PAC

PARLIAMENT

REPUBLIC OF TRINIDAD AND TOBAGO

*THIRTY-THIRD REPORT OF THE*

# PUBLIC ACCOUNTS

C O M M I T T E E

*FIFTH SESSION OF THE 11TH PARLIAMENT*

*Inquiry* Follow-up on the status of the implementation of the recommendations on Information and Communication Technology (ICT) governance and general controls as stated in the Reports of the Auditor General on the 2017, 2018 and 2019 Public Accounts.

## Public Accounts Committee

The Public Accounts Committee (PAC) established by the Constitution of the Republic of Trinidad and Tobago in accordance with Section 119(4) is mandated to consider and report to the House of Representatives on:

*"(a) appropriation accounts of moneys expended out of sums granted by Parliament to meet the public expenditure of Trinidad and Tobago;*

*(b) such other accounts as may be referred to the Committee by the House of Representatives or as are authorized or required to be considered by the committee under any other enactment; and*

*(c) the report of the Auditor General on any such accounts."*

### Current membership

| | |
|---|---|
| Dr. Bhoendradatt Tewarie | Chairman[1] |
| Mr. Taharqa Obika | Vice-Chairman |
| Mrs. Ayanna Webster-Roy | Member |
| Mr. Randall Mitchell | Member |
| Dr. Lester Henry | Member |
| Mrs. Paula Gopee-Scoon | Member |
| Mr. Adrian Leonce | Member |
| Mrs. Charrise Seepersad | Member |

### Committee Staff

The current staff members serving the Committee are:

| | |
|---|---|
| Ms Keiba Jacob | Secretary to the Committee |
| Ms Hema Bhagaloo | Assistant Secretary to the Committee |
| Ms. Vanna Jankiepersad | Procedural Officer Intern |
| Mr. Darien Buckmire | Graduate Research Assistant |
| Mr. Justin Jarrette | Graduate Research Assistant |
| Ms. Anesha James | Administrative Assistant |
| Ms. Natoya O'Neil | Clerk Typist I |

### Publication

An electronic copy of this report can be found on the Parliament website: www.ttparliament.org

## Contacts

All correspondence should be addressed to:
The Secretary
Public Accounts Committee
Parliamentary Complex
Cabildo Building
St Vincent Street, Port of Spain, Trinidad and Tobago
Tel: (868) 624-7275; Fax: (868) 625-4672
Email: pac@ttparliament.org

[1] The Committee held its first meeting on Wednesday December 2, 2015. At this meeting the Committee elected Dr. Bhoendradatt Tewarie as Chairman, in accordance with Section 119(2) of the Constitution of the Republic of Trinidad and Tobago. At that same meeting, the Committee resolved that its quorum should comprise of three (3) Members, inclusive of the Chairman and any other Opposition Member.

## Table of Contents

Members of the Public Accounts Committee .... 4
Executive Summary .... 5
Introduction .... 9
The Inquiry Process .... 11
Background: Auditor General's Department .... 12
Issues, Observations and Recommendations .... 15
Concluding Remarks .... 23
Appendix I .... 25
    Witnesses .... 25
Appendix II .... 27
    Minutes of Meeting .... 27
Appendix III .... 52
    Verbatim Notes .... 52

## Members of the Public Accounts Committee

ELEVENTH PARLIAMENT, REPUBLIC OF TRINIDAD AND TOBAGO

Dr. Bhoendradatt Tewarie
**Chairman**

Mr. Taharqa Obika
**Vice- Chairman**

Mrs. Ayanna Webster-Roy
**Member**

Mr. Randall Mitchell
**Member**

Mrs. Paula Gopee-Scoon
**Member**

Dr. Lester Henry
**Member**

Mr. Adrian Leonce
**Member**

Mrs. Charrise Seepersad
**Member**

## Executive Summary

The Public Accounts Committee (PAC) is the Parliamentary Financial Oversight Committee tasked with the responsibility of examining the issues outlined in the Report of the Auditor General and Audited Financial Statements of Ministries, Departments and Statutory Bodies referred to the Committee by the House of Representatives or as are authorized or required to be considered by the committee under any other enactment. The PAC presents its Thirty-Third Report of the Eleventh Parliament which details its ***follow-up on the status of the implementation of the recommendations on Information and Communication Technology (ICT) governance and general controls as stated in the Report of the Auditor General on the 2017, 2018 and 2019 Public Accounts.***

This report highlights the issues, observations and recommendations made by the Committee in its review of the status of the implementation of the recommendations on ICT governance and general controls as presented in the 2017, 2018 and 2019 Auditor General's Report.

**During this inquiry, the following issues arose:**

1. Status of the training of Auditor General's Department personnel to conduct IT audits;
2. The 2016 review of the IT Governance Framework focusing on seven (7) Ministries, Departments and Agencies (MDA);
3. The challenges with regard to ICT throughout the public service;
4. The lack of standardization in the use of ICT guidelines throughout the public sector;
5. The status of the Interoperability Framework and its role in ensuring uniformity throughout Ministries and Department;
6. The establishment and role of the Government ICT Leadership Advisory Council (GILAC);
7. The status of the initiatives under of the National ICT Plan 2018-2022 halfway through the life of the Plan;
8. The status of the implementation of the National ICT Plan 2018-2022;
9. The lack of the monitoring of ICT governance and structure across the public sector;
10. The status of the approval of the 'Cloud Policy';
11. The review of technical and functional support units of all MDAs conducted by the Project Management Consulting Division (PMCD) of the Ministry of Public Administration; (MPA)
12. The role of the MPA in formulating ICT-related policy;
13. The role of iGovTT in the implementation of MPA policy and as policy advisor to other Government Ministries;
14. iGovTT's self-assessment of its fulfilment of its mandate and the potential to improve its service delivery;
15. The need for human resource enhancement with respect to ICT;

16. The efforts by the MPA to monitor expenditure on ICT across MDAs;
17. The status of the MPA's Business Continuity and Disaster Recovery Plan;
18. The HackTT ICT innovation competition hosted by iGovTT;
19. The collaboration between the MPA and the MPD to monitor ICT expenditure under the Public Sector Investment Programme (PSIP);
20. The need to align ICT projects with the Vision 2030 Plan;
21. The MPA's Collaboration with the International Telecommunications Union (ITU) for capacity building;
22. The status of the MPA's collaboration with the Government of the Republic of Estonia to observe best practices;
23. The two Digital Divide Surveys conducted by the TATT with a view to assessing access gaps;
24. The status of the use of the Universal Service Fund to fund projects aimed at geographical and social service access gaps;
25. The provision of free WIFI in selected public areas such as libraries, hospitals and transport hubs;
26. The status of the Enterprise Asset Management Framework;
27. The status of the Court Pay and Gov Pay systems as well as the Gov Net platform;
28. The status of collaboration between iGovTT and the Ministry of Health (MoH) through GILAC for integration of RHAs ICT infrastructure;
29. The challenges of the MoH's Health Information Management System to improve ICT collaboration with RHAs;
30. The status of the ICT integration pilot project involving two (2) Regional Health Authorities (RHA); and
31. The status of security measures taken in light of the 2019 hacking incident.

**Based on the Committee's examination, the following endorsement were made:**

- ***The Committee acknowledges and commends the detailed, measurable and time-bound alignment of the National ICT Plan to the National Development Strategy (Vision 2030).***

**Based on the Committee's examination, the following recommendations were proposed:**

- ***iGovTT should provide a status report to Parliament on the completion of the GovNeTT stabilisation initiative by August 30, 2020;***

- ***iGovTT should report to Parliament on the status of the development of a policy on Government website cyber security requirements by August 30, 2020;***
- ***iGovTT should report to Parliament on the existing GILAC reporting mechanism and its recommendations for the implementation of a system for direct feedback between GILAC and the Government by August 30, 2020;***
- ***The Ministry of Public Administration should report to Parliament on the following by August 30, 2020;***
    - ***a. the findings of the November 2019 Third Party Risk Assessment of GovNeTT; and***
    - ***b. the reason for which Third Party Risk Assessments are not conducted across the board.***
- ***The Cyber Security Incident Response Team, Ministry of National Security, should provide Parliament with its recommendations to avoid future breaches by August 30, 2020;***
- ***The Ministry of Public Administration should report to Parliament on the progress made in enhancing interoperability across the public sector through the Microsoft Enterprise Agreement by August 30, 2020;***
- ***iGovTT should provide Parliament with its assessment of the overall success of the Enterprise Agreement in promoting shared services and the uniformity of ICT across the public service by August 30, 2020;***
- ***iGovTT should report to Parliament on the status of a new Enterprise Agreement to come into effect after the extension of the original 3-year Agreement expired in June 2020 by August 30, 2020;***
- ***iGovTT should inform Parliament whether there is any substantial difference between the conditions of arrangements in place from June 2020 onward and the 2016-2019 Enterprise Agreement;***
- ***iGovTT should report to Parliament on whether there are plans to extend the server maintenance and e-learning training to all Ministries, Departments and Agencies by August 30, 2020;***
- ***The Ministry of Finance should report to Parliament on the feasibility of presenting ICT expenditure separately in the Estimates of Expenditure by August 30, 2020;***
- ***iGovTT should report to Parliament on the extent to which the Microsoft Enterprise Agreement contributed to the fulfilment of the recommendation of the Auditor General that there be a strategic approach to procurement of IT systems, licences, support and maintenance across Ministries and Departments to achieve value for money by August 30, 2020;***
- ***The Ministry of Health should submit an update to Parliament on the completion of the following measures in response to the recommendations of the Auditor General by August 30, 2020; and***

*a. the finalisation of a standardised structure for ICT Units;*
*b. the development of an ICT Service Continuity Plan;*
*c. the recommendations for information systems auditing training; and*
*d. the implementation of a Logistics Management System.*

- ***iGovTT should report to Parliament on the following by August 30, 2020:***
    - ***a. a list of the winning solutions;***
    - ***b. the timeline for the implementation of the solutions developed during the 2019 Hackathon;***
    - ***c. the MDAs within which each solution was deployed; and***
    - ***d. the results of the proposed solutions.***

# Introduction

The PAC of the Eleventh Republican Parliament was established by resolution of the House of Representatives and the Senate at the sittings held on Friday November 13, 2015 and Tuesday November 17, 2015 respectively.

The Constitution of the Republic of Trinidad and Tobago mandates that the Committee shall consider and report to the House on appropriation accounts of monies expended out of sums granted by Parliament to meet the public expenditure of Trinidad and Tobago and the report of the Auditor General on any such accounts.

In addition to the Committee's powers entrenched in the Constitution, the Standing Orders of the House of Representatives and of the Senate also empower the Committee, inter alia, to:

a) send for persons, papers and records;
b) have meetings whether or not the House is sitting;
c) meet in various locations;
d) report from time to time; and
e) communicate with any other Committee on matters of common interest.

## Election of the Chairman and Vice-Chairman

In accordance with section 119(2) of the Constitution, the Chairman must be a member of the Opposition in the House. At the first meeting held on Wednesday December 2, 2015 Dr. Bhoendradatt Tewarie was elected Chairman of the Committee. Mr. Taharqa Obika was elected Vice-Chairman of the Committee on December 13, 2017.

## Establishment of Quorum

The Committee is required by the Standing Orders to have a quorum so that any decisions made by the Members during the meetings can be considered valid. A quorum of three (3) Members, inclusive of the Chair or Vice-Chairman, with representatives from both Houses was agreed to by the Committee at its First Meeting.

Determination of the Committee's Work Programme

The Committee agreed to a work programme for the Fifth Session of the Eleventh Parliament during its thirty-seventh meeting held on Wednesday September 11, 2019. These entities include:

1. National Library and Information System Authority (NALIS)
2. Ministry of Energy & Energy Industries and Ministry of Finance (Revenue Collection)

3. National Insurance Board of Trinidad and Tobago (NIB)
4. Caribbean Industrial Research Institute (CARIRI)
5. College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTAATT)
6. Sports and Culture Fund
7. Follow-up:
    - Water and Sewerage Authority
    - Trinidad and Tobago Electricity Commission
    - Airport Authority of Trinidad and Tobago
    - Chaguaramas Development Authority
    - Land Settlement Agency
    - Public Transport Service Corporation
    - National Lotteries Control Board
    - Trinidad and Tobago Bureau of Standards
8. Trinidad and Tobago Civil Aviation Authority
9. Trinidad and Tobago Securities Exchange Commission
10. Trinidad and Tobago Unit Trust Corporation

Following the submission of the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial year 2018 to the Parliament, the Committee agreed to invite the Auditor General's Department to a public hearing to discuss follow-up on ***ICT governance and general controls as stated in the Reports of the Auditor General on the 2017 and 2018 Public Accounts.*** This public hearing was held on September 11, 2019.

## The Inquiry Process

The Inquiry Process comprises the steps taken by the Committee in its Follow-up on the status of the implementation of the recommendations on Information and Communication Technology (ICT) governance and general controls as stated in the Reports of the Auditor General on the 2017, 2018 and 2019 Public Accounts. The Inquiry Process agreed to by the PAC included the following steps:

I. Identified issues concerning ICT governance and general controls addressed in the Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial years 2017 and 2018;

II. Sent requests for written comments on the concerns and recommendations of the Information Technology Assessment in the Report of the Auditor General Public Accounts of the Republic of Trinidad and Tobago for the financial year 2018 to the Ministry of Public Administration (MPA) and the Ministry of Planning and Development (MPD) on April 4, 2019. The National Information and Communication Technology Company Limited (iGovTT) was asked to provide any supporting information on ICT Controls that would assist the Committee with its inquiry on April 5, 2019. Responses were received from the MPA on April 18, 2019 and from the MPD on April 26, 2019. No response was received from iGovTT. The responses received were used to draft possible questions to be asked at the public hearing;

III. Held a public hearing on Wednesday September 11, 2019 attended by the relevant witnesses to whom requests for written responses were sent as per item II above;

IV. Forwarded questions for additional information to the Auditor General's Department, the Ministry of Public Administration and the Ministry of Planning and Development on September 12, 2019, and to iGovTT on September 13, 2019. All responses were received between September 19 and November 19, 2019;

V. Report the Committee's findings and recommendations to Parliament upon conclusion of the inquiry, eventually including the findings of the 2019 Auditor General's Report, following the publication of said Report; and

VI. Carrying out further follow-up to monitor progress in the implementation of recommendations.

# Background: Auditor General's Department

## History[2]

The coming into effect of the Exchequer and Audit Ordinance on December 05, 1959 and the achievement of Independence by Trinidad and Tobago on August 31, 1962 that marked the creation of the post of Auditor General. The holder of that position has full responsibility for the audit and certification of the Nation's public accounts in accordance with Section 90 (2) of the Trinidad and Tobago (Constitution) Order in Council, 1962.

## Establishment of the Office of the Auditor General[3]

The Constitution of the Republic of Trinidad and Tobago (Act 4 of 1976) Chapter 8– Section 116 states that:

1) There shall be an Auditor General for Trinidad and Tobago, whose office shall be a public office.
2) The public accounts of Trinidad and Tobago and of all officers, courts and authorities of Trinidad and Tobago shall be audited and reported on annually by the Auditor General, and for that purpose the Auditor General or any person authorized by him in that behalf shall have access to all books, records, returns and other documents relating to those accounts.
3) The Auditor General is hereby empowered to carry out audits of the accounts, balance sheets and other financial statements of all enterprises that are owned or controlled by or on behalf of the State.
4) The Auditor General shall submit his reports annually to the Speaker, the President of the Senate and the Minister of Finance.
5) The President of the Senate and the Speaker shall cause the report to be laid before the Senate and the House of Representatives, respectively, at the next sitting of the Senate and the House of Representatives after the receipt thereof, respectively.
6) In the exercise of his functions under this Constitution the Auditor General shall not be subject to the direction or control of any other person or authority.

## Appointment of the Auditor General[4]

The Auditor General is appointed by the President of the Republic of Trinidad and Tobago after consultation with the Prime Minister and the Leader of the Opposition and may hold office up to age sixty-five (65) years and may be removed from office only on certain grounds and after a

[2] Auditor General Department's website http://www.auditorgeneral.gov.tt/content/history accessed May 16, 2020.
[3] Constitution of The Republic of Trinidad And Tobago http://laws.gov.tt/pdf/Constitution.pdf
[4]Auditor General Department's website http://www.auditorgeneral.gov.tt/content/appointment-role-and-function accessed on May 16, 2020.

prescribed procedure. Those provisions are entrenched in the Constitution of the Republic of Trinidad and Tobago (1976).

## Mission[5]

To independently audit and report on the use of public resources for the benefit of the country and its people, and to lead by example.

## Vision[6]

To be an Independent Supreme Audit Institution that effectively promotes Accountability, Transparency and Integrity in the use of Public Resources.

## Appointment of the Auditor General[7]

The Auditor General is appointed by the President of the Republic of Trinidad and Tobago after consultation with the Prime Minister and the Leader of the Opposition and may hold office up to age sixty-five (65) years and may be removed from office only on certain grounds and after a prescribed procedure. Those provisions are entrenched in the Constitution of the Republic of Trinidad and Tobago (1976).

## Current Auditor General[8]

2019 - Present     Ms. Lorelly Pujadas

## Role and Function[9]

The Auditor General is required by law to examine and report annually to Parliament on the accounts of Ministries, Departments, Regional Health Authorities, Regional Corporations and such State Controlled Enterprises and Statutory Boards for which the Auditor General is the statutory auditor. The portfolio also includes the audit of:

- The accounts of projects funded partly or wholly by International Lending Agencies;
- All pensions, gratuities and other separation benefits paid by the State in accordance with the Pensions Acts and other Agreements; and
- The grant of credit on the Exchequer Account in accordance with the requirements of section 18 of the Exchequer and Audit Act, chapter 69:01.

---

[5] Auditor General Department's website http://www.auditorgeneral.gov.tt/content/mission-and-vision accessed on July 9, 2019.

[6] Ibid

[7] Auditor General Department's website http://www.auditorgeneral.gov.tt/content/appointment-role-and-function accessed on July 9, 2019.

[8] Auditor General Department's website http://www.auditorgeneral.gov.tt/content/profile-auditor-general accessed on May 16, 2020.

[9] Auditor General's Department, Appointment, Role and Function, http://www.auditorgeneral.gov.tt/content/appointment-role-and-function accessed on May 16, 2020.

The audit services take the form of financial audits, compliance audits and value for money audits intended to promote:

- Accountability;
- Adherence to laws and regulations; and
- Economy, efficiency and effectiveness in the collection, disbursement and use of funds and other resources.

## Issues, Observations and Recommendations

During the examination of the status of the implementation of the recommendations on Information and Communication Technology (ICT) governance and general controls as stated in the Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Financial Years 2017, 2018 and 2019, the Committee highlighted the following issues, made the following endorsements and proposed the accompanying recommendations:

### 1. Alignment with Vision 2030

**Vision 2030 alignment is key to understanding the benefits of ICT-related measures.** The National ICT Plan 2018-2022[10] developed by the Ministry of Public Administration contains many references to its vision to support the National Development Strategy (Vision 2030), given the relevance of ICT to all aspects of Vision 2030's themes. Under the Plan, Government ensures an ICT environment conducive to citizens' participation in the new digital economy. By enhancing connectivity, human capacity and digital government, the National ICT Plan is meant to help achieve the overall Vision 2030 development goal.

The Plan's 5 Strategic Thrusts are explicitly aligned with the themes presented in Vision 2030, and specific strategies, measurable outcomes and timeframes are identified for each[11]. Targets to be achieved by 2022 include a 5% increase in the ICT Sector's contribution to GDP, the operationalisation of enterprise-wide applications and of end-to-end eServices such as tax filings and business registration and 50% adoption of shared services and infrastructure. In terms of international benchmarks, by meeting the Plan's 2022 targets, Trinidad and Tobago could rise in the rankings of the World Economic Forum (WEF) Network readiness Index (NRI) and the International Telecommunications Union (ITU) ICT Development Index (IDI).

Since the launch of the National ICT Plan, initiatives undertaken have been aligned with the Vision 2030 Plan as shown below:

| Initiative | National ICT Plan | Vision 2030 |
|---|---|---|
| National Payment Gateway (GovPayTT) pilot run by iGovTT to provide citizens with a payment platform for Government-related | Strategic Thrust 3: Enhancing Service Delivery. | Goal 2: Promoting Good Governance and Service Excellence. |

[10] Ministry of Public Administration, Trinidad and Tobago's National ICT Plan ICT Blueprint 2018 – 2022
[11] Ibid, pages 24-47.

| | | |
|---|---|---|
| transactions accessible round the clock. | | |
| Stabilisation of the Government Wide Area Network (GovNeTT) to improve the quality of services such as email, domain services, internet, security, remote access and wide area network connectivity. | Strategic Thrust 1: improving Connectivity and Enhancing ICT infrastructure. | Goal 3: Improving Productivity through Quality Infrastructure and Transportation. |
| The development of live chat and chatbot technology (ttGovChat) to provide real-time customer service (live chat) and 24-hour service (chat bot) in the dissemination of information concerning government services. | Strategic Thrust 3 | Goal 2: Promoting Good Governance and Service Excellence |

The Committee noted that the GovNeTT stabilisation work was described as 80% completed and was due to be completed by November 2019.

***Endorsement:***

- ***The Committee acknowledges and commends the detailed, measurable and time-bound alignment of the National ICT Plan to the National Development Strategy (Vision 2030).***

***Recommendation:***

*i.* ***iGovTT should provide a status report to Parliament on the completion of the GovNeTT stabilisation initiative by August 30, 2020.***

**2. Government Information Technology Leadership Advisory Council (GILAC)**

**Closer communication is needed between GILAC and the Government.** GILAC was established in 2015. It promotes collaborative efforts and helps to guide the planning of measures regarding ICT development, technical policies, standards and guidelines. There were initially 3 GILAC Committees (Policy, Infrastructure and Communications). A further 4 Committees were being put in place on the issues of Information Security, Data Classification, Enterprise Architecture and Enterprise Services.

In its written submission dated September 27, 2019, iGovTT emphasised the importance of establishing a system for direct feedback between GILAC and the Government.

The Ministry of Public Administration (MPA) indicated in a written submission that there was no policy to address the cyber security requirements for Government Websites. The MPA further explained that this policy was on the GILAC Policy Agenda.

***Recommendations:***

i. ***iGovTT should report to Parliament on the status of the development of a policy on Government website cyber security requirements by August 30, 2020; and***
ii. ***iGovTT should report to Parliament on the existing GILAC reporting mechanism and its recommendations for the implementation of a system for direct feedback between GILAC and the Government by August 30, 2020.***

**3. Hacking Prevention and Response**

**Strong and coordinated oversight of website maintenance is needed to reduce vulnerability to cyber-attacks**. In July 26, 2019, there was a hacking incident targeting the websites of the Ministry of National Security, the Immigration Division and several other public entities. No data was compromised. According to the Ministry of Public Administration, investigations have revealed that the sites attacked were be built using the Content Management System (CMS) – Dot NET NUKE, and that those websites were not using the latest version of CMS.

The Committee was all the more concerned to learn from the MPA that older versions of CMS contained vulnerabilities which increase the likelihood of succumbing to attacks. The MPA explained that the Cyber Security Incident Response Team (TT-CSIRT), within the Ministry of National Security, investigates these kinds of incidents but that it has no oversight of website maintenance. MDAs are responsible for ensuring website maintenance via Website Maintenance Agreements with the relevant vendors.

In response to questions from the Committee about Third Party Risk Assessments regarding the vendors from whom ICT is procured for the public service, the MPA explained that the last such exercise was conducted in 2014 – specifically at GovNeTT – and that one was scheduled for November 2019.

The TT-CSIRT found that the breach occurred due to the following:

- Lack of Cyber Security policy for the development and management of Government Websites.
- Improper maintenance practices, ensuring website is patched and updated.
- Lack of skilled personnel in the various Ministries to manage the particular CMS platform.

- Lack of scheduled Vulnerability Assessments to identify risks and threats to Government websites.

***Recommendations:***

i. ***The Ministry of Public Administration should report to Parliament on the following by August 30, 2020: and***
   a. ***the findings of the November 2019 Third Party Risk Assessment of GovNeTT; and***
   b. ***the reason for which Third Party Risk Assessments are not conducted across the board.***

ii. ***The Cyber Security Incident Response Team, Ministry of National Security, should provide Parliament with its recommendations to avoid future breaches by August 30, 2020.***

## 4. Interoperability

**There is potential for even more initiatives to strengthen interoperability.** The Auditor General noted that interoperability led to increased productivity, and recommended that the Ministry of Public Administration develop policies and guidelines on interoperability to allow systems interface and the exchange and sharing of data and resources amongst Ministries and Departments[12]. One definition of interoperability is 'the ability of a system to work with other systems without special effort'[13]. The National ICT Plan developed by the Ministry of Public Administration emphasised the importance of interoperability for the delivery of digital services by Government to citizens[14].

In a written submission[15] to the Committee, the Ministry of Planning and Development highlighted that Enterprise Agreements help to reduce duplication, overspending and the complexity of varying sets of terms and conditions that occurred where numerous distinct software contracts were concluded by various MDAs.

As the Government's agent for Enterprises Agreements, iGovTT entered into a 3-year agreement on 30 November 2016 with Microsoft Corporation for the acquisition and management of enterprise-wide licenses at prices lower than standard license pricing. Some of the principal goals

---

[12] Report of Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for Financial Year 2017, page 80.

[13] United Kingdom Government, Interoperability Glossary <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890772/interoperability-glossary.pdf> accessed June 10, 2020.

[14] National ICT Plan, <http://mpac.gov.tt/sites/default/files/file_upload/publications/NICT%20Plan%202018-2022%20-%20August%202018.pdf> page 17, accessed June 10, 2020.

[15] Ministry of Planning and Development written submission dated April 26, 2019, page 3.

of the Agreement were to help to standardize ICT across the public service, promote the use of shared platforms and simplify licence management processes. Under the Enterprises Agreement, iGovTT managed procurement, promoted adherence to ICT best practices, managed contracts and created an ICT governance framework.

iGovTT explained that a 1-year extension of the Enterprise Agreement was sought. The contract was initially due to expire in June 2019, so this extension would have prolonged the arrangement to June 2020.

***Recommendations:***

i. ***The Ministry of Public Administration should report to Parliament on the progress made in enhancing interoperability across the public sector through the Microsoft Enterprise Agreement by August 30, 2020;***
ii. ***iGovTT should provide Parliament with its assessment of the overall success of the Enterprise Agreement in promoting shared services and the uniformity of ICT across the public service by August 30, 2020;***
iii. ***iGovTT should report to Parliament on the status of a new Enterprise Agreement to come into effect after the extension of the original 3-year Agreement expired in June 2020 by August 30, 2020; and***
iv. ***iGovTT should inform Parliament whether there is any substantial difference between the conditions of arrangements in place from June 2020 onward and the 2016-2019 Enterprise Agreement.***

## 5. ICT Training

**The reach of ICT training must be broadened.** Over the duration of the Microsoft Enterprise Agreement, training in server maintenance solutions was also provided to 136 participants from 44 MDAs. E-Learning training in Microsoft Systems, applications and servers was also provided to 674 staff at 20 Ministries, Departments, Agencies, and Statutory Bodies[16]. Regarding the e-learning training, the Committee noted that 9 of these entities were Government Ministries and that they made up over half (379) of the recipients of this training. However, among these 9 Ministries, over half of the participants came from just 1 Ministry. In addition, the 13 other Government Ministries did not benefit from this training.

The eCabinet Solution was implemented with the support of iGovTT. The aim of eCabinet Solution is to promote paperless administration through digitization of the creation, revision and

[16] iGovTT written submission dated September 27, 2019, page 15.

circulation of Cabinet Notes. One component of this process is electronic agenda management. Staff and Ministers at the Office of the Prime Minister received training in the use of the agenda management solution in 2019.

***Recommendation:***

i. ***iGovTT should report to Parliament on whether there are plans to extend the server maintenance and e-learning training to all Ministries, Departments and Agencies by August 30, 2020.***

## 6. Expenditure on ICT

**The lack of a distinct listing of ICT expenditure in budget documents raises the likelihood of inefficiencies in policy implementation.** In both the 2017 Report (page 78) and 2019 Report (page 82), the Auditor General highlighted that ICT expenditure was not separately classified in the Estimates of Expenditure or the Accounting Votes. This made it difficult for the Auditor General to ascertain the amounts of spending on specific items or issues. The absence of disaggregated figures could lead to inappropriate decisions on planning, budgeting and resource allocation and inefficient use of financial resources.

In 2017 and 2019, the Auditor General recommended a strategic approach to procurement of IT systems, licences, support and maintenance across Ministries and Departments to achieve value for money. Regarding the previously addressed Microsoft Enterprise Agreement, iGovTT explained that the Agreement enabled the Government to save by paying lower licensing prices. It was also explained that the Agreement facilitated simpler license management with a single agreement, predictable software costs and comprehensive software assurance benefits.

***Recommendations:***

i. ***The Ministry of Finance should report to Parliament on the feasibility of presenting ICT expenditure separately in the Estimates of Expenditure by August 30, 2020; and***

ii. ***iGovTT should report to Parliament on the extent to which the Microsoft Enterprise Agreement contributed to the fulfilment of the recommendation of the Auditor General that there be a strategic approach to procurement of IT systems, licences, support and maintenance across Ministries and Departments to achieve value for money by August 30, 2020.***

## 7. Implementation of Recommendations by the Ministry of Health and Regional Health Authorities

**There is more integration among the RHAs than there was in 2017.** The Reports of the Auditor General for Financial Years 2017 and 2018 discussed the difficulties of ICT integration noted at the Ministry of Health (MoH) and the Regional Health Authorities (RHA). The 2019 Report then highlighted the implementation by the MoH of measures to improve on the weaknesses found in the 2 previous years.

The Auditor General made recommendations in 2017. These addressed the role to be played by the MoH in ICT standardisation of ICT solutions and the integration of information systems at all RHAs, the acquisition of new information systems, ICT planning and controls, compliance guidelines, the structure of ICT Units, internal ICT audits and business continuity.

In response to these recommendations, the MoH convened the Health ICT Committee. The role of this Committee included to identify gaps, standardise policies across all RHAs, facilitate communication and feedback and develop the RHAs ICT Strategic Plans. The 2019 Report commended the MoH for the progress made in implementing the recommendations over the previous 2 years.

The Public Accounts Committee notes that several commitments were made by the MoH regarding measures that would be carried out by the Health ICT Committee. These include to finalise a standardised structure for ICT Units after a draft was developed to RHAs for feedback in November 2019, to develop an ICT Service Continuity Plan, to recommend training for RHA and MoH staff in information systems auditing and to implement a Logistics Management System.

***Recommendation:***

i. ***The Ministry of Health should submit an update to Parliament on the completion of the following measures in response to the recommendations of the Auditor General by August 30, 2020:***
   a. ***the finalisation of a standardised structure for ICT Units;***
   b. ***the development of an ICT Service Continuity Plan;***
   c. ***the recommendations for information systems auditing training; and***
   d. ***the implementation of a Logistics Management System.***

## 8. New Solutions to ICT Challenges

**Innovation can help solve common ICT problems**. In 2019, iGovTT hosted the HackTT Hackathon event, whereby tertiary level students submitted their proposed solutions to ICT-related challenges across the public sector. This was facilitated by a Memorandum of Understanding (MOU) between iGovTT and the University of the West lndies (UWl). The competition ended in September 2019. The winning solutions were scheduled to be put into operation in Government Ministries, Divisions and Agencies (MDAs) shortly thereafter.

***Recommendation:***

i. ***iGovTT should report to Parliament on the following by August 30, 2020:***
   a. ***a list of the winning solutions;***
   b. ***the timeline for the implementation of the solutions developed during the 2019 Hackathon;***
   c. ***the MDAs within which each solution was deployed; and***
   d. ***the results of the proposed solutions.***

## Concluding Remarks

The Committee notes the numerous steps being taken towards the goal of uniform ICT policy implementation across the public service. It is especially encouraging to see the Auditor General having reason to commend Government Ministries for the progress made since 2017. However, important to note that still more needs to be done. The Committee insists on the need to quicken the pace of progress. The current pandemic context has clearly demonstrated that seamless ICT solutions are crucial to successful functioning of any entity in case of unforeseen circumstances that radically change the way in which work must be carried out.

The Committee urges the Ministry of Public Administration, the Ministry of Planning and Development and iGovTT to continue to play their distinct roles and to do so in close collaboration with each other.

The Committee also urges the Ministry of Finance to expedite the completion of IFMIS integration so that money can be followed on a day to day basis to determine the daily health of finances across the system. The Committee notes the state of disjointedness of IT within the Public service and this is a cause for concern.

There seems to be a lack of coordination, lack of coherence and most troublingly the lack of strategic focus. The Committee is also very concerned about the slowness of implementation of matters and projects driven by IT to enhance government efficiency and effectiveness.

The IT platform of government is not only critical to efficiency and effectiveness within government but essential to delivery to the citizen and vital for ease of doing business and business competitiveness. IT in the public service must therefore be treated as a priority.

This Committee respectfully submits this Report for the consideration of the Parliament.

Dr. Bhoendradatt Tewarie
**Chairman**

Mr. Taharqa Obika
**Vice-Chairman**

Mrs. Ayanna Webster-Roy
**Member**

Mr Randall Mitchell
**Member**

Mr. Adrian Leonce
**Member**

Mrs. Paula Gopee-Scoon
**Member**

Dr. Lester Henry
**Member**

Mrs. Charrise Seepersad
**Member**

# Appendix I
## Witnesses

At the meeting held on Wednesday September 11, 2019, the following witnesses appeared:

**Auditor General's Department (AGD)**

- Ms. Lorelly Pujadas - Auditor General
- Mr. Desmond Noel - Assistant Auditor General (Ag.)
- Mr. Louis Hernandez - Assistant Auditor General (Ag.)
- Mrs. Nela Dwarika-Ali - Audit Director

**Ministry of Public Administration**

- Ms. Joan Mendez - Permanent Secretary
- Mr. Claudelle McKellar - Deputy Permanent Secretary
- Ms. Shanaz Mohammed - Public Sector ICT Specialist
- Mr. Desron Palmer - ICT Policy Strategy & Development Specialist
- Ms. Abigail Bynoe - Manager, Policy, Strategy and Monitoring

**Ministry of Planning and Development**

- Mrs. Ayleen Alleyne-Ovid - Permanent Secretary (Ag.)
- Mr. Peter Mitchell - Director (Ag), Project Planning and Reconstruction Division
- Mr. Mark Joseph - Project Monitoring Officer, Project Planning and Reconstruction Division
- Mr. Keane Bryan - Director IT Department Specialist

**National Information and Communication Technology Company Limited (iGovTT)**

- Mr. Charles Bobb Semple - Deputy Chief Executive Officer
- Dr. Sean Rocke - Chairman
- Mr. Sherwin Ragoonanan - Head, Operations Unit
- Ms. Christine Ferreira - Head, Finance and Administration

- Ms. Vashti Maharaj - Director
- Ms. Jacqueline Morris - Director

# Appendix II

## Minutes of Meeting

**THE PUBLIC ACCOUNTS COMMITTEE –**
**FOURTH SESSION, ELEVENTH PARLIAMENT**
**MINUTES OF THE THIRTY- SEVENTH MEETING HELD ON WEDNESDAY, SEPTEMBER 11, 2019 AT 10:07 A.M.**
**IN THE ARNOLD THOMASOS (WEST) MEETING ROOM, LEVEL 6, AND IN THE J. HAMILTON MAURICE MEETING ROOM, MEZZANINE FLOOR, OFFICE OF THE PARLIAMENT, TOWER D, THE PORT OF SPAIN INTERNATIONAL WATERFRONT CENTRE, 1A WRIGHTSON ROAD, PORT-OF-SPAIN.**

Present were:

| | | |
|---|---|---|
| Dr. Bhoendradatt Tewarie | - | Chairman |
| Mr. Taharqa Obika | - | Vice-Chairman |
| Dr. Lester Henry | - | Member |
| Mr. Adrian Leonce | - | Member |
| Mrs. Paula Gopee-Scoon | - | Member |
| Mr. Randall Mitchell | - | Member |
| Mrs. Ayanna Webster-Roy | - | Member |
| | | |
| Ms. Hema Bhagaloo | - | Assistant Secretary |
| Ms. Vanna Jankiepersad | - | Procedural Officer Intern |
| Mr. Justin Jarrette | - | Parliamentary Intern |

Excused was:

| | | |
|---|---|---|
| Ms. Charrise Seepersad | - | Member |

**COMMENCEMENT**

1.1 At 10:07 a.m. the Chairman called the meeting to order and welcomed those present. The Chairman informed the Members that Ms. Charrise Seepersad asked to be excused from the Meeting.

**THE EXAMINATION OF THE MINUTES OF THE THIRTY- SIXTH MEETING**

2.1 The Committee examined the Minutes of the Thirty-Sixth ($36^{th}$) Meeting held on Wednesday May 22, 2019.

2.2 There being no omissions or corrections, the Minutes were confirmed on a motion moved by Mr. Taharqa Obika and seconded by Mrs. Ayanna Webster-Roy.

**MATTERS ARISING FROM THE MINUTES OF THE THIRTY- SIXTH MEETING**

3.1 With reference to item 5.4, the Chairman informed the Members that the request for additional information were sent to the Ministry of Finance, Comptroller of Accounts and the Auditor General's Department and the responses to the questions for additional information were received by the Secretariat and used to draft the Twenty-Eight Report of the Committee.

**CONSIDERATION OF WORK SCHEDULE FOR THE FIFTH SESSION, ELEVENTH PARLIAMENT**

4.1 The Chairman invited the Members to review the proposed work schedule for the Fifth Session of the Eleventh Parliament prepared by the Secretariat.

4.2 The Committee agreed to the following Work Programme for the Fifth Session of the Eleventh Parliament:

11. National Library and Information System Authority (NALIS)
12. Ministry of Energy & Energy Industries and Ministry of Finance (Revenue Collection)
13. National Insurance Board of Trinidad and Tobago (NIB)
14. Caribbean Industrial Research Institute (CARIRI)
15. College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTAATT)
16. Sports and Culture Fund
17. Follow-up:
    - Water and Sewerage Authority
    - Trinidad and Tobago Electricity Commission
    - Airport Authority of Trinidad and Tobago
    - Chaguaramas Development Authority
    - Land Settlement Agency
    - Public Transport Service Corporation
    - National Lotteries Control Board
    - Trinidad and Tobago Bureau of Standards
18. Trinidad and Tobago Civil Aviation Authority
19. Trinidad and Tobago Securities Exchange Commission
20. Trinidad and Tobago Unit Trust Corporation

**PRE-HEARING DISCUSSION RE: THE STATUS OF THE IMPLEMENTATION OF THE RECOMMENDATIONS ON IT GOVERNANCE AND GENERAL CONTROLS AS STATED IN THE AUDITOR GENERAL'S REPORT FOR THE FINANCIAL YEARS 2016, 2017 AND 2018**

5.1 The Chairman informed the Members that the purpose of the public hearing was to discuss the status of the implementation of the recommendations on IT Governance and General Controls as stated in the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial years 2016, 2017 and 2018.

5.2 The Members discussed the issues of concern and the general approach for the Public Hearing.

5.3 There being no further business for discussion *in camera*, the Chairman suspended the meeting at 10:36 a.m.

**DISCUSSION ON THE STATUS OF THE IMPLEMENTATION OF THE RECOMMENDATIONS ON IT GOVERNANCE AND GENERAL CONTROLS AS STATED IN THE AUDITOR GENERAL'S REPORT FOR THE FINANCIAL YEARS 2016, 2017 AND 2018**

6.1 The Chairman called the public meeting to order at 10:48 a.m.
6.2 The following officials joined the meeting:

**Auditor General's Department (AGD)**

- Ms. Lorelly Pujadas - Auditor General
- Mr. Desmond Noel - Assistant Auditor General (Ag.)
- Mr. Louis Hernandez - Assistant Auditor General (Ag.)
- Mrs. Nela Dwarika-Ali - Audit Director

**Ministry of Public Administration**

- Ms. Joan Mendez - Permanent Secretary
- Mr. Claudelle McKellar - Deputy Permanent Secretary
- Ms. Shanaz Mohammed - Public Sector ICT Specialist
- Mr. Desron Palmer - ICT Policy Strategy & Development Specialist
- Ms. Abigail Bynoe - Manager, Policy, Strategy and Monitoring

**Ministry of Planning and Development**

- Mrs. Ayleen Alleyne-Ovid - Permanent Secretary (Ag.)
- Mr. Peter Mitchell - Director (Ag), Project Planning and

| | | |
|---|---|---|
| | | Reconstruction Division |
| • Mr. Mark Joseph | - | Project Monitoring Officer, Project Planning and Reconstruction Division |
| • Mr. Keane Bryan | - | Director IT Department Specialist |

**National Information and Communication Technology Company Limited (iGovTT)**

| | | |
|---|---|---|
| • Mr. Charles Bobb Semple | - | Deputy Chief Executive Officer |
| • Dr. Sean Rocke | - | Chairman |
| • Mr. Sherwin Ragoonanan | - | Head, Operations Unit |
| • Ms. Christine Ferreira | - | Head, Finance and Administration |
| • Ms. Vashti Maharaj | - | Director |
| • Ms. Jacqueline Morris | - | Director |

**6.3 Key Topics Discussed:**

1. The status of the training provided to personnel from the Auditor General's Department to conduct IT audits;
2. The 2016 review of the IT Governance Framework focusing on seven (7) Ministries, Departments and Agencies (MDA);
3. The challenges with regard to ICT throughout the public service;
4. The lack of standardization in the use of ICT guidelines throughout the public sector;
5. The status of the Interoperability Framework and its role in ensuring uniformity throughout Ministries and Department;
6. The establishment and role of the Government ICT Leadership Advisory Council (GILAC);
7. The status of the initiatives under the National ICT Plan 2018-2022 halfway through the life of the Plan;
8. The status of the implementation of the National ICT Plan 2018-2022;
9. The lack of the monitoring of ICT governance and structure across the public sector;
10. The status of the approval of the 'Cloud Policy';
11. The review of technical and functional support units of all MDAs conducted by the Project Management Consulting Division (PMCD) of the Ministry of Public Administration; (MPA)
12. The role of the MPA in formulating ICT-related policy;
13. The role of iGovTT in the implementation of MPA policy and as policy advisor to other Government Ministries;

14. The iGovTT's self-assessment of its fulfilment of its mandate and the potential to improve its service delivery;
15. The need for human resource enhancement with respect to ICT;
16. The efforts by the MPA to monitor expenditure on ICT across MDAs;
17. The status of the MPA's Business Continuity and Disaster Recovery Plan;
18. The HackTT ICT innovation competition hosted by iGovTT;
19. The collaboration between the MPA and the MPD to monitor ICT expenditure under the Public Sector Investment Programme (PSIP);
20. The need to align ICT projects with the Vision 2030 Plan;
21. The MPA's Collaboration with the International Telecommunications Union (ITU) for capacity building;
22. The status of the MPA's collaboration with the Government of the Republic of Estonia to observe best practices;
23. The two Digital Divide Surveys conducted by the TATT with a view to assessing access gaps;
24. The status of the use of the Universal Service Fund to fund projects aimed at geographical and social service access gaps;
25. The provision of free WIFI in selected public areas such as libraries, hospitals and transport hubs;
26. The status of the Enterprise Asset Management Framework;
27. The status of the Court Pay and Gov Pay systems as well as the Gov Net platform;
28. The status of collaboration between iGovTT and the Ministry of Health (MoH) through GILAC for integration of RHAs ICT infrastructure;
29. The challenges of the MoH's 'Health Information Management System';
30. The status of the ICT integration pilot project involving two (2) Regional Health Authorities (RHA); and
31. The status of security measures taken in light of the 2019 hacking incident.

**Please see the attached verbatim notes for the detailed oral submission by the witnesses.**

6.4 The Committee agreed to send additional questions to the AGD, iGovTT, MPA, MPD for written submission.

[**Please see Appendix 1**]

6.5 The Chairman thanked the representatives from the AGD, iGovTT, MPA, MPD, members of the media, the public and the Members of the Committee for their attendance.

**ADJOURNMENT**

7.1 There being no other business, the Chairman thanked the Members and Witnesses for their attendance and the meeting was adjourned.

7.2 The adjournment was taken at 12:44 p.m.

**We certify that these Minutes are true and correct**.

CHAIRMAN

SECRETARY

***September 11, 2019***

## Questions for the Additional Information

**Auditor General's Department**

**Responses Not Received**

1. What is the status of responses to the request for information on ICT and data resources from Ministries and Departments?
2. Were the Coast Guard and Air Guard required to submit information on ICT and data resources? What were reasons for the Coast Guard and Air Guard being excluded from the list of Ministries and Department that responses were not received?
3. What controls are in place with regard to data integrity?

**EXPENDITURE ON ICT – RECOMMENDATIONS** **PG. 79**

1. What is the status of the adherence to the recommendations in the Auditor General's Report by the Ministries and Departments?
2. Is there a plan in place for the execution of the recommendations by Ministries and Departments?
3. Has there been any follow-up on the implementation of the recommendations to date?
4. What improvements/ savings have been noted by Ministries and Departments following the adherence to the recommendations in the Auditor General's Report?

**National Information and Communication Technology Company Limited**

1. What have been the five (5) top achievements made since the launch of the National ICT Plan?

**Ministry of Public Administration**

**General Question:**

2. What have been the five (5) top achievements made since the launch of the National ICT Plan?

**Questions based on the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial year 2017**

**ICT RESOURCES AT MINISTRIES AND DEPARTMENT** **PG. 73**

1. What are the benefits to be derived from the collaboration between the Ministry of Public Administration (MPA) and the Ministry of Planning and Development (MPD) in addressing the IT needs of Ministries and Departments?
   - See further questions at Appendix 1.

**Non-Submission of Documents**

1. Are the Ministries and Departments aware that the non-submission of information is in direct contravention of Section 10 (1) (a) of the Exchequer and Audit Act, Chapter 69:01?
2. How are Ministries and Department being held accountable for the non-submission of information?
3. What steps are being taken by the MPA to address this issue?

**COLLABORATION AND INTEGRATION** **PG. 74**

1. Based on the analysis of the information received and need to ensure that there is an appropriate level of integration and collaboration in the use of ICT to improve the efficiency and effectiveness of service delivery:
   - What is being done to reduce cost across all Ministries and Department?
   - What can be done to unify the use of these applications to reduce cost across the Board?

**IT POSITIONS IN MINISTRIES AND DEPARTMENTS AS AT APRIL 2018** **PG. 77**

1. What is the reason for the number of vacant positions at the Service Commissions Department and the Ministry of Education? What is the impact of the vacant positions on the operations of the Service Commissions Department and the Ministry of Education?
2. Based on the size of the Ministry of Social Development and Family Services, what were the reasons for the small number of contract officers at this Ministry?

**EXPENDITURE ON ICT – RECOMMENDATIONS** **PG. 79**

1. What is the status of the adherence to the recommendations in the Auditor General's Report by the Ministries and Department?
2. Is there a plan in place for the execution of the recommendations by Ministries and Departments?
3. Has there been any follow-up on the implementation of the recommendations to date?

**TABLE 5.5: ASSESSMENT OF IT GENERAL CONTROLS AT RHAS** **PG.81**

1. Out of the five (5) RHA's, three (3) were operating without a documented IT Strategy. What is the reason for this?
2. How is patient-related data being protected?

**IT Security Policy**

1. What is the reason for no senior officer nominated as "Owner" of the policy?
2. Who is monitoring and implementing the IT strategy?
3. What is the reason for the lack of controls in place to inform the new staff of the IT Security Policy?

**Organizational IT Security**

1. What is the reason for the lack of risk assessment at the five (5) RHA's?
2. What is the reason for the lack of audit/review of IT security of systems in use at the five (5) RHA's?
3. What is the reason for the lack of risk assessment of access by vendors to RHA systems at the four (4) RHA's?
4. What is the reason for the lack of identification of a security specialist, in-house or outsourced to RHA systems at the five (5) RHA's? How are patient's information being protected? Who is responsible for protecting patients and other person's personnel information?
5. What is the reason for the lack of IT security standards /framework? What measures are in place to address this issue to ensure standards are in place to protect patient's information at the five (5) RHA's? Provide an example.

Risk Assessment and Asset Classification

1. What is the reason for the results of the verification exercises not provided to the AGD?
2. What is the process for the disposal of the IT equipment?
3. What is being done to ensure compliance with legal and contractual requirements?

- See Appendix 2 for further questions on the Audit of IT Governance and General Controls at Regional Health Authorities (RHA), Pages 80-85

**Follow-Up Review on Audit of General Controls at Selected Ministries and Departments pgs. 85-94**

- See Appendix 3 for questions on:
    - **TABLE 5.7:** Status of Corrective Actions on Overarching Governance Issues **PG.86**

- Status of Corrective Actions to address Deficiencies in IT General Controls – Recommendations, Page 94

## Hacking Incident

Based on an article in the guardian newspaper on Friday July 26, 2019, which stated that Minister of National Security, Hon. Stuart Young said that he had been made aware of a hack.

Excerpt from the article:
"The Ministry of National Security's website, as well as Immigration's website, were hacked. There are currently investigations with respect to where this hacking could have taken place from and we have shut down the website as you would imagine until we are able secure them and understand if anything has happened," said Minister Young during the Post-Cabinet Press Briefing.
The minister said that no critical information had been compromised by the attack. "I would like to assure the public that there is no real damage done. These websites don't get into our operating systems, these websites are not going to affect the records at National Security....certainly not the records at immigration either. So there is no reason for us to overly concerned about an intentional attack on data that exists in those two very important places...National Security and the division of Immigration which is a vision of National Security," said Minister Young.
http://www.guardian.co.tt/news/hackers-hit-6-state-websites-6.2.894827.428c1482da

1. What framework was used to manage information technology projects?
2. What was the cause of this issue taking place?
3. Why was this allowed to happen in the Government space? Who was responsible for protecting the Government space from this problem?
4. Was an information technology risk assessment conducted? What was the reason for failure occurring?
5. Was any issue identified, accessed, reviewed and solutions put forward? Provide a copy of this report.
6. What systems are in place to detect breach or risk?
7. What are the lessons learnt?
8. What are some of the emerging cybersecurity risks?
9. Who are the Ministry of Public Administration and IGOVTT major vendors?
10. Were the vendors vetted before entering into a contract?
11. Are the same vendors still being used?

12. Who is responsible for monitoring the vendors, so that gaps and errors in providing services are eliminated?
13. How frequent are third party risk assessment conducted with regard to these vendors?
14. Were all the issues regarding the hack on Friday July 26, 2019 rectified? If not, what percentage of the issues were rectified, ongoing and not addressed to date?
15. Do the vendors have a business continuity plan? If no, why not.

**Questions based on the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial year 2018**

**<u>General Questions:</u>**

1. What is the reason for the lack of collaboration and coordination amongst the RHAs and the Ministry of Health (MoH)?
2. What steps will be taken to ensure there is collaboration with the Ministry and the RHAs?
3. What are the challenges being faced by the Ministry and the RHAs with regards to collaboration and coordination efforts for the implementation of information systems used for inventory and distribution of pharmaceuticals?
4. What steps are in place and will be taken to ensure that the staff of the Internal Audit Units of the RHA have the competencies to audit the information systems?
5. What were the reasons for the non-receipt of responses from the MoH and the MPD on the status of the implementation of recommendations?
6. What is the status of the implementation of the recommendations?
7. What are the challenges affecting the implementation of the recommendations?
8. What is being done to ensure the implementation of the recommendations?

**Appendix 1**

**Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for financial year 2017**
**Chapter 5 – Information Technology Assessment**
**ICT Resources at Ministries and Departments, Pages 79-80**

| 2017 RECOMMENDATIONS | QUESTIONS |
|---|---|
| There should be a strategic approach to procurement of IT systems, licenses, support and maintenance across Ministries and Departments to achieve both purpose and value for money. | 1. How would a strategic approach to procurement of IT systems, licenses, support and maintenance achieve value for money? What is the estimate cost and benefit of this approach? Provide an example.<br>2. What is the general status of the development and implementation of the strategic approach?<br>3. What steps were taken by Ministries and Departments to ensure that IT resources are procured economically?<br>4. Is there a registered list of persons to provide for the procurement of IT goods and services across Ministries and Department? |
| The data and information needs of all Ministries and Departments and main stakeholders should be assessed to facilitate improvement in service delivery. | 1. What is the status of the assessment of the data and information needs of all Ministries and Departments and main stakeholders?<br>2. Who is responsible for accessing the data and information needs of Ministries and Department?<br>3. How will the results of this assessment be used to facilitate improvement in service delivery?<br>4. What is the cost of the assessment initiative? What savings will be realised from this assessment? Provide an example. |
| There should be regular collaboration between MPAC and MPD with respect to IT projects to ensure that opportunities for integration and data sharing are maximized. | 1. Since this recommendation was made, what did the MPA do to ensure regular collaboration with MPD?<br>2. What are the parameters of the working relationship between the MPA and the MPD concerning IT projects?<br>3. What is the collaboration between the two (2) Ministries coordinated?<br>4. To what extent has this collaboration achieved the desired goals? |
| MPAC should develop a central database of IT software and hardware. | 1. Since this recommendation was made, what is the status of the development of this database?<br>2. What is the cost and benefits of this central database? Provide an example.<br>3. What challenges and solutions of the central database of IT software and hardware? |
| A gap analysis should be performed at all Ministries and Departments to assess the IT skills and competencies required. The skills and competencies of IT staff should be aligned to the needs of the organization. Efforts should be made to retain qualified and experienced IT staff in established positions. | 1. Has this GAP analysis been conducted?<br>- If yes, when was this done and what were the conclusions?<br>- If no, when is it due to be carried out?<br>2. What is the status of this recommendation? |

| | |
|---|---|
| A central database of bio data should be developed and maintained for use as needed across Ministries and Departments to create efficiency in verification and facilitate common availability of information. | 1. What is the status of the development of this database?<br>2. What is cost of this project?<br>3. What are the challenges of this project? |
| The Ministry of Finance should consider creating a separate accounting vote for IT expenditure which would facilitate:<br>• The availability of complete costing information on IT acquisition and projects for planning and budgeting;<br>• Transparency and value for money with respect to IT expenditure, and<br>• Effective decision-making with respect to the best or most efficient use of limited financial resources. | 1. Since this recommendation was made, what is the status of this issue?<br>2. Have the MPA or the MPD sought the view of the Ministry of Finance (MoF) on this issue?<br>- If yes, when was this done and what was the result?<br>- If no, why not and when will this be done? |

## Appendix 2
## Audit of IT Governance and General Controls at Regional Health Authorities (RHA), Pages 80-85

| **ISSUE: DISTRIBUTION AND INVENTORY OF PHARMACEUTICALS** | |
|---|---|
| **NOTE: These recommendations were made in the 2017 AGD Report. At the time of publication of the 2018 AGD Report, it was indicated that "to date, responses were not received from either the Ministry of Health or the Ministry of Planning and Development on the status of implementation of any of the above mentioned recommendations".** | |
| **RECOMMENDATIONS** | **QUESTIONS** |
| The Ministry of Health in consultation with the MPA and the MPD should ensure that:<br>• The respective RHAs develop/update their IT Strategic Plan to ensure that IT risks and resources are managed appropriately;<br>• IT policies and procedures which adhere to international IT standards are developed for the RHAs;<br>• A feasibility study is conducted prior to the acquisition of any new system;<br>• Standardized IT solutions are developed and implemented across all RHAs to facilitate operations as well as to realise benefits such as data comparability, harmonized reporting, cost savings and sharing of expertise;<br>• All RHAs comply with IT related legislation;<br>• All RHAs develop a Business Continuity Plan after identifying critical IT assets and processes through a Business Impact Review;<br>• Regular training is conducted to ensure that IT staff is kept updated with changes in the IT environment in order to maintain high security and quality standards, and<br>• The Internal Audit Units of the RHAs are strengthened with the required skills and resources so that regular reviews of IT security and controls are undertaken. | 1. Since this recommendation was made, what is the status of the development/updating of Strategic Plans of each RHA?<br>2. What international standards are being used by RHAs?<br>3. What systems are in place for verifying that feasibility studies are conducted before new systems are acquired?<br>4. What measures are being implemented to facilitate interoperability among RHAs?<br>5. To ensure equal capacity with respect to compliance, is the staff complement of the legal function of RHAs the same across the board?<br>- If no, what are the differences?<br>6. How often has the necessary periodic training of IT and Internal Audit officers been conducted?<br>- How has this training benefitted the RHAs?<br>7. What is the status of the Business Impact Reviews conducted by the respective RHAs?<br>- How have the conclusions been used to develop a Business Continuity Plans?<br>- What is the status and cost of the development and implementation of the Plan? |
| **OBSERVATIONS** | |

| | |
|---|---|
| According to paragraph 5.4 (page 46) of the 2018 AGD Report, the following issues still affected the RHAs:<br>1. Weak or non-existent IT general and application controls.<br>2. Business continuity and disaster recovery plans were not developed to facilitate the timely recovery of critical business processes in the event of a major disruption or disaster.<br>3. Information systems were only partially implemented at the South West and Tobago RHAs.<br>4. The North West and North Central RHAs ceased using the pharmacy system and reverted to manual systems.<br>5. There were instances of duplication of effort when both electronic and manual records were simultaneously maintained at three RHAs.<br>6. None of the RHAs had adopted an IT governance framework or IT security standards. | 1. How can the MPA work with the MPD and the Ministry of Health to enhance the fulfilment of its oversight role over RHAs to secure compliance? |

## Appendix 3(a)

## Follow-Up Review on Audit of General Controls at Selected Ministries and Departments

## TABLE 5.7: Status of Corrective Actions on Overarching Governance Issues, PG.86

| 2016 RECOMMENDATIONS | MPA RESPONSES | QUESTIONS |
|---|---|---|
| MPAC should ensure that overarching IT Governance structures such as an IT Strategic Plan and an IT Policy are instituted for the Public Service. These structures should define the parameters within which Ministry and Department-specific IT Policies and Procedures should be developed and should require adherence to international IT standards. The responsibility of Ministries to monitor and oversee the IT activities of entities falling under their purview should also be specified. | This issue is addressed within the Draft National ICT Plan for the period 2017 to 2021, which text was approved by Cabinet. The Draft Plan is being revised for validation and subsequent submission to Cabinet for approval by end of March/early April 2018.<br>There are several Cabinet approved ICT Policies including the e-Government Interoperability Framework (eGIF) Policy which is complemented by the eGovernment Technical Omnibus Standards (eGOTS). All approved policies need to be reviewed and updated as necessary. MPAC's further action is the formal adoption and provision of consultancies and training for the following: ISO: 20000; ISO: 27000; and other ISO series which have ICT components as well as COBIT IT Governance Framework.<br><br>MPAC has also reconstituted, as of April 25, 2017 the Government | 1. A document entitled '*Trinidad and Tobago's National ICT Plan ICT Blueprint 2018-2022*' is available on iGovTT's website.<br>- When was the 2018-2022 Plan developed?<br>- Is this the successor to the 2017-2021 Plan?<br>- If yes, what were the improvements in the 2018-2022 Plan compared to the 2017-2021 version?<br>2. What measures have been implemented to achieve the 10 Headline Targets identified in the 2018-2022 Plan?<br>3. The Plan highlights three (3) major challenges to advancing the national ICT Agenda.<br>- What systems are in place to address and overcome these challenges?<br>4. Was the revised version of the Draft National ICT Plan submitted to Cabinet?<br>5. What is the relationship between the different ICT Policies approved by Cabinet and the National ICT Plan?<br>6. What specific measures has the Government ICT Leadership Advisory Council (GILAC) implemented to achieve its objectives since its re-establishment in 2017? |

| | | |
|---|---|---|
| | ICT Leadership Advisory Council (GILAC) as a robust, sustainable Community of Practice for ICT within GoRTT. Its objectives are to:<br>- Facilitate continuous and active engagement among members, MPAC and the Committee of Permanent Secretaries.<br>- Develop, review and/or maintain ICT Standards, Guidelines, Position Papers and ICT Policy and their application,<br>- Foster an environment that facilitates responses to technology and socioeconomic trends,<br>- Establish a framework for collaboration across the public service on national ICT programmes, projects, operations and experiences. | |
| MPAC should liaise with the Ministry of Finance to develop and implement guidelines and procedures for the proper disposal of IT equipment including storage media. | iGovTT informed MPAC that it is also undertaking the development of a Green ICT policy. | 1. What is the status of the development of a Green ICT Policy by iGovTT?<br>2. How will the Green ICT Policy help to reduce the carbon footprint of Ministries '/ Departments' digital activities? |
| MPAC should guide and monitor the IT activities of Ministries and Departments to ensure that robust IT Governance and controls exist to secure the economical, efficient and effective procurement and use of IT to improve service delivery and accountability. | MPAC will facilitate guidance and monitoring of IT activities through the TT ICT Managers Forum by communicating ICT shared polices, guidelines and standards. Existing policies relating to ICT e.g. Email and Internet Usage and Computer Hardware and Software Standards will be reviewed. | 1. What does the TT ICT Managers Forum consist of?<br>2. How can the MPA ensure that Ministries / Departments act on the policy, guideline and standard-related information shared with them? |
| The IT Units in Ministries and Departments should be adequately resourced with permanent staff possessing the specialist IT skills necessary to ensure the continuity of business operations. | Public Management Consulting Division and the Personnel Department conducted an exercise in December 2016/January 2017 on the standardization of ICT positions (review of established ICT positions and contract ICT positions). The Draft Note is being finalized and should be completed by end of March 2018. | 1. Was the Note finished in March 2018?<br>- If not, what was the reason for the delay and when was it finished? Provide a copy of the Note.<br>2. How did the Note facilitate the necessary recruitments?<br>3. Provide a breakdown of the recruitments that have been made, specifying the nature of the skills of the recruits and the nature of their tenure. |
| Ministries and Departments should ensure that the information processing facilities are secured and conform to international best practice. The design of new office buildings should also include specifications for IT facilities. | Currently the Outfitting Policy 2012 for office space does not include guidelines for IT facilities. However, the policy does speak to designing for compliance.<br>The Outfitting Policy is currently being reviewed and includes an Appendix for Special Purpose Rooms such as Server Rooms. The National Enterprise Architecture | 1. What is the status of the completion of the review of the Outfitting Policy?<br>2. What was the consequence of accepting the operational risk created by not providing for secured IT facilities? |

| | | |
|---|---|---|
| | programme is expected to address this at a high level. | |
| Procedures and guidelines should be instituted to ensure that Ministries and Departments comply with IT related legislation. | MPAC is looking into the adoption of relevant ISO standards and COBIT. The Ministry is also planning for a central repository for sharing through GILAC and Review of relevant legislation and policies: Cybercrime Bill, Data Protection Act, Computer Misuse Act.<br>MPAC will be working with the Ministries and agencies with respect to the consequences of the legislation. | 1. What is the status of the adoption of ISO standards and COBIT?<br>2. Has the central repository been created?<br>- If yes, when?<br>- If no, what were the challenges faced? |
| The Internal Audit Units in Ministries/Departments should be strengthened to include staff with the requisite competencies to audit information systems. | MPAC will coordinate through the Public Service Academy (PSA), the Comptroller of Accounts and the Ministry of Finance on training of Internal Auditors to ensure they have the required skills and resources to review and report to management on the effectiveness of IT security and control mechanisms. | 1. Have the relevant training initiatives begun?<br>- If yes, when did they begin, what did they entail and how can their contribution be measured?<br>- If no, when are they scheduled to begin? |
| Disaster Recovery and Business Continuity Plans should be developed and implemented to ensure continuity of operations in the event of a disaster or disruption. | MPAC had a Business Continuity Management project which was piloted in five (5) Ministries:<br>- Ministry of Trade and Investment.<br>- Ministry of Finance, Treasury Division.<br>- Ministry of Education.<br>- Ministry of Social Development and Family Services<br>- Ministry of Public Administration.<br><br>The pilots were completed in December 2016, however due to resource constraints further roll-out could not be done. It is expected that we will be able to restart this BCM in this fiscal year. Further iGovTT's Security and Assurance Unit as part of its operational plan for FY I8, will be embarking on specific BCP planning and awareness sessions with Ministries, Departments and Agencies (MDAs) in the aim of continuing and updating the BCP activities completed in 2014 by a Consultant where detailed Business Impact Analysis (BIA) and | 1. Given the crucial importance of Business Continuity and notwithstanding resource constraints, what was the reason for not prioritizing it?<br>2. When was BCM re-started?<br>3. How were the five (5) Ministries chosen for the pilot project?<br>4. What were the expected milestones / objectives of the pilot project?<br>5. What were the results of the pilot project?<br>6. What were the MDAs with which iGovTT conducted BCP planning and awareness sessions?<br>7. What measures has the MPA implemented to promote the adoption of entity-wide Business Continuity Plans to reduce risk across the public sector? |

| | | |
|---|---|---|
| | Facilities Risk and Vulnerability Assessment (FRVA) were conducted as well as recommendations for recovery strategies that can support multiple MDAs. | |

**Appendix 3(b)**

**Status of Corrective Actions to address Deficiencies in IT General Controls – Recommendations, Page 94**

| RECOMMENDATIONS | QUESTIONS |
|---|---|
| The MPA should:<br>- Continue its initiatives aimed at advancing GoRTT's National ICT Agenda and guide Ministries and Departments in aligning their IT strategies to the Government's overall IT strategy;<br>- Adopt a common IT Governance framework to be followed by Ministries and Departments for ICT planning and reporting;<br>- Ensure that Ministries and Departments adopt International IT security standards;<br>- Develop an overarching ICT Policy for Ministries and Departments supported by guidelines and procedures;<br>- Develop guidelines and procedures to ensure compliance with IT related legislation, and<br>- Update and roll-out the existing Business Continuity Plan to all Ministries and Departments. | 1. What systems are in place to address a possible lack of buy-in by Ministries / Departments on this issue?<br>2. What capacity / authority does the MPA have to secure compliance by Ministries / Departments?<br>3. What are the international IT security standards that should be adopted by Ministries / Departments?<br>4. How old is the existing Business Continuity Plan?<br>5. What percentage of Ministries / Departments did not have entity-wide BCPs?<br>6. How did those Ministries / Departments attempt to mitigate risk in the absence of such Plans?<br>7. What, if any, oversight does the MPA exercise over the development and implementation of IT BCPs? |
| Ministries and Departments should make every effort to correct the deficiencies identified to ensure that the IT assets are protected whilst ensuring confidentiality, integrity and availability of data to increase efficiency and effectiveness. | 1. What is the MPA's assessment of measures put in place by Ministries / Departments to implement this recommendation? |

**Ministry of Planning and Development**

**ICT RESOURCES AT MINISTRIES AND DEPARTMENT** **PG. 73**

2. What are the benefits to be derived from the collaboration between the Ministry of Planning and Development (MPD) and the Ministry of Public Administration and Communication (MPA) in addressing the IT needs of Ministries and Departments?
3. Briefly state the role of the MPD in approving, monitoring and evaluating IT projects for Ministries and Department.

- See further questions at Appendix 1.

**Audit of IT Governance and General Control's**
**PGS.80-85**

- See Appendix 2 for questions on the Audit of IT Governance and General Controls at Regional Health Authorities (RHA), Pages 80-85

**Follow-Up Review on Audit of General Controls at Selected Ministries and Departments**
**pgs. 85-94**

- See Appendix 3 for questions on:
  - **TABLE 5.7:** Status of Corrective Actions on Overarching Governance Issues **PG.86**
  - Status of Corrective Actions to address Deficiencies in IT General Controls – Recommendations, Page 94

**Questions based on the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the financial year 2018**

**General Questions:**

4. What is the reason for the lack of collaboration and coordination amongst the RHAs and the Ministry of Health (MoH)?
5. What steps will be taken to ensure there is collaboration with the Ministry and the RHAs?

6. What are the challenges being faced by the Ministry and the RHAs with regards to collaboration and coordination efforts for the implementation of information systems used for inventory and distribution of pharmaceuticals?
7. What steps will be taken to ensure staff of the Internal Audit Units of the RHA have the competencies to audit the information systems?
8. What were the reasons for the non-receipt of responses from the MoH and the MPD on the status of the implementation of recommendations?
9. What is the status of implementation of the recommendations?
10. What are the challenges affecting the implementation of the recommendations?
11. What is being done to ensure the implementation of the recommendations?

**Appendix 1**

## Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for financial year 2017

## Chapter 5 – Information Technology Assessment

## ICT Resources at Ministries and Departments, Pages 79-80

| 2017 RECOMMENDATIONS | QUESTIONS |
|---|---|
| There should be a strategic approach to procurement of IT systems, licenses, support and maintenance across Ministries and Departments to achieve both purpose and value for money. | 5. How would a strategic approach to procurement of IT systems, licenses, support and maintenance achieve value for money? Provide an example.<br>6. What is the general status of the development and implementation of the strategic approach?<br>7. Have Ministries and Departments taken adequate steps to ensure that IT resources are procured economically?<br>8. Is there a registered list of persons to provide for the procurement of IT goods and services across Ministries and Department? |
| The data and information needs of all Ministries and Departments and main stakeholders should be assessed to facilitate improvement in service delivery. | 5. What is the status of the assessment of the data and information needs of all Ministries and Departments and main stakeholders?<br>6. Who is responsible for accessing and monitoring the data and information needs of Ministries and Department?<br>7. How will the results of this assessment be used to facilitate improvement in service delivery?<br>8. What is the cost of the assessment initiative? What savings will be realised from this assessment? Provide an example. |

| | |
|---|---|
| There should be regular collaboration between MPAC and MPD with respect to IT projects to ensure that opportunities for integration and data sharing are maximized. | 5. Since this recommendation was made, what did the MPD do to ensure regular collaboration with the MPA?<br>6. What are the parameters of the working relationship between the MPA and the MPD concerning IT projects?<br>7. What is the collaboration between the two (2) Ministries coordinated?<br>8. To what extent has this collaboration achieved the desired goals? |
| MPAC should develop a central database of IT software and hardware. | 4. Since this recommendation was made, what is the status of the development of this database?<br>5. What is the cost and benefit of this central database? Provide an example.<br>6. What challenges have been faced and how have they been overcome? |
| A gap analysis should be performed at all Ministries and Departments to assess the IT skills and competencies required. The skills and competencies of IT staff should be aligned to the needs of the organization. Efforts should be made to retain qualified and experienced IT staff in established positions. | 3. Has this GAP analysis been conducted?<br>- If yes, when was this done and what were the conclusions?<br>- If no, when is it due to be carried out?<br><br>4. What is the status of this recommendation? |
| A central database of bio data should be developed and maintained for use as needed across Ministries and Departments to create efficiency in verification and facilitate common availability of information. | 4. What is the status of the development of this database?<br>5. What is cost of this project?<br>6. What are the challenges of this project? |
| The Ministry of Finance should consider creating a separate accounting vote for IT expenditure which would facilitate:<br>• The availability of complete costing information on IT acquisition and projects for planning and budgeting;<br>• Transparency and value for money with respect to IT expenditure, and<br>• Effective decision-making with respect to the best or most efficient use of limited financial resources. | 3. Since this recommendation was made, what is the status of this issue?<br>4. Have the MPA or the MPD sought the view of the Ministry of Finance (MoF) on this issue?<br>- If yes, when was this done and what was the result?<br>- If no, why not and when will this be done? |

## Questions for Additional Information – Ministry of Planning and Development

### Appendix 2
### Audit of IT Governance and General Controls at Regional Health Authorities (RHA), Pages 80-85

<table>
<tr><td colspan="2">ISSUE: DISTRIBUTION AND INVENTORY OF PHARMACEUTICALS</td></tr>
<tr><td colspan="2">NOTE: These recommendations were made in the 2017 AGD Report. At the time of publication of the 2018 AGD Report, it was indicated that “to date, responses were not received from either the Ministry of Health or the Ministry of Planning and Development on the status of implementation of any of the above mentioned recommendations”.</td></tr>
<tr><td colspan="2">GENERAL QUESTION to the MPD:<br>1. What was the reason for non-submission of the required responses to the AGD?</td></tr>
<tr><td>RECOMMENDATIONS</td><td>QUESTIONS</td></tr>
<tr><td>The Ministry of Health in consultation with the MPA and the MPD should ensure that:<br>• The respective RHAs develop/update their IT Strategic Plan to ensure that IT risks and resources are managed appropriately;<br>• IT policies and procedures which adhere to international IT standards are developed for the RHAs;<br>• A feasibility study is conducted prior to the acquisition of any new system;<br>• Standardized IT solutions are developed and implemented across all RHAs to facilitate operations as well as to realise benefits such as data comparability, harmonized reporting, cost savings and sharing of expertise;<br>• All RHAs comply with IT related legislation;<br>• All RHAs develop a Business Continuity Plan after identifying critical IT assets and processes through a Business Impact Review;<br>• Regular training is conducted to ensure that IT staff is kept updated with changes in the IT environment in order to maintain high security and quality standards, and<br>• The Internal Audit Units of the RHAs are strengthened with the required skills and resources so that regular reviews of IT security and controls are undertaken.</td><td>8. Since this recommendation has been made, what is the status of the development/updating of Strategic Plans of each RHA?<br>9. What international standards are being used by RHAs?<br>10. What systems are in place for verifying that feasibility studies are conducted before new systems are acquired?<br>11. What measures are being implemented to facilitate interoperability among RHAs?<br>12. To ensure equal capacity with respect to compliance, is the staff complement of the legal function of RHAs the same across the board?<br>- If no, what are the differences?<br>13. How often has the necessary periodic training of IT and Internal Audit officers been conducted?<br>- How has this training benefitted the RHAs?<br>14. Have RHAs conducted their respective Business Impact Reviews?<br>- If yes, how have the conclusions been used to develop Business Continuity Plans and what is the status and cost of the development and implementation of those Plans?</td></tr>
<tr><td>OBSERVATIONS</td><td></td></tr>
<tr><td>According to paragraph 5.4 (page 46) of the 2018 AGD Report, the following issues still affected the RHAs:<br>7. Weak or non-existent IT general and application controls.<br>8. Business continuity and disaster recovery plans were not developed to facilitate the timely recovery of critical business processes in the event of a major disruption or disaster.<br>9. Information systems were only partially implemented at the South West and Tobago RHAs.<br>10. The North West and North Central RHAs ceased using the pharmacy system and reverted to manual systems.<br>11. There were instances of duplication of effort when both electronic and manual records were simultaneously maintained at three RHAs.<br>12. None of the RHAs had adopted an IT governance framework or IT security standards.</td><td>2. How can the MPD work with the MPA and the Ministry of Health to enhance the fulfilment of its oversight role over RHAs to secure compliance?</td></tr>
</table>

## Appendix 3(a)
## Follow-Up Review on Audit of General Controls at Selected Ministries and Departments
## TABLE 5.7: Status of Corrective Actions on Overarching Governance Issues, PG.86

| **2016 RECOMMENDATIONS** | **MPAC RESPONSE** | **QUESTIONS** |
|---|---|---|
| MPAC should ensure that overarching IT Governance structures such as an IT Strategic Plan and an IT Policy are instituted for the Public Service. These structures should define the parameters within which Ministry and Department-specific IT Policies and Procedures should be developed and should require adherence to international IT standards. The responsibility of Ministries to monitor and oversee the IT activities of entities falling under their purview should also be specified. | This issue is addressed within the Draft National ICT Plan for the period 2017 to 2021, which text was approved by Cabinet. The Draft Plan is being revised for validation and subsequent submission to Cabinet for approval by end of March/early April 2018.<br>There are several Cabinet approved ICT Policies including the e-Government Interoperability Framework (eGIF) Policy which is complemented by the eGovernment Technical Omnibus Standards (eGOTS). All approved policies need to be reviewed and updated as necessary. MPAC's further action is the formal adoption and provision of consultancies and training for the following: ISO: 20000; ISO: 27000; and other ISO series which have ICT components as well as COBIT IT Governance Framework.<br><br>MPAC has also reconstituted, as of April 25, 2017 the Government ICT Leadership Advisory Council (GILAC) as a robust, sustainable Community of Practice for ICT within GoRTT. Its objectives are to:<br>- Facilitate continuous and active engagement among members, MPAC and the Committee of Permanent Secretaries.<br>- Develop, review and/or maintain ICT Standards, Guidelines, Position Papers and ICT Policy and their application,<br>- Foster an environment that facilitates responses to technology and socioeconomic trends,<br>- Establish a framework for collaboration across the public service on national ICT programmes, projects, operations and experiences. | 7. Describe the assistance, if any, provided by the MPD in the implementation of these recommendations. |
| MPAC should liaise with the Ministry of Finance to develop and implement guidelines and procedures for the proper disposal of IT equipment including storage media. | iGovTT informed MPAC that it is also undertaking the development of a Green ICT policy. | |
| MPAC should guide and monitor the IT activities of Ministries and Departments to ensure that robust IT Governance and controls exist to secure the economical, efficient and effective procurement and use of IT to improve service delivery and accountability. | MPAC will facilitate guidance and monitoring of IT activities through the TT ICT Managers Forum by communicating ICT shared polices, guidelines and standards.<br>Existing policies relating to ICT e.g. Email and Internet Usage and Computer Hardware and Software Standards will be reviewed. | |

| | | |
|---|---|---|
| The IT Units in Ministries and Departments should be adequately resourced with permanent staff possessing the specialist IT skills necessary to ensure the continuity of business operations. | Public Management Consulting Division and the Personnel Department conducted an exercise in December 2016/January 2017 on the standardization of ICT positions (review of established ICT positions and contract ICT positions). The Draft Note is being finalized and should be completed by end of March 2018. | |
| Ministries and Departments should ensure that the information processing facilities are secured and conform to international best practice. The design of new office buildings should also include specifications for IT facilities. | Currently the Outfitting Policy 2012 for office space does not include guidelines for IT facilities. However, the policy does speak to designing for compliance.<br>The Outfitting Policy is currently being reviewed and includes an Appendix for Special Purpose Rooms such as Server Rooms. The National Enterprise Architecture programme is expected to address this at a high level. | |
| Procedures and guidelines should be instituted to ensure that Ministries and Departments comply with IT related legislation. | MPAC is looking into the adoption of relevant ISO standards and COBIT. The Ministry is also planning for a central repository for sharing through GILAC and Review of relevant legislation and policies: Cybercrime Bill, Data Protection Act, Computer Misuse Act.<br>MPAC will be working with the Ministries and agencies with respect to the consequences of the legislation. | |
| The Internal Audit Units in Ministries/Departments should be strengthened to include staff with the requisite competencies to audit information systems. | MPAC will coordinate through the Public Service Academy (PSA), the Comptroller of Accounts and the Ministry of Finance on training of Internal Auditors to ensure they have the required skills and resources to review and report to management on the effectiveness of IT security and control mechanisms. | |
| Disaster Recovery and Business Continuity Plans should be developed and implemented to ensure continuity of operations in the event of a disaster or disruption. | MPAC had a Business Continuity Management project which was piloted in five (5) Ministries:<br>- Ministry of Trade and Investment.<br>- Ministry of Finance, Treasury Division.<br>- Ministry of Education.<br>- Ministry of Social Development and Family Services<br>- Ministry of Public Administration.<br><br>The pilots were completed in December 2016, however due to resource constraints further roll-out could not be done. It is expected that we will be able to restart this BCM in this fiscal year. Further iGovTT's Security and Assurance Unit as part of its operational plan for FY I8, will be embarking on specific BCP planning and awareness sessions with Ministries, Departments and Agencies (MDAs) in the aim of continuing and updating the BCP activities completed in 2014 by a Consultant where detailed Business Impact Analysis (BIA) and Facilities Risk and Vulnerability Assessment (FRVA) were conducted as well as | |

| | | |
|---|---|---|
| | recommendations for recovery strategies that can support multiple MDAs. | |

## Appendix 3(b)
## Status of Corrective Actions to address Deficiencies in IT General Controls – Recommendations, Page 94

| RECOMMENDATION | QUESTION |
|---|---|
| Ministries and Departments should make every effort to correct the deficiencies identified to ensure that the IT assets are protected whilst ensuring confidentiality, integrity and availability of data to increase efficiency and effectiveness. | 1. What is the MPD's assessment of the measures in place by Ministries / Departments to implement this recommendation? |

## Appendix III
## Verbatim Notes

**VERBATIM NOTES OF THE THIRTY-SEVENTH MEETING OF THE PUBLIC ACCOUNTS COMMITTEE HELD IN THE J. HAMILTON MAURICE ROOM, MEZZANINE FLOOR (IN PUBLIC) TOWER D, THE PORT OF SPAIN INTERNATIONAL WATERFRONT CENTRE, 1A WRIGHTSON ROAD, PORT OF SPAIN, ON WEDNESDAY, SEPTEMBER 11, 2019, AT 10.48 A.M.**

**PRESENT**

| | |
|---|---|
| Dr. Bhoendradatt Tewarie | Chairman |
| Mrs. Ayanna Webster-Roy | Member |
| Dr. Lester Henry | Member |
| Mr. Randall Mitchell | Member |
| Mrs. Paula Gopee-Scoon | Member |
| Mr. Taharqa Obika | Vice-Chairman |
| Mr. Adrian Leonce | Member |
| Ms. Hema Bhagaloo | Secretary |
| Ms. Vanna Jankiepersad | Procedural Officer Intern |

**ABSENT**

| | |
|---|---|
| Ms. Charrise Seepersad | Member |

**AUDITOR GENERAL'S DEPARTMENT**

| | |
|---|---|
| Ms. Lorelly Pujadas | Auditor General |
| Mr. Louis Hernandez | Assistant Auditor General (Ag.) |
| Mr. Desmond Noel | Assistant Auditor General (Ag.) |
| Mrs. Nela Dwarika-Ali | Audit Director |

**MINISTRY OF PUBLIC ADMINISTRATION**

| | |
|---|---|
| Ms. Joan Mendez | Permanent Secretary |
| Mr. Claudelle McKellar | Deputy Permanent Secretary |
| Ms. Abigail Bynoe | Policy, Strategy & Monitoring Manager |
| Ms. Shanaz Mohammed | Public Sector ICT Specialist |
| Mr. Desron Palmer | ICT Policy & Strategy Development Specialist |

**MINISTRY OF PLANNING AND DEVELOPMENT**

| | |
|---|---|
| Mrs. Ayleen Alleyne-Ovid | Permanent Secretary (Ag.) |
| Mr. Peter Mitchell | Director (Ag.) Project Planning Division |
| Mr. Mark Joseph | Project Monitoring Officer |
| Mr. Keane Bryan | Director IT Department |

**NATIONAL INFORMATION AND COMMUNICATION TECHNOLOGY COMPANY**

**LIMITED (iGovTT)**

| | |
|---|---|
| Mr. Charles Bobb-Semple | Deputy Chief Executive Officer |
| Mr. Sherwin Ragoonanan | Head, Operations |
| Ms. Christine Ferreira | Head, Finance and Administration |
| Dr. Sean Rocke | Chairman |
| Ms. Vashti Maharaj | Director |
| Ms. Jacqueline Morris | Director |

**Mr. Chairman:** Good morning, good morning everybody. This morning I want to take the opportunity to welcome each and everyone here. I will identify the groups that are here and I want to thank you first of all for coming and I look forward to engaging discussion because this is an important issue.

This morning what we are going to discuss is the status of implementation of the recommendations on IT governance and general controls as stated in the Auditor General's report for the financial years 2016, 2017 and 2018. So I want to take this opportunity to welcome officials from the Auditor General's Department including the Auditor General herself, Ms. Pujadas, who is here; representatives from the Ministry of Planning and Development; representatives of the Ministry of Public Administration; and also from the National Information and Communication Technology Company Limited. I also want to take the opportunity to welcome any members of the public who are here and especially members of the media who are present or who are looking on to cover.

I am Chair of the Public Accounts Committee and my name is Bhoendradatt Tewarie. I am the Member for Caroni Central. The purpose of this meeting of the Public Accounts Committee is to follow up on the status of the implementation of the recommendations on IT governance and general controls as stated in the report of the Auditor General in their 2016, 2017 and 2018 public accounts reports to determine the challenges being faced and possible solution to these challenges.

The stakeholders whom I identified previously are all here and represented, and again we want to say thanks for coming and we welcome you here. And I do not want you to feel any pressure, the questions we are going to ask you are straightforward questions; I mean, they might be a little hard sometimes, but it is things that you would know or you can address. So I do not want you to feel any pressure about that. Let us just try and give the public the information that is important to them, and so that we understand. Because at the end of the day, based on this meeting we write up recommendations which are then responded to by your line Ministers. Okay?

This meeting is being held in public and is being broadcast live on Parliament's Channel 11, and Radio 105.5 FM and also on the Parliament's YouTube Channel, *ParlView*. Viewers and listeners can send their comments related to today's topic to either the email address which is parl101@ttparliament.org, or to facebook.com/ttparliament on Facebook, or to Twitter @ttparliament.

So, in sequence, I will ask the Auditor General to introduce herself and also any members who are with her, and also the same for the Ministry of Planning and Development, the same for the Ministry of Public Administration, and the same for National Information and Communication

Technology Company Limited. So would you please introduce yourselves first of all and then I will ask members of my Committee to do the same; although you may know them, I think it is important for them to introduce themselves to you. Okay? So could we start with the Auditor General?

**Ms. Pujadas:** Good morning, Dr. Tewarie and other distinguished members of the Public Accounts Committee. I am Lorelly Pujadas, Auditor General of the Republic of Trinidad and Tobago and with me are three members of my team that were involved in the audits of the ICT within the public service within the years 2016, 2017 and 2018. And through you, Chair, I would invite them to introduce themselves.

[*Introductions made*]

**Mrs. Alleyne-Ovid:** Good morning, Chair, thank you for the opportunity. I am Ayleen Alleyne-Ovid, Acting Permanent Secretary, Ministry of Planning and Development and through you I would like the members of my team, we are three members of the team for the Ministry of Planning in attendance, and I would invite them to introduce themselves. Thank you.

[*Introductions made*]

**Ms. Mendez:** Good morning, Chair and members of the Public Accounts Committee. Joan Mendez, Permanent Secretary, Ministry of Public Administration. I will ask my team members to now introduce themselves. Thank you.

[*Introductions made*]

**Mr. Chairman:** NICTC Company Limited.

**Dr. Rocke:** Good morning, Chair, and good morning members of the Committee. Sean Rocke, Chairman of iGovTT. With me I have two members of my board and three members from executive management. Through you, I would ask them to introduce themselves.

[*Introductions made*]

**Mr. Chairman:** Okay. And I already introduced myself. I will start on my right with Sen. Henry.

[*Introductions made*]

**Mr. Chairman:** All right. Okay. Well, we will begin with some general questions and then we would—[*Interruption*]—oh, yeah. We will begin with some general questions and then each member will take a turn to ask questions. Some of them will be questions that have already been prepared, some of them might derive out of the things that you say when you answer. But before I do that I would ask the Auditor General to make an opening statement.

**Ms. Pujadas:** Thank you, Chair. Just to give a little bit of background as to how we have reached where we are and how we have reported. The former Auditor Generals of the day, they recognized that Government Ministries, Departments and agencies were increasingly adopting information and communication technologies to conduct their functions and deliver their various services. This transition to electronic processing has triggered significant changes in the environment in which we are finding ourselves to audit. In recognition of this trend one of our Auditor Generals, Mrs. Sharman Ottley, sought to have our staff trained and some of them certified in the area of IT auditing.

To this end, with the assistance of a certified IT Auditor from the Office of the Comptroller and Auditor General, India, we embarked on a number of pilot audits. And these were taken primarily with the purpose of assessing the business that was being undertaken by certain entities, and the aim of these was to gain assurances that the financial statements that were being generated were actually free from material misstatements.

In so doing, we found that we needed to look at the actual IT general controls, partly because the IT general controls actually define and facilitate the application controls, and we needed to be assured that the IT controls were in place to provide us—to make sure that there were no weaknesses. And so that the reliability of these statements could have been further relied upon. So in 2016 we reviewed the IT governance framework, specifically the IT general controls at seven Ministries; these were the Ministry of Energy and Energy Industries; Ministry of National Security, Immigration Division; Ministry of Social Development and Family Services; Ministry of Works and Transport, Licensing Division; Ministry of Education, GATE; and Ministry of Finance, Project iHRIS, Inland Revenue Division and Treasury Division.

We have unearthed, you know, a number of weakness which were highlighted in the report which we thought needed to be strengthened. Following on that, we sought, in 2017 just to broaden our knowledge of the ICT universe that existed. And with this in mind we did not do a full audit but what we did is we circularized to all Ministries a document which we called "Request for information on an ICT and data resources". And we also issued an ICT questionnaire which we were trying to get a sense of, what software was in place, what hardware was in place, what applications As indicated on page 78 and page 79, there are no separately classified estimates of expenditure to facilitate us knowing the actual expenditure that is being played; we do not know. But based on the responses and those were just the responses, at that time in 2017, approximately $529,900,000 was invested in ICT. And that was predominantly hardware; we were unable to really get an assessment of the cost that was being spent in terms of the software. Further, what the responses revealed at that time is that there was no clear direction and standardization concerning ICT. Each Ministry seemed to have their own data needs and they were using different applications, had separate databases, when there could have been a centralized repository therefore achieving some sort of economies of scale.

We also looked at the policies and we determined that a number of the policies at that time were in draft and had not been fully communicated or rolled out to the Ministries. And the Ministry of Planning and Development, which was responsible for ensuring that requests were facilitated for IT projects releases, was not properly monitoring the ICT through the entire public service to get a perspective, but rather was evaluating each project on a project-by-project basis. So those were some of the weaknesses that were highlighted in the 2017 report.

I am happy to report, in 2019 we followed up with an update, again another questionnaire. And the Ministry of Public Administration has provided us with responses which we have evaluated and further detailed analysis will need to be done to those as well. So thank you very much, and that is my opening so far.

**Mr. Chairman:** All right, thank you very much. We will follow up on some of the issues that you raised in that report. I will ask the Permanent Secretary in the Ministry of Planning and Development, please.

**Mrs. Alleyne-Ovid:** Thank you, Chair. On behalf of the Ministry I would like to say that we are happy to be here today to review this important issue of governance and policy structures with regard to ICT in the public sector to ensure that there is effective implementation and value for money. Working with the Ministry of Public Administration, it is the Ministry of Planning and Development's intention moving forward to develop a harmonized approach from conceptualization to implementation of ICT projects. And to ensure that projects that are being included in the PSIP, in the Public Sector Investment Programme, and in accordance with *Vision*

*2030* and the National ICT Plan. And the Ministry is working assiduously with the Ministry of Public Administration to ensure that this takes place. Thank you.

**Mr. Chairman:** Thank you very much. Permanent Secretary, Ministry of Public Administration.

**Ms. Mendez:** Thank you, Chair. Good day, members. I am pleased to be here to provide information on the implementation of the recommendations relating to IT governance and general controls as stated in the reports of the Auditor General on the 2016, 2017 and 2018 public accounts. I want to acknowledge the Auditor General's Department and their focus on ICT in the public service in the last three years and emphasize the Ministry's commitment to work with them and all stakeholders to improve public service efficiency and effectiveness.

The Ministry of Public Administration's mandate covers public service modernization and national ICT. Digital government intersects both of these areas. Digital government is concerned with the use of ICTs to improve public service delivery in the front end and the back office. The Ministry would have provided a written response to the Committee prior to this meeting. From these responses the Committee would have noted two key updates: that we have established the GILAC, the Government ICT Leadership Advisory Council, a forum of ICT managers in the civil service, and that we are working on several policies and standards for use in the public service. The Committee would also have noted that MPA is collaborating with the Ministries of Finance and Planning and Development to design and implement expenditure and budgeting controls to improve ICT governance.

With regard to staffing, the Ministry of Public Administration would have provided information that the Public Management Consulting Division, PMCD, is in the process of undertaking a review of the technical and functional support units of all Ministries and Departments. In this exercise, the composition of IT units is being addressed to ensure the needs of all Ministries are met. The Ministry is guided by the Cabinet's approved National ICT Plan 2018—2022 as published on our website. Advancing digital government is one of the five strategic thrusts in the plan.

In closing, I wish to state that the Ministry does recognize the value and opportunities of ICTs in today's world, and we continue to be committed to championing ICT for national sustainable development and public service delivery. Chair, members, my team and I stand ready to answer members' questions or to make available any written submission that may be required to deliver on our digital government agenda. I thank you.

**Mr. Chairman:** Thank you very much to both Permanent Secretaries for your opening statements. They are helpful, they give us context and I will proceed now to ask some questions. I will just ask three questions. The first question I am going to ask—what I am trying to do is to address the issue of the ICT challenge: the achievement of your objective of digital government at three levels. So I am going to ask you about some things on what I consider level one; some things at level two; and an important question for the achievement of level three; and perhaps even level two as well.

So I will start with the first one. How—and the issue is a simple question of readiness, preparedness, achievement, okay, of where you are then. How good are you in terms of communication and exchange of information among Ministries? How good or strong are you in terms of financial accounting accuracy and security issues raised in the Auditor General's report? How good or strong are you in the integration of systems and government systems? The Auditor General in her particular report mentioned the issue of things being—Ministries operating sort of on their own, disconnected, et cetera. How strong or effective are you in terms of citizen access for information on the one hand and then citizen interface for service delivery and responsiveness? By that, I mean if I want to pay my taxes or if I want to get a form and fill it out and send it back and get a response—those kinds of things.

And the final thing in that: How strong or effective are you in terms of business support for competitiveness, including the ease of doing business issues which really require across-Ministry interventions and collaboration, et cetera? If you forget any of these things I will—you can ask, I will mention it. But it really goes from the individual citizen to some of the other things that the citizen in their different roles would want from Government and the effectiveness from Government in that process. Okay? Who will answer that? Ministry of Public Administration or Ministry of Planning and Development.

**Ms. Mendez:** Seems I was elected. In terms of the communication, the Ministry of Public Administration is the entity in charge of the policy development, ICT policy development. With respect to the implementation of projects and activities we rely on our ancillary body, the NICT.

**Mr. Chairman:** Okay.

**Ms. Mendez:** So we will be sharing in terms of the responses. Communication: one aspect in terms of getting our communication out would be through presentations to the board of Permanent Secretaries; through official correspondence, memos, and also through the body GILAC, which is really growing from strength to strength. I will ask my ICT policy specialist to elaborate on the work being done through GILAC and endorsing some of the communication strategies as well as the digital government agenda through that body. Can I ask, Chair, of iGovTT to probably elaborate on some of the other aspects?

**Mr. Chairman:** Go ahead.

**Dr. Rocke:** Okay. Good morning again. Thank you, PS. As you may be aware, the National ICT Company is really responsible for—or has been branded in terms of being the implementation arm for many of the policies and so forth that come from the line Ministry. And to this end, in support of the national ICT blueprint 2018 to 2022, we would have, again recognizing that there is a continuum—so some of these things would have been going on preceding the launch of the plan—we would have been providing support in respect to many different aspects.

Now, in terms of one of the things that was mentioned in your question, and I heard mention of it again, as it relates to the Auditor General's report in terms of not having sight of software expenditures, et cetera, one of the, sort of the flagship initiatives that the company has been involved in, focused on the use of enterprise software asset management, a framework and tools that would allow to have sight of many of the software-related aspects across government.

We are also looking at, in our advisory capacity to the Ministry, providing inputs in many different aspects as relate to several of the other initiatives that they would be working on. We are also responsible for the enterprise-wide type facilities. So, for example, one of our flagship products would have been that of GovNeTT. In response to several of the challenges raised through GovNeTT over the years, in particular the ageing platform, the company would have undertaken to find—and in light of the challenging financial environment that we are in—the company would have taken to work within the frameworks of the stakeholders that we are engaged with to strengthen that platform, which would involve refreshing the technology, and making it something that is more agile and responsive for line Ministry use on the back end as it relates to the facilitation of electronic service delivery.

What we would have also done over the years is we have formed a governance subcommittee that has membership, both within our company as well as with the line Ministry, to establish tighter communications. And since then we have undertaken to develop a series of data-driven-type initiatives which are—some are still under development, but the intention is to provide information, not only on the flagship products that are enterprise-wide. But also to provide that information for the various Ministries via the Permanent Secretaries, et cetera, and GILAC so that they would be able to also make data-driven decisions as far as possible.

We have a slew of other products and services. Chair, I know you mentioned with respect to e-Tax and so forth. So that in terms of the informational side, where that would fall would be under the information and access-type product which would be the ttconnect platform. The ttconnect platform, itself, focuses primarily on government information and services. In that respect, we have undertaken despite the challenges financially and with respect to time, support for hardware and software, we have looked at economical ways to ensure the robustness of the platform. One of the reports that we look at in the subcommittee would relate to the up-time and business continuity management and so forth. Those are the types of things we are trying to encourage, in grown, and to be more pervasive over whole-of-government. So that would be another area that we are using data to sort of pick up on as well.

We have a few other products that we are working on which would assist with end-to-end government delivery. Those would include the current piloting for GovPayTT. We have also, in response to another concern you raised, looked at GovChat. GovChat is a facility that would extend the ttconnect platform through the use of chatbot technology. So that people can avail themselves of certain government informational services outside of the usual hours, and it also provides a transcript that can be used, not only to mine citizens' concerns with an aim towards the deployment of new products and services, but it also allows us to see how traffic and how we engage with the citizenry and G2C-type activities can transform over time to be more electronic in nature. If there is anything I forgot at this point, I would apologize, but I can always answer it further in writing.

**11.15 a.m.**

**Mr. Chairman:** No, no, no. That is fine. I mean, I let you speak because you are articulating on behalf of your institution what you are doing. But, you see, I mean, remember we do this for the public's benefit, right, and we want them to know. That is part of the democratic process. I mean, the reason why we have these things and we have them public is so that the public will know. So I want to do things in a way that the public will understand. So let us say in terms of communication and exchange within the system, if you had to say between one and 10, with 10 being the best that you can do, where would you be?

**Dr. Rocke:** Ha! That is an interesting question. I think there is always room for improvement.

**Mr. Chairman:** Just give me a number. Give me a number and I will ask you a hard question after.

**Dr. Rocke:** [*Laughter*] I would say—

**Mr. Chairman:** The public will understand the number easy.

**Dr. Rocke:** I would say about seven.

**Mr. Chairman:** Seven?

**Dr. Rocke:** Yes.

**Mr. Chairman:** Okay. On the issue of financial accounting accuracy and security, where would you say you are?

**Dr. Rocke:** I can speak internally. I would say around seven as well.
**Mr. Chairman:** About seven. Integration of systems and government systems?
**Dr. Rocke:** Integration of systems and government systems?
**Mr. Chairman:** Yeah.
**Dr. Rocke:** I would say seven going on to eight.
**Mr. Chairman:** All right. So the integration is proceeding at a faster pace? Is it?
**Dr. Rocke:** I would say so.
**Mr. Chairman:** Because that is not the impression we get from the Auditor General's Report. Now, the Auditor General did say she had a 2019 response that seems to show some improvements, so I could ask her.
**Dr. Rocke:** No problem. What I can say in response to that is that one of the core products I would have mentioned is GovNeTT. GovNeTT handles the support for a lot of the backing processes. One of the challenges would have been in terms of the up time, the software age, et cetera, and in partnership with our contractor alliance, we have been doing a refresh, and from my best information, that refresh should be done by the end of September into October. That is the estimated time.
**Mr. Chairman:** So you are better integrated as a set of Government services?
**Dr. Rocke:** I would say so, yes.
**Mr. Chairman:** Okay. What about citizens' access to information? I think from the platform that you have, it looks like—it seems to me from what you said that there is easy access to a lot of information, but what about the interface for service delivery?
**Dr. Rocke:** Right.
**Mr. Chairman:** How is that? How would you number that one to 10?
**Dr. Rocke:** One to 10? I would say about seven again.
**Mr. Chairman:** You are sure about that? You do not think your numbers are too high?
**Dr. Rocke:** I mean, you asked for the opinion—
**Mr. Chairman:** Yes.
**Dr. Rocke:** And the basis, the criteria for that would be in terms of what I see as our remit and where we stand. There are particular challenges that would be responsible for some of the other variations in that scoring. So, for example, we refer to Government information access. We are responsible for providing the facility or the platform through which Government agencies are able to disseminate information—
**Mr. Chairman:** No, not the information.
**Dr. Rocke:**—and services.
**Mr. Chairman:** I mean the services.
**Dr. Rocke:** Right. And services, yes.
**Mr. Chairman:** I am conceding that you are fairly good on the information. I am questioning whether you are good enough on the services.
**Dr. Rocke:** I would say that, again, there is room for improvement, yes, and that is why I did not give myself a perfect 10. [*Laughter*]
**Mr. Chairman:** But you say seven.
**Dr. Rocke:** Yes, and the reason why I say seven is because there are few thingsthat are piloting and that are under works right now that I think are transformational-type ICT projects. So, for example, there is the issue of GovPayTT. GovPayTT to me is something that will allow

Government to citizens, Government to business and, perhaps, Government to Government-type transactions to end to end. We are piloting right now—the technology is not the problem. The problem is more along the lines of making sure that the relevant inter-agency frameworks are in place. And, again, from where I sit and my understanding, a lot of these things are underway, and as far as the National ICT Company is concerned, we are there to support as needed.

**Mr. Chairman:** You just told me you are the implementer for the Government.

**Dr. Rocke:** Sorry.

**Mr. Chairman:** You just told me that you are the implementer for the Government.

**Dr. Rocke:** Yes, yes. We provide that service.

**Mr. Chairman:** Okay. What about, I mean, you raised an important issue which is the ability to pay to conduct services, et cetera, and pay for it. What about the issue of this support for business—interface with business, the competitiveness issue, the ease of doing business issue which is across Ministries. How is that? Because that is something that we have fallen in and I think that is something if we handle ICT properly, we could improve. So how is that? How would you rank that?

**Dr. Rocke:** I would say that is a different animal, yes. I would rank that slightly lower, and the reason why is because a lot of the challenges are, again, not the ICT particularly, they are the interagency-type things—

**Mr. Chairman:** Collaboration?

**Dr. Rocke:** Yes. And those things take time to trash out, honestly.

**Mr. Chairman:** Okay. Now, this is a harder question, so this is the stage two question.

**Dr. Rocke:** So those questions were not hard? Okay? [*Laughter*]

**Mr. Chairman:** No, those were simply questions I just asked you, because those are basic things you want to have in this society, you see. I mean, most countries that you go to would have conquered those things. We have our own challenges, but I think we are trying to get somewhere. So the second one which would really take you to the second tier, if you want to get to digital government, you really want to create a platform for what you might call the Internet of things economy, right, which is our gateway, basically, to the absorption of technology, the leveraging of communication technology for business creation and growth and development purposes, and creating the conditions for integration with an artificial intelligence world. All right? Now, I know we are way away from that, but cloud computing is a reality, right—big data analytics is a reality today. Artificial intelligence is a reality. Now, given what you have told me about that first platform, do we have a strategy, a set of steps, to get to that point?

**Dr. Rocke:** We as in the National ICT Company, we as in the Ministry of Public Administration through the ICT Blueprint?

**Mr. Chairman:** Well—

**Dr. Rocke:** I can speak from where I sit.

**Mr. Chairman:** Yeah. I am thinking of in terms of implementation and, therefore, how far we have gotten and how much further we need to go. I am not asking you any trick questions.

**Dr. Rocke:** I know. I know.

**Mr. Chairman:** I am asking just so that we know what is happening.

**Dr. Rocke:** Yes, agree. So I can respond to that. I do not think that is a level two question yet, not to challenge you—

**Mr. Chairman:** All right. What you think it is?

**Dr. Rocke:** But one thing that I forgot to mention would have been another one of our flagship products, in a sense, and that one goes straight to something that resonates with me, which is the issue of human capacity development. I think that is one, in light of the developments within technology—I mean technology changes every 18 months, policy could never keep up with that, where a lot of this stuff happens, and you see this going on over the entire planet. For example, take as an example, the Cambridge Analytica and the social media and data protection and where it was a few months ago into last year. People are struggling to keep up globally. I mean, I am not saying that is the benchmark which we should measure ourselves by, but because it is just a challenge we have to find a way to overcome, but capacity is a big aspect of the plan.

Now, if you refer to the National ICT Blueprint you will see that one of the five strategic thrusts focuses on that in alignment with *Vision 2030* from the Ministry of Planning and Development, and in respect to that one of the things that the company has undertaken is to develop a product call HackTT. HackTT is a Hackathon and what we have tried to do through this—this is the first offering this year and I believe that the awards for the finals will be next week. What we try to do is to engage tertiary level institutions to have kids tackle some of these application centric problems which would then be more impactful and really be closer to the citizenry in terms of their ability to benefit from e-government type services. The services that we have looked would be things that they developed the ICT solutions for in partnership with the private sector mentoring them. And from what I have seen so far with respect to that which is, again—responding to you in terms of the plan, one of the focal points I said is the human capacity side, and that is where we try to capture a lot of the—we focus a lot on that.

The other thing we focus on, as I mentioned before through the chatbot facility, is exploring things that relate to, for instance, data-driven decision making. So, for example, looking at the chatbot facility, we can see what types of questions people ask outside of hours, et cetera, and that is something we will do internally as a way of hopefully developing a case study to do a sort of a perspective change, a change of thinking through these sort of pilot activities.

**Mr. Chairman:** But given where—I know you understand where we need to be headed. All right?**Dr. Rocke:** Yes.

**Mr. Chairman:** Where are we, one to 10?

**Dr. Rocke:** So, where are we one to 10 with respect to those things? I would say about eight in terms of the mindset and in terms of the things that I would have mentioned. Again, with respect to—if this applies to—my argument here is that it applies to certain services we are playing with, and the model can be extended following, so. It is sort of developing the supporting—the foundational things and—

**Mr. Chairman:** So you are saying that we are eight out of 10 in terms of readiness for the Internet of things economy?

**Dr. Rocke:** I would say that is where we are from where I sit.

**Mr. Chairman:** I find that very difficult on the basis of my personal experience and on the basis of my knowledge of how the society operates to agree with that, but I would not challenge you because I am not an expert in it, but it is something that I think that is critical in our development. And the final question is a quick question—I do not know who wants to answer this—which is, are we anywhere near to the establishment of a unique identifier as part of the system of the use and deployment of ICT services at the digital age?

**Dr. Rocke:** I could answer that, but I could also defer to Mr. Charles.
**Mr. Bobb-Semple:** Hi, good day. Just to clear up and clarify. In the conversation that Chair would have been having, he would have been relating it in terms of infrastructure that we have and deployed. Some of the questions you based in terms of our readiness for cloud computing and Internet of things—
**Mr. Chairman:** That is right.
**Mr. Bobb-Semple:**—it goes a bit beyond. Right? So just to clarify with that regard, so yes eight in terms of what we have, but in terms of the cloud aspect of things and our readiness for Internet of things, it is probably like around a two and the reason for that is, we have been trying for some years to have a cloud policy approved. It is at Cabinet and it requires approval, because a lot of persons are desirous of moving into infrastructure that can be scaled easily. And so, the Ministry undertook an exercise to interact with stakeholders so that we can liaise and determine how do we move forward. Because what you find happening, when we take long to do these things, some Ministries and so on make decisions on their own, because they need to spend less money and achieve more.
What we have attempted to do within iGovTT as well, and it is coming before the subcommittee that Chairman would have spoken to you about, is in us having a facility where local persons could provide a local-type cloud, because we do understand some of the concerns that were raised by Cabinet is where the data is stored and things like that. Because of the toing and froing and time is passing and sometimes it takes years to make certain decisions, you will find that sometimes we could be much further along the line but, at this point, we are a bit low there. Once things like this approve we will be much further along the pathway. So that was just to address that aspect.
With regard to the second question—
**Mr. Chairman:** Unique identifier.
**Mr. Bobb-Semple:** Unique identifier. We have had a unique identifier that was approved by Cabinet in 2008/2009. The identifier is ttconnect ID. This is the ID you will use to file your taxes as well as to conduct business with TTBizLink. Now, we are currently in some discussions with—for instance, Health wants to proceed and do their thing. The concept will be shared services. So while the unique identifier would be ttconnect ID, for instance, if you are desirous of, for instance, deploying a service, what we will have is your system could have its unique identifier and we will have an interpreter in-between that unique identifier. So, I am Charles Bobb-Semple, and just take, for instance, Legal Affairs has a system and within that system, I am number one. We will have a translator that will translate number one in Legal Affairs' system to ttconnect ID 9307, and the reason for this is because we understand that it takes a while for all persons to be on board with the same thing for legal affairs to agree with customs and to agree with all Ministries. I mean, that is unrealistic. Not even in Estonia you have those things and it took a while to advance. So what we will have is each Ministry or agency or division, they develop their service and we have an interpreter in-between to translate that Dr. Tewarie in this system is one, in this next system here is nine and in this other system he is 302. But the unique identifier that would cross thread all of them—
**Mr. Chairman:** Will pick up the difference.
**Mr. Bobb-Semple:** Will pick up the difference. And one of things we will do is determine the single source of truth. So a lot of persons may capture addresses but it is supposed to be a single

source of truth for address. So, if for instance, we generate a certain type of report or we need certain types of information and a subset of it is address, it will take that address from that specific service. That is what we have in train, that is what we have documented, and as services come on board to be deployed, that is what we are utilizing.

**Mr. Chairman:** Okay. I wonder if you could give me a quick answer to this before I move on to the next question. I mean, for us to have an integrated ICT platform in Government that really works—interfaces and supports the private sector to do what they are supposed to do—respond to the citizens in a way that they would like to respond and to get the system to move up in the value chain, does that—from your experience and knowledge should that be centrally driven?

**Mr. Bobb-Semple:** Centrally driven by policy and generally providing infrastructure, which is what the Chairman would have been alluding to, that we are doing those things. So those things are "ready" except for the cloud aspect, right, that we spoke of.

**Mr. Chairman:** Okay.

**Mr. Bobb-Semple:** In terms of the driving of the other things and the services, once we indicate this is the standard, this is what is expected, this is the infrastructure we will utilize, then it is driven by the owners which will be the Ministries themselves, and that is not an issue once we have the things defined as in the example I provided. Once we have the interpreter in between, and Mr. Mitchell would like to do something by his Ministry, we do not need to hold him back because we need to centrally manage it.

**Mr. Chairman:** That is right.

**Mr. Bobb-Semple:** We will provide all the resources and infrastructure and provide him with guidelines, so that when he completes then his system could speak with Mrs. Gopee-Scoon and so on rather than us trying to control everyone in here. You know, we set policy in place. The governance that was alluded do by the Auditor General, we have those things in place. We have the governance. So everyone is aware of what others are doing and we provide the respective infrastructure.

**Mr. Chairman:** Okay. So central policy coordinated, decentralized operations?

**Mr. Bobb-Semple:** Correct.

**Mr. Chairman:** Okay. Mrs. Ayanna Webster-Roy.

**Mrs. Webster-Roy:** Just listening to the conversation and taking into consideration those viewing, you said the policy is already in place. Right? Who is to drive the policy? Is it iGovTT? Is it Ministry of—so that the public could understand, I could understand, who is to drive the policy to ensure that policy is in motion and the public will benefit.

**Mr. Bobb-Semple:** So what we will do, we will be able together with the Ministry of Public Administration to identify some gaps, and in terms of some of the valuable information that are provided in the report, we will be able to see gaps we may not have seen before. We would help craft and draft it, but in terms of the executional drive, it lies with the Ministry of Public Administration who via the Minister will have representation within Cabinet.

**Ms. Mendez:** As I indicated, the Ministry is responsible for ICT policy and development and through the mechanism of the establishment of GILAC, we are able to coordinate. Everybody is on board. This is our NICT plan. This is our agenda for digital government and through the GILAC mechanism, we are able to monitor and even evaluate in time how the policies are being implemented. I will take the opportunity to ask Ms. Mohammed to explain the mechanisms that are utilized through the GILAC body. Ms. Mohammed? Thank you.

**Ms. Mohammed:** Hi, morning again everyone. So the GILAC has two layers. It has a strategic layer and an operational layer. The strategic layer pretty much involves or it is comprised of all ICT practitioners and leaders within Ministries, Departments and agencies. The operational layer, this is pretty much smaller committees comprised of like eight to 10 persons within different Ministries, Departments and agencies. The operational committees, they deal with the policies. So we have a policy committee, we have an infrastructure committee and a communication committee.

We are currently updating ICT Cabinet approved policies, dated policies. So we are working on like, for instance, the email and Internet usage policy, asset management policy, and we do this in a team, in a very collaborative way. So some of the roles, I could tell you for the technical committees are: they provide recommendations on the development and revision of the policies; identify specific issues with the policies; share any relevant policies that they may have within operation that could align to the whole of Government policy we are trying to create. Pretty much that is it.

**Mrs. Webster-Roy:** So for the average man or woman out there, whenever they hear about ICT and ICT relations to Government, the first agency that would come to mind is iGov. I am being honest. Whenever I think about ICT I think about iGov. Again, so that the public will understand, how does it fit? Where is iGov within the agenda? How is iGov assisting Government Ministries and agencies to ensure that policy is put into practise?

**Ms. Mohammed:** So, I would take it first and then maybe Mr.— So iGov is always part of the policy revision or development process. So we work again collaboratively. We select the policy together. They have a policy department that will look at it. They attend all the GILAC meetings and they support us in terms of sharing these technical committees. Yeah. Charles?

**Mr. Bobb-Semple:** Thanks. [*Laughter*] Yes, so that is accurate. In terms of one of the areas that could be better as a country is in terms of us doing what the policy says as a country, as Ministries and so on. You mentioned a word there, "enforcement", how do we do those things? At present, I would say through all of us understanding that is the best thing to do, and this is the most appropriate way to move forward with expenditure. Beyond that if, for instance, you as a Ministry were to go out of policy, as far as I am aware, there are not very much tight things in place to enforce and indicate, "No, you are not doing that or stop doing it." It is advisory again, and our role really is implement and execution. In terms of enforcement closer, it will be more—apart from the GILAC, PS will have a word with your PS and would be like: "Guys, are you aware of this?" and rotate the call circulars and so on again. So those are the things that take place at the moment.

**Mrs. Gopee-Scoon:** Thank you. I really wanted to go straight to the National ICT Blueprint, but you raised the question of the cloud policy, and I think we just jumped ahead with the public and it would have been nice for you to say what it is and how would the Government benefit from this cloud policy. And if there are you know—what are the handicaps? But I want to tell you also that the TTBizLink has actually migrated to the cloud already and so, therefore, we would like the rest of the institutions to move on with it. I know that it is going to be through you, but always we are here for the public, so tell us about the policy and what are the benefits of it.

**Mr. Bobb-Semple:** Sure. So a cloud environment, there are three environments: on premise, which is, let us take—we have PCs and we have all of our computers in one room in our house, and then we have cloud which is an environment where your PC is hosted by someone else, a PC-type environment. We have several of them like Google and Amazon and so on. You pay a subscription to utilize the service and if you need to expand or reduce, you pay accordingly, and the third is a hybrid which is you have some things in your house and you have some things in the cloud. So, for example, some of us may use things like WhatsApp. So your data is stored in a different environment. It is not on your computer, it is not on your phone. Some of us use Google Drive. It is not anything within country, it is not in your home. So those are some examples for clarity.

Some of the pros and cons. Let us start with some pros. The pros of a cloud environment is, we could scale up, we could scale down as we want. Based on the subscription in terms of maintenance and so on, it is as a part of the subscription. So you do not pay WhatsApp or anyone to maintain the service. It is up.

The pro with on premise, a lot of us still like to see things. So I could see the box there. It is physical, I could touch it. Technology is moving beyond those things in terms of us measuring that against being hosted in the cloud. Government's data is a bit different. There is—we do have some Acts and so on that speak to jurisdiction of data, where your data resides, and although the cloud may be in Europe, it may have to hop through certain jurisdictions which may or may not be a problem. The cloud policy attempts to address those types of things, and whether or not we truly have a challenge with our data residing somewhere else, because while we could see the computer here, someone could still be tapping into the computer and retrieving data or if our environment is not as secured as where the other servers are stored abroad or in whichever other jurisdiction, then we may have a false thinking that the data is more secured; or the thinking may be right.

The cloud policy is meant to provide a guideline for us to have a seasoned discussion about it, because you also have data classification, and if it is indeed that some data needs to be on island or on premise or in your room as the example I gave with the PC, then certain information can be there and then certain information is okay if it is out there, and the cloud policy is an attempt to bring those things to the fore so that we could address it at a Cabinet level.

**11.45 a.m.**

**Mrs. Gopee-Scoon:** Thank you. So basically it is more cost effective and more efficient as well. Let me go to the substantive issue I wanted to raise, and we have been talking about, which is the National ICT Plan, and ICT Blueprint which is supposed to provide the framework for ICT development in our country. The implementation is categorized into 10 targets as we understand it. It is a four-year plan, and we are coming to the end of the second year, so you are midstream and you have already rated yourselves as seven out of 10 in terms of implementation. So I would like to ask you: What have you implemented? What are your achievements? What systems have been put in place, and so? But I know that you would have had some challenges, we have been talking about that, and some of your challenges are probably within the Ministries.

The Auditor's reports speaks to a gap analysis that should have been performed at Ministries with a view to determining the readiness of persons there, and therefore identifying the skills or lack therefore and the competencies or lack thereof and so on. So I would want you to touch on that, and the question of the central database of biodata. But generally I want this addressed in terms of what are your achievements in terms of the ICT Blueprint having reached the midway mark.

**Dr. Rocke:** I guess I will start and hopefully people will continue. Like I said before in the scoring—I just want to make it clear I am responding from the perspective of the National ICT Company, and I understood that there are certain things which are external to the company. So for instance when Charles would have suggested a slightly different scoring, it is because he is looking at some other aspects which are generally outside of the remit of the company. So I just wanted to make that clear first in the statement.

**Mr. Chairman:** No, I think he made the right distinction, which is the difference between hardware and implementation using the software capability—

**Dr. Rocke:** Agreed.

**Mr. Chairman:**—and the human resource capacity, and that is important.

**Dr. Rocke:** Yes. In response to the question, what I can say is several things are doing. For example, one of the biggest products would have been to enable the back end systems to be sufficiently reliable and so on, such that the Government and the Ministries, divisions and agencies have a platform whereby they can spring board for the delivery of e-services end to end. That is the GovNeTT platform. So that is an infrastructural issue.

So in terms of the infrastructure, as I would have mentioned before, that is one of the things that we would have worked with the alliance to sort to come up with an approach that can allow us to make sure that we can deliver the infrastructure as a service, so that that foundational infrastructure is there and reliable, because that is key for our service delivery. I would have mentioned as well that that has been ongoing, and to the best of my knowledge that is something that should be completed within short order. That is one important thing to note.

I think that in one of the submissions you would have gotten you would have seen for instance some of the data relating to the uptime of that facility, and it has improved over the last few years.

The other side would have been the ttconnect platform which is primarily the facility whereby governments can interact with the citizenry. In terms of the core foundational things—and the challenge here, as you would have mentioned, is in terms of—these things sit at a layer not necessarily below or away from the citizenry, and depend a lot on the applications that would come, let us say, from the different Ministries who would leverage this hub to deliver services. So that would have been the challenge with respect to that aspect.

So in terms of an accomplishment, I would say that we have put things in place to also make that platform more robust, and we have looked at for instance the internal governance arrangements, the data-driven type approach, the support provided for the facility, and again at least through the numbers reporting on the uptimes and the incidents reports that would be something that has improved over the last few years.

Another aspect, as the Chair would have mentioned is the issue of human capacity. Again that is one of the important aspects of this whole web of initiatives and so on as it relates to the national ICT Blueprint. As I would have mentioned, one of the specific accomplishments we would have had is the deployment of the first year of our HackTT. As I said, HackTT is the facility whereby we engage the youth. We use problems from the Ministries that require ICT solutions. The first cycle of which has been reviewed, and the award ceremony should be next week. I would invite, if anybody is interested and able to come—it would be in the media as well, so you could get a better sense as to what we are doing with respect to putting people first aspect in the national ICT Blueprint.

The other thing I would suggest outside of people, infrastructure and the governance and communications things that we have had accomplishments with, would be, as I said, trying to push more for the data-driven approaches to things. That would be, as I said, through the reports that definitively suggest or inform us regarding when there are problems with the infrastructure and so on.

The other aspect of iGovTT, which most of the public would not be aware of, is as relates to our mandate and our vision, which is about being, not necessarily only the premier ICT solution provider for Government, but also a trusted advisor. As that would entail, it would involve the relationships between the Ministries. You would have heard, for instance, mention of GILAC and the role we play with respect to providing inputs into the various documents that are with the line Ministry. So in that regard, for instance the cloud policy and so on, that is where we would have a direct input. So that is why, as I said, in terms of our achievements, and notwithstanding the fact that the plan is midway, I am thinking along the continuum of where we are right now and where we need to be to provide not only advice to the Government to support their thrust to digital government, but also to provide the foundational hub through which Government to citizen, Government to business, and Government to Government type services can be deployed.

**Ms. Mendez:** Chair, through you I would like to respond to the member, Mrs. Gopee-Scoon, and remind the public that the NICT plan has five strategic initiatives: improving connectivity, improving human capacity, digital government, fostering economic development and advancing the environment for societal benefit. At this time basically our human resource needs to be upgraded. We need to develop. We need to see what are the needs, particularly in our IT departments, and through PMCD's work we were able to have the professional and the type of capacity through GILAC and the Public Administration due to development.

From the discussions this morning you will notice that we really have been focusing on the three aspects: improving that connectivity; trying with our human capacity development; forging ahead in some respects with digital government. But, we need to address fostering our economic development. We need to address advancing the environment for societal benefit.

Through collaboration with some international organizations, the International Telecommunications Union, the Ministry has engaged that entity to help us in terms of metrics. How we can do better monitoring and evaluation of our performance, monitor and evaluate how we are implementing, but also helping in some capacity building.

We are also looking at, early in the financial year, engaging with Estonia, looking at the best practices there, and see how we can learn, but of course using our own indigenous skills and capacity to develop the type of ecosystem that is relevant to the needs of Trinidad and Tobago.

I would ask Mr. Palmer who has been working with respect to those projects to give some more elaboration. Thank you.

**Mr. Palmer:** Good morning everyone, Chair. As the PS would have mentioned we would have been working with our colleagues, with Estonia, looking at how we develop a number of projects. We would have mentioned some earlier, e-identity project in particular. That is one of the projects we were looking at and how we can develop the internal capacity to roll out that type of initiative across governments.

Another one of the projects that you all would have mentioned earlier, an interruptibility framework for Government. You would have touched on it a number of times, and how we roll out that project is very integral to different Ministries, all MBAs in fact, and it is important that we get it right this time around. I should say fortunately for us Ministries have shown a lot of support through our GILAC in getting a lot of these projects off the ground. Estonia has pledged and we hope that once we get our approvals that we can move forward with that initiative.

This leads us into the issue that was raised in terms of service delivery. Basically an interruptibility framework allows Ministries to roll off their projects in a lot shorter period. It means that the Ministry would be able to support other Ministries work, support service delivery, support interaction with citizens with Governments and so forth.

**Mrs. Gopee-Scoon:** Just a quick follow-up. You talked about improving connectivity. So can you just tell me quickly, if I am in Cedros or Toco, ttconnect is it easy to access?

**Mr. Palmer:** So there are a number of initiatives that we are looking at in terms of access and connectivity, the TTWi-Fi project being one as well as the star.tt centres. So for example if you are in Cedros and those locations, the Ministry is eagerly looking at through our digital divide survey and the support of iGovTT as well as TAD, those areas that are otherwise underserved, and how we are actually rolling out services in those areas. In some instances it may be a situation of just providing access to Wi-Fi, in other areas there may be need for a centre, such as the start.tt centres, to roll out services inclusive of training and so on in those areas. So currently we have

If I may add, the Ministry is currently looking to roll out just over 100 access points or access hubs through the TTWi-Fi initiative. That is looking at hospital waiting areas, transit hubs as well as national libraries. So that citizens can gets access across the country from Cedros to Toco, as well as in Tobago.

**Mr. Obika:** Thanks Chair, and good morning again to all. My question speaks to the report in 2017 on page 85. There were some recommendations regarding the Regional Health Authorities and the Ministry of Health, and you are getting a sense that there is a lack of collaboration and coordination amongst the RHAs and the Ministry. I want to ask the Ministry of Public Administration as well as iGovTT what are the challenges being faced in terms of collaborating, and what solutions are there, and what would a fully coordinated effort mean for the public? Would it mean that our medical records will be electronically available from the point of inception? What exactly would be the benefit to the citizenry? **Mr. Palmer:** If I could just clarify your first point in terms of there being a lack of collaboration. I think that what we are saying is that a number of systems are being rolled out across different MDAs, and given our current situation Ministries each have their agenda.

**Mr. Obika:** Sorry, Mr. Palmer, MDAs?

**Mr. Palmer:** Ministries, Departments and agencies, my apologies.

**Mr. Obika:** Thank you.

**Mr. Palmer:** Ministries having their own agendas will try to go ahead with their initiatives. However at MPA we would have ensured to collaborate with all of the Ministries' IT staff, directors, PSs at all levels to ensure that we are aware as much as possible the projects they are doing and try to integrate as much as possible. This is, going back to what I said earlier, there is need for the interruptibility framework and there is need for the cloud computing policy, which we are waiting on eagerly so that we can have these systems that are currently being rolled out by Ministries integrated into the whole of government approach. But we would have liaised regularly with the Ministry of Health. Their IT managers sit on our GILAC committes, various committees, and regularly we coordinate efforts through that committee.

**Mr. Obika:** I thank you for the response. I am not sure I am fulfilled with what I was asking, because the Auditor General's Report for 2017 specifically points to a lack of collaboration between the Ministry of Health and the RHAs. So would it be possible to address that response, or if it would actually be addressed subsequently, in terms of what are the specific challenges that they are facing that could be overcome with ICT, and what would be the result? Would it mean at the end of it patients would have a seamless access where their records are concerned, when they are getting pharmaceuticals within the hospitals and so on? What exactly would be the benefit from such a collaboration?

**Mr. Palmer:** My apologies, I would have to continue. As we are aware at the Ministry that the Ministry of Health is currently restructuring their health information management system and they are looking at a health management solution that I believe would incorporate or improve the collaboration between the Ministry and the RHA, as it stands. Again it goes back to the need for interruptibility across Ministries and their agencies and sub offices. So we have been in collaboration with the Ministries looking at these solutions and providing support where necessary. But I know that that system is in train and hopefully that should improve the collaboration between the Ministry and its RHAs.

**Mr. Obika:** I need to ask a close-ended question, either for the Ministry or iGovTT to answer. Would it be at the end of this collaboration or how much time in terms of years for example can we expect to get our medical records being accessible electronically? If not accessible electronically, within the system, in the hospital system as opposed to this physical card system and so on?

**Mr. Bobb-Semple:** Member, I will share as much as I can on this one because it is something that is going out for procurement in a bit. They are undertaking an exercise where two regional health authorities will be integrated. So for instance you go to one of them and all your records are at that location, and you were to visit the next location, all your records will be there as well. So it is meant to be a pilot utilizing two RHAs, and their intention is that it be continued and be rolled out to all.

**Mr. Chairman:** Could I ask a quick question. Is the system that you want not a system in which all patients records could be in the same place, but wherever you are you can access that patient's records and the issue of location is irrelevant?

**Mr. Bobb-Semple:** No, correct. What happened is that the roll-out of it, they are utilizing, rather than rolling out to everyone at the same time, that is the intention. So it is one system, but it would be rolled out at two institutions first and from that I guess there will be teething issues and so on, they resolve it and they keep rolling out to all. The intention, exactly what you are saying, regardless of wherever you go, that is the intention. It is just that all of the other areas would not have access to that solution at the onset. Yes, correct. But exactly what you are saying is the scope of the project.

**Mr. Chairman:** A quick follow-up and then member Leonce.

**Mr. Obika:** So quick follow-up. At the end of July there was a reported hack on the Ministry of National Security's website. Sticking to the Ministry of Health here and persons' medical records which is seen as very private information, which can compromise persons in many different ways, how can we be assured of this pilot for example and the eventual full roll-out of security of persons' medical records?

**Mr. Bobb-Semple:** Our head operations was instrumental in this exercise, and in terms of the infrastructure that was shared by the Chairman, the solutions and the websites that were in our environment, they did not succumb to what you mentioned. What happened in that regard, the Web services provider for those institutions did not apply certain patches in their environment and as a result, once they got into this one area they had access to several. So subsequent to that, we did have interactions with CCERT and we assisted where we can because CCERT is the body under National Security responsible for providing advice and so on in these environments, and so we provided our input and assistance to them where need be.

With regard to the question specifically for this system, part of the scope is directly related with this, and the environments that we have that the Chairman shared earlier, the intention is for it to be placed in such an environment and that is 99.96 per cent uptime literally, and we have improved the infrastructure tremendously, and as mentioned that project closes the end of this month with knowledge transfer taking place in the months of October and November. So we should not be fearful of that, but what we also will be having is periodic penetration testing in our environments to ensure that all we say the systems are capable of doing.

**Mr. Leonce:** Thank you very much. Some of what I wanted to ask would have been touched on before. I wanted to focus more on the security of information. You would have mentioned that the cloud policy is being worked upon and being finalized. I am assuming GILAC is in charge of that, yes? Where are we with that and how does that impact on the security of the information stored by the various Government agencies?

**Ms. Mendez:** As would have been indicated, it is before Cabinet at this time. We needed to address some issues that were raised at the Cabinet level, and it should be going back by next week in terms of the responses. So once they are satisfied with the responses, I do believe before the end of the month we should have a cloud policy approved. GILAC would have been involved in the consultation and all the necessary engagement as well as iGovTT, TATT and other stakeholders in developing the policy. Security issue was one of the issues raised and we have addressed that in our response.

**Mr. Leonce:** In terms of what we are doing now, right, based on the little breach that we had, you guide the Government agencies as you would have indicated in terms of their roll-out, you would give your guidance. What are the security measures in your guidance and are the security measures part of the proposed policy to be approved?

**Mr. Bobb-Semple:** So in all of the sessions where we provide advisory services or a system in the crafting of the terms of reference, a significant aspect of it would be the security of the system. Like for instance we engaged and we partnered with TSTT for the e-tender system, right, so that all procurement could take place online and so on. In any system where it—I would say it is not "proven", there are certain tests and so on that would be mandatory and one such test is a penetration test in terms of access from out to in, but as well as where the data resides. So if it is in a data centre, what level data centre we are speaking of, what are the certifications of the persons within that data centre, what are the physical security measures in there? Because we might be paying attention to one aspect, which is the technology side, but we leave out the physical side, you know. So in all of our advisory services we incorporate several aspects of security.

When the vendors bid, most times if not all, the Ministries would have us as part of the evaluation team if we are doing the procurement. We would be there by default and someone from the Ministry would be chairing that committee, and the scores and so on for that aspect of security is rated accordingly. If they are not up to standard per se but the person may have passed the threshold, in the negotiations phase there would be discussions surrounding those items, because we do understand the importance of the security. Also was mentioned by the Vice-Chairman in terms of the breach that took place the other day, you may have all these things in place but no one is paying attention to simple things like patches and so on.

Now, the purpose, and I mentioned the certifications of the persons working within whichever institution as the data centre, whether local or abroad, there are certain things you must do and certain works you must sign and there could be random audits done on them by the user in terms of please provide me with this and we do an analysis. In terms of ensuring that patches and so on take place, a lot of it depends on in the analysis of where the data would reside, whether it is cloud or locally, but the facility itself and the level of certifications of the persons there as well as the institution itself, the data centre, what tier it is at.

**Mr. Leonce:** I am happy to hear that—and the PS would have indicated that would be addressed in the policy. What I would like to know is in terms of the current situation you would have expressed before that there were some breaches. Is there a report coming out of those breaches and how is that addressed? Because for a situation like that, I mean we are speaking about patches and this, but is it left on a desk or is a document just sent as an advisory? How do we follow up to ensure the loop is closed in terms of the breach being mitigated against?

**Mr. Bobb-Semple:** So in terms of this specific example, that entire exercise was undertaken by TT CCERT. We provided advice and also manpower to them. What takes place after that, a report is generated but even before the report is generated, the patches and so on, would have had to occur. And the reason we are aware of what I shared with you all is because of the very report that was produced. So we were able to understand why did not occur in GovNeTT for instance, compared to these other websites being under threat and that was the reason for the patches. Whether it is a proactive or reactive thing is a different discussion. On GovNeTT side it is proactive because these things are done, all of GovNeTT is in the data centre, Government's data centre, and there are expectations. We have certain SLAs with them that they must abide by and provide monthly reports and we do have governance meetings with them on a regular basis.

With regard to TT CCERT and the report that was provided, I know they fall under the Ministry of National Security. I know the items were addressed. In terms of if something is being put in place to proactively address all of them, we would be able to probably get some more information and advise subsequently. That is, if they fall under a different umbrella body.

**Mr. Chairman:** Mr. Mitchell.

**Mr. Mitchell:** Thank you very much, Mr. Chair. I have interacted with iGovTT and I can tell you that this team has been doing some really excellent work. With that being said, I want to follow on from Sen. Obika's questions. You see we can talk about policy and GILAC and all these different things, but what the Auditor General's Report of 2017 has outlined is that Ministries and Departments continue to operate in silos, and I have first-hand experience of that with respect to the procurement and the implementation of ICT across.

**12.15 p.m.**

To the Ministry of Public Administration: How can we reduce this silo approach to ICT? Because no Ministry or Government Department to my knowledge is mandated to go through or to adhere to the standard set by iGovTT. I have first-hand knowledge of that. And the Deputy CEO just alluded to it. Many of the Ministries and Departments they go off and they procure their own websites and they do not maintain them, they do not provide the patches, and they are susceptible to hacks. Same thing with the software. I mean, the Auditor General's Report identified quite a number of Ministries and Departments using different applications to perform similar functions. And that would result in considerable waste to the taxpayer. So what is the Ministry of Public Administration doing about this to ensure that Ministries and Government Departments adhere to the standard set by iGov?

**Ms. Mendez:** Thank you, member. Basically coming out of recommendations from the Auditor General's Report, the Ministry of Public Administration was tasked with certain initiatives or activities to undertake, and two of which we have done. We have engaged at the Permanent Secretary's level, Ministry of Finance where we have asked and are collaborating in terms of ensuring and monitoring the ICT spend, expenditure on ICT.

In the Auditor General's Report regarding information technology assessment and expenditure on ICT, it was recommended that we should have amendments to the chart of accounts and classification of expenditure for both recurrent and development programme. So we have engaged the Ministry of Finance to ensure that we do have a separate line item in each Ministry. Because we have observed over the years regarding ICT spend, it can be used in various Votes. So you are not able to really monitor. So we do hope in the next financial year and in the production of our recurrent expenditure we will have a separate item for ICT expenditure across Ministries. And back home in the Ministry of Public Administration we will be putting in our monitoring and evaluation mechanisms.

Secondly, we are engaging the Ministry of Planning and Development, in respect to all ICT projects and initiatives that are presented under the PSIP and I will invite and ask the Permanent Secretary, Ministry of Planning and Development, to explain the collaboration with our Ministry in terms of effectively monitoring that type of expenditure under the PSIP. Thank you.

**Mrs. Alleyne-Ovid:** Through you, Chair, member, as PS just alluded, at present the system that obtains in terms of new projects coming into the PSIP, including ICT projects, they are basically assessed by the Ministry of Planning and Development, yes? And included in the PSIP.

Based on the report we have seen from the Auditor General in terms of duplication and lack of integration across the Ministries, as PS alluded, the Ministry of Planning and Development and the Ministry of Public Administration would now be working on a collaborative effort in terms of, new projects coming into the PSIP would have to go to the Ministry of Public Administration for their assessment in terms of the software that is being procured, the hardware that is being procured, how it is going to be integrated, we get their consideration, their considered view and their recommendation and then the Ministry of Planning and Development would then include those projects within the Public Sector Investment Programme. So that is what being proposed moving forward.

**Mr. Mitchell:** And how does that work? I am talking in practice. So it goes to the, I mean, the budget is passed, the Appropriation Bill is passed, and it goes to the Ministry as part of their PSIP, but the team lead for that project, that ICT project, is reticent or resistant to gaining the advice of iGovTT and he just goes off and he does his procurement, within the procurement rules, but he does his procurement. But he has no regard for the standard set by iGovTT. What happens then?

**Mrs. Alleyne-Ovid:** The Ministry of Planning and Development has the authority to deny such Ministry or agency funding if it is we have upon approval in your recognizing that you are not complying with the National ICT Plan, you are not complying with the Ministry of Public

Administration strictures, we can recommend that no funding should be released by the Ministry of Finance.

**Mr. Mitchell:** Okay. And another issue, Chairman. You mentioned, chairman of iGov, you mentioned CourtPay and GovPay, well GovPay, and I know about CourtPay, but I do not know much about it. But from the little I know it seems to be a major transformative ICT solution in the public sector. Could you tell us a little bit, well, tell us about that?

**Dr. Rocke:** Sure I can, through you Chair. Thanks for highlighting this. Now as a prelude to the response I just want to point out again that a lot of the things relating to ICT in terms of impact happened way before the impact as you would recognize and a lot of it is foundational, a lot of the technology, the people, the processes, et cetera, and Johnand Jane Public as you have mentioned, Chair, through facilities such as this might not be aware of such.

Now in terms of facilities such as GovPayTT, I will deal with that, that would essentially allow for a lot of these sort of financial transactional type activities to occur provided that the relevant legislation is in place, et cetera, and a lot of that is already the case right now. In terms of the CourtPay, I am just going to respond to that by putting it in terms of the impact to John and Jane Public. Well, it just so happens that there was an event last week, sort of public event relating to the launching of CourtPay essentially. And to put it in terms for John and Jane Public to understand I have made sure that I am not going above 100 kilometres per hour because I do not want to know that when I reach home it is in the mail waiting on me. And by it, I mean the thing that I would now have to pay.

So in terms of the end to end type activities what things like CourtPay allows is it allows for the ICT facilitated services that relate to all of those transactional activities that the citizenry would face with respect to interaction or interface with the Judiciary and so forth. I could also, to give you further specifics if required, defer to one of my board members if they would be willing to offer any additional information.

**Mr. Mitchell:** I want to understand if you could quantify the impact to the citizenry, where we are coming from and what is now going to be, and how the citizens are going to benefit from this. It is not just tickets right, which is traffic tickets, the maintenance payments, you know, any financial service that you interact with the court.

**Ms. Maharaj:** If I may, through you, Chair. What you are referring to in CourtPay also integrates with the Ministry of Works and Transport's U-Turn, Traffic Management System which is integrated into paying tickets. And it also linked to the piloting of GovPay using the Ministry of the Attorney General and Legal Affairs where we will be piloting very soon, actually, persons being able to go online and pay or utilize any service that is offered by the Registrar General's Department as well as the Intellectual Property Office. They can select their service, they can pay for it using their credit card online and it will also be delivered directly to them. Meaning, you have a complete end to end service. It will impact in terms of the citizens not having to line up and wait for several hours, people with children will not have to bear the inconvenience of travelling far distances and it would also impact upon the diaspora who have—there are for any government service people and nationals who live abroad or are abroad who would like to access those services and can do so online.

How it integrates with the other Ministries is that this is a pilot and it is anticipated that when it is launched we would be looking at launching the Ministry of Works and Transport who has—this Ministry has made significant advancement through their U-Turn Traffic Management System where there is going to be an integration with red light camera enforcement, spot speed cameras and the ticketing system. That interlinks with CourtPay because no longer will you have to go to the relevant Magistrates' Courts in the relevant jurisdiction or the district that you received a ticket and have to wait during certain hours and hope to be able to pay your ticket.

As for CourtPay I understand that the Chair has alluded to the official launch of Electronic Case Management System that took place by the Judiciary on Friday, and they are looking at, right now moving from just having not only maintenance payments that you can access electronically or through electronic channels, there are electronic channels, but they are looking at expanding that to the other fees, fines and penalties which you would have to pay into court. And all of this integrates into making it very much easier for the citizen or general members of the public to access Government services and transact their business online.

**Mr. Mitchell:** So in other words, citizens do not have to line up on Leotaud Street in the hot sun anymore outside the Registrar General's Office. Thank you very much. And I will just add this advice to the Chairman of iGovTT.

I know that you would want to bring awareness to this new solution, but my advice to you is that you also bring awareness of iGov's role in bringing this solution, bring awareness to the competencies and to increase your credibility so that more Ministries and Departments would use your services in bringing these solutions. Thank you.

**Mr. Chairman:** Thank you very much. Sen. Henry.

**d. Henry:** Morning everyone again. My first question is very basic. Is there a substantive CEO—and why is he not here—of the company? Are you the Deputy CEO? Right.

**Dr. Rocke:** I believe that—yes there is a substantive CEO and I believe that the explanation should have been offered in writing and to the best of my knowledge it was so done. I cannot speak beyond that. At this point, however, I would also put forward that it is our belief that at least with the team that we have here we should be able to respond at least and represent for iGov sufficiently at this point.

**Dr. Henry:** Okay. I have a general question in terms of, the Government is in the process of implementing a financial information management system. I know it is primarily handled by the Ministry of Finance, right. But are any of the entities here involved in that—who could shed light on what is going on with that?

**Mrs. Alleyne-Ovid:** Chair, through you, the Integrated Financial Management Information System is an IDB funded project [*Crosstalk*] and I would defer to Mr. Mitchell for some more details in terms of the IFMIS Project.

**Mr. P. Mitchell:** Good morning. Yes, we are working in collaboration with the Ministry of Finance in operationalizing the system. Basically what the system intends to do is to allow interconnectivity between the Ministry of Finance, Ministry of Planning and Development and the line Ministries with respect to submission of their expenditure request, their request for allocation, request for release of funds and so forth. So what we are trying to do is to do that electronically and also it is going to improve in terms of how we accurately access on a monthly basis how government expenditure is proceeding. We are going to access in real time the quantum of releases to Ministries and so forth.

The Ministry of Planning and Development's role is for the capital expenditure side of the programme and right now there is a team, internally, the Ministry of Planning and Development that is working with the Ministry of Finance in terms of upgrading the Ministry of Planning and

Development, the PPRD Division, the Project Planning and Reconstruction Division internal processes to meet that challenge.

Also IFMIS is part of our IDB loan which includes a training component for, not only the Ministry of Finance, the Ministry of Planning and Development but also line Ministries as well. There are certain components that will be rolled out very soon and I think the Ministry of Finance will be better able to answer where the status on role out of the training component of the loan programme is. But in relation to the use of ICT in terms of public expenditure management, we are looking forward to it with eager anticipation because it will improve how we can track where value for money is being done in terms of how Government expenditure is being done.

**Dr. Henry:** Thanks for your answer. The reason I ask the question is because this represents here, this particular grouping of people, iGov plus all the other entities, really comprise the national ICT trust in total. So who is going to manage and how could they not be involved in a project like that? That is really what I am getting at. So when the consultant is finished with the financial information management system, what is going to happen after? That is the point I am getting at.

I would go on to something else quickly because I know we are running out of time. In terms of the—one of the things the Auditor General flagged very clearly was the business continuity and disaster recovery. Can anyone update us on what is the status of progress in terms of implementing?

**Ms. Bynoe:** Thank you member. I will answer. The Ministry would have had a Business Continuity Management Project in 2014/2015 where we would have engaged PriceWaterhouseCoopers on a consultancy. And in our response to the Committee we would have shared that five agencies were part of that project where we developed and implemented business continuity plans.

Due to the staff challenges within the Ministry, the programme was paused but we have recommenced it in the last year where we have put in place a committee within the Ministry of Public Administration and we are seeking firstly to re-implement business continuity at the Ministry of Public Administration and rebuild capability and specifically receive certification in BCM in order to provide support and coordination services to the rest of the public service.

In the 2020 PSIP we submitted a project to receive certified training. Once we get that funding we will be able to have the capability to start working on implementing across a selection of Government Ministries and Departments to again work with them to develop their business continuity plans. Business continuity comprises not just the DRP, that is, the disaster recovery associated with ICT systems, it also covers the emergency response planning aspect where we try to account for and treat with our employees and then of course the business processes necessary to ensure the continuity of service delivery.

**Dr. Henry:** Okay, my final question is, I was told by a friend that a friend of his jaywalked in a particular country recently and he got a picture on his phone with him jaywalking. A copy of the ticket and money deducted from his bank account. Mr. Chairman of iGov, on a scale of one to 10 how far away are we—[*Laughter*]

**Dr. Rocke:** "Aah boy", I seem to be getting all the hard questions, well, right now. In respect to a service like that I would say that we are a little bit lower than six you know. However, I would also respond to qualify that I am not sure what the country is or who the friend is, but they would have been at a particularly different point developmentally to us and they would have different challenges to us. So I would put that scoring in that context as well.

**Mr. Chairman:** All right then. Thank you very much for your responses to our questions and for the information that you provided to the general public. I want to close at this point, we were hoping to close at about 12.15 p.m., but we had to satisfy some of the questions here and secondly to give you time to give the kind of answers that you wanted to give.

Before I close though I want to ask the Auditor General just one question which Has to do with the fact that she indicated that she had 2019 responses from the various Ministries. And from your point of view, based on the audit that you did in 2016, the issues that you flagged in 2017 and some of the issues that you continued to raise in 2018, what kind of progress are you seeing and where do the deficits remain that need serious attention?

**Ms. Pujadas:** Thank you, Chair, but I think there needs to be a bit of clarification. You received our response from the Ministry of Public Administration which is basically just addressing the matters that they have raised here—

**Mr. Chairman:** Here today.

**Ms. Pujadas:**—today. In the context of what you are asking, our discussion prior to coming here is that we are looking to actually, again, we are not going to do a full audit, but what we are seeking to do is again circularize to get a better understanding of where the Ministries and Departments really are from the point of view of ICT governance framework, because the national plan is supposed to be their framework. And they have spoken here today about strategic alignment, collaboration, coordination, elimination of silos, these sorts of things.

So we are hoping now that we are going to go back and address, re-circularize, we are going to address, we are going to tweak based on the level of questioning that we have had here today, some of our questions may have to be tweaked to bring them up-to-date and we are going to be re-circularizing again, the Ministries and Departments with a view to really getting an understanding of where we are. And again we are going to be submitting our report on those findings so that we can see that based on, this is the response and this is what Ministries and Departments is saying, because this is what we are trying to get a grip of. What are the gaps, what are the deficiencies and is the plan really moving forward towards a strategic alignment collaboration and coordination, because our concern is governance and ensuring that a proper governance structure exists. So that is where we are going to be taking off from with regard to this here and with regard to the response that we received from the Ministry of Public Administration.

**Mr. Chairman:** Okay. Thank you all very much. I would say that we are heartened by some of the responses and we are certainly happy that we have this engagement. But I cannot say that I have the comfort level. I do not know if my colleagues will agree with me, I cannot say that I have the comfort level that we are moving at the pace we need to, given the pace at which the rest of the world is moving. I have a real problem with that and I do not take the sevens. I do not accept them. Maybe the two was a little harsh, all right, but I feel that, at best I feel we might be around a five somewhere and we have a lot to go in terms of achieving some of the basics as well as the higher tier levels of achievement. And given where some countries are and what they are doing and I am talking about countries that are not really regarded as much better than we are in developmental terms, but they have made significant progress in ICT and in the digital economy and it is working and it is operational. And even though they may be dysfunctional in other areas and they may be less developed than us in other aspects, yet they have been able to make significant strides in some of these areas.

So I think this is something that we need to push. I think all my colleagues here would agree with me, that I mean, we need to take our country forward at a much faster pace. And the governmental services are critical in terms of what you are able to do with the rest of the population for the other things to lift. I mean, this might sound like a trite thing to say, but really the private sector is highly dependent on the efficiency and effectiveness of the public sector. And their ability to compete, if we are to compete as a country, I mean is really hampered by the inability of the public service to deliver. The citizen is distressed when they cannot get their business fixed through ICT services at a rapid rate and they have to take a taxi and come to town or get a bus to come to town or go some other place, I mean, these things are really, really vital for us.

And so what I would say is, yes, you have the—what I sense might be some of the challenges that we might want to address and I speak also to my colleague Ministers who are colleague members who are Ministers in the Cabinet. I would say well, yes, you need the policy decisions and that is true and in order to get the policy decisions made, you have to be able, let us say iGov or one of the Ministries is preparing the Cabinet Note, I mean the clarity and precision with which you have to answer the questions that Cabinet will ask before they ask it in the Note become very important for something like this. You know and to get the policy decisions made.

The second thing is that we need some kind of coordinated action. Now, that is really the role of the Ministry of Public Administration and now that you are collaborating with the Ministry of Planning and Development not just on the PSIP thing, but if you are able to do that because the Ministry of Planning and Development has an overarching view of what is happening developmentally in the country. And the Ministry of Public Administration would have an overarching view of what the public service is doing in its various Ministries, et cetera, that are ICT related. And these things really need to come together at that level of coordination.

I think the question Minister Mitchell was really asking about, ICT, about iGov and asking them to publicize what they do and what are their capabilities that they have really relate to this issue of how iGov relates to the coordination and implementation function in the various Ministries. And if what you are saying is true which is that you have decentralized implementation, there seems to be that one of iGov's role has to be—which Ministry are you under?

**Hon. Members:** Public Administration.

**Mr. Chairman:** Well, one of the things that the Ministry of Public Administration has to do is to empower you to act in each Ministry that you visit and advise and support for implementation. They have to empower you to make sure that that decentralized action actually happens as it advances the roll out of government policy or else the process is just going to be slowed. I mean, if you do not have the authority and you are just coming here as an advisor and so on, I mean you know realities of Trinidad and Tobago nobody "eh" taking you on. So there has to be that element and then, of course, the people and infrastructure and the will to result. This will to result is a democratic deficit, you know, in countries like ours. I want to be quite frank with you. This will to result is the consequence of democracy and is a deficit in the process which is why we cannot get a lot of things done. And we have to find a way of getting through the policy decision making, the coordinating action and the decentralized implementation under expert advice and guidance. We have to take care of that will to results. [*Crosstalk*] Yes, okay go ahead. And therefore—we close now and I thank you again for your contribution and we have a lot of questions still.  There are 100 questions in my mind about a lot of things and we are going to put some questions together and send to you for written answers, okay.  So thank you very much.  We bring this meeting to a close.

**12.44 p.m.:** *Meeting adjourned*.