



MINISTRY OF SCIENCE & TECHNOLOGY (MoST)

THIRD QUARTER (OCTOBER 2018 – DECEMBER 2018) PERFORMANCE REVIEW REPORT



...fuelling growth

i. INTRODUCTION

This report covers the performance of the Ministry of Science and Technology (**MoST**) two (2) portfolio areas for the **THIRD** quarter, (**October – December**) of the 2018 – 2019 financial year. The performance report highlights and assesses performance based on the monitoring of plans, policies, programmes and projects identified from the Ministry's Business and Operational Plans for the 2018 - 2019 financial year.

The plans reflect the mandate of the Ministry, along with the national priorities, policies and programmes that fall under this Ministry's portfolio. These include some of the priorities, programmes and outcomes identified under the National Development Plan Vision 2030, that Jamaica is a technology enabled society, with internationally competitive industry structures.

The three (3) years Medium Term Socio-Economic Policy Framework 2019 – 2021 has specifically identified the priority outcomes, strategies and actions to be taken now to further advance the implementation of Vision 2030. It is based on these immediate priorities, activities and targets that the Ministry's current performance and trajectory is being monitored and assessed.

ii. HIGHLIGHTS OF MAIN ACHIEVEMENTS / MILESTONES DURING FY 2018-2019

The main achievements/milestones during the year included:

SCIENCE SECTOR

National Council for Science and Technology (NCST)

Under the initiative "**Promote the development of S&T**" (International Scientific and Technological Bilateral Cooperation between Jamaica & South Africa)

- Meeting was held with SA Representative, PS, Ministry S&T and NCST to discuss SA Ministerial visit to Jamaica in 2019, and Joint Committee activities hosted in collaboration with the SA High Commission a three (3) day youth workshop," See.Touch.Innovate"

TECHNOLOGY SECTOR

Post and Telecommunication Department

e-Gov

Under the Initiative GIT 3: Support the development and implementation of Core and Common GOJ ICT to provide project management, application integration and infrastructure support services

- Development of the Jamaica Data Exchange Platform (JDXP) is being done to facilitate the NIDS. The GDXP has been rebranded to JDXP, with the "J" representing Jamaica

1.0 SCIENCE PORTFOLIO:

MAIN DRIVERS: Scientific Research Council (SRC), International Centre for Environmental and Nuclear Sciences (ICENS) and National Commission on Science and Technology (NCST)

1.1 INTRODUCTION

The science and technology interventions and projects pursued by the main drivers in this sector reflect the desired outcomes of the Government of Jamaica (GOJ) and also aligned with Vision 2030 under outcome #11: A technology enabled society through the integration of Science and Technology (S&T) into all areas of development. The entities sought in carrying out their mandates to build awareness of the relevance and importance of science and technology in influencing Jamaica's growth and development

1.2 NATIONAL COMMISSION ON SCIENCE AND TECHNOLOGY (NCST)

The agency has responsibility to promote the sustainable development and the utilization of local science and technology capabilities for competitive and profitable production through education of the populace, partnership of the government, private sector, academic institutions and such other bodies. These are to be promulgated through established priority programmes and key initiatives alike.

Objective: Development of new Science, Technology and Innovation Policy aligned to Vision 2030 National Development Plan (YEDAIP supported)

Target: Complete the revision of the document and submission of request from Cabinet for input and public consultations

- STI Policy draft submitted to Cabinet Office for Green Paper consideration
- Presentation made to Cabinet Subcommittee that had reviewed the document
- The National Health Fund (NHF) impact study work plan drafted. Project awaiting kick-off.
- Finalised the drafting of the work plan and budget with UWI, SRC and IOJ. Jamaica Medical Cannabis Corporation's (JMCC) approval pending for initial draw down

****Variance**:** Budget request high due to high capital expenditure within the first 3 years of the project. Order for JMCC expired and pending Cannabis Licensing Authority's approval.

Objective: Pilot Research and Development Indicator

- No activity to report

****Variance**:** Dependent on timeliness of respondents and their in-house recording systems; which may not be in congruence/complementary to the request.

Partnering with key sectors for development of a national research agenda and resourcing R&D and innovation

- NCST has for the quarter, engineered the development and coordination of the research services agreement between the National Health Fund and the Jamaica Medical Marijuana Cooperative on behalf of the National Foundation for Development of Science and Technology

Promote the development of S&T

International Scientific and Technological Bilateral Cooperation between Jamaica & South Africa (SA)

Target: Secure funds for 2nd year of the joint research projects between Jamaica and South Africa

- Meeting held with SA Representative, PS, Ministry S&T and NCST to discuss SA Ministerial visit to Jamaica in 2019, and Joint Committee activities Hosted in collaboration with the SA High Commission a three (3) day youth workshop,” **See.Touch.Innovate”**

Execution of the MOU with BioJam Industrial Research and Development-BIRD Planning and Execution to undertake Feasibility Study for the Establishment of Science and Technology Park

Target: Establish methodology for study, plan data collection and stakeholder engagement activities

- No activity reported on this initiative

Objective: Establish the Framework for a Functional and Sustainable National Nutraceutical Industry (NNI)

Target: Provide the Technical Support through the NNI Steering Committee (SC) for the amendment of the Ministry of Health, Food and Drug Act/Regulations to incorporate Natural Health Products inclusive of Nutraceuticals

- The subcommittee of the NNI Steering Committee prepared drafting instructions to the Chief Parliamentary Council (CPC) who requested additional details on the submission.

Objective: Implement key recommendation emerging from Audit of GOJ Labs: Promote improvement and infrastructure development

Target: Execute recommendations of the Hazardous Lab Waste Clean-up Ad-Hoc Committee (HALWAC) for disposal of stored chemicals and obsolete equipment waste

- Approximately 4000 litres of the 6000 litres of organic solvents earmarked for disposal was incinerated at the Caribbean Cement Company Ltd. From UWI Mona and UWI Hospital.
- Meetings hosted with Trade Facilitation Taskforce and several key stakeholders including Ministry of Health, Cabinet Office, Public Sector Transformation and Implementation Unit etc. to discuss approaches to implement the Strategic review being planned.
- No activity to report on HALWAC recommendations

Target: Facilitate a strategic review of Government Labs to outline a framework for the modernization and transformation of GOJ labs

- No activity reported on the following initiative.

Popularization of Science, Technology, and Innovation

Objective: To enhance public awareness of the importance of ST& I to everyday life and their application to national development

Strategy: Publicly recognize the efforts of scientists and innovators

- Staging of the 2018 National Medal and Innovation Awards supported by the Scientific Research Council

Target: Facilitate wide Dissemination of Scientific and Technical Information through various Media and Public Engagement activities

- Mass media promotion of 2018 National Medal for Science and Technology Recipient and Innovation Award winners. Additionally, interviews conducted by JIS News with various winners for newspaper publishing of their work and innovation (ongoing).

1.3 SCIENTIFIC RESEARCH COUNCIL (SRC)

The SRC was established by an Act of Parliament in 1960 and the Government through the Minister of Science, Energy and Technology (MSET), has mandated the Scientific Research Council (SRC) to contribute to economic growth through the application of Science, Technology and Innovation (STI). The SRC is guided by the Ministry’s priorities which are aligned to the National Development Plan (Vision 2030).

The SRC’s role in the Build, Commissioning and Monitoring of Wastewater Treatment Systems, is primarily to build, provide technical resource and supervision for individual and private entities who invest in the construction of WWTS. The agency ensures that these systems are done to required building specifications and are compliant according to the National Environment and Planning Agency (NEPA). The Commissioning of all systems is an on-going management to ensure proper maintenance and efficiency of their installation.

A Technology enabled Society; integration of S&T into all areas of development and fulfilment of the mandate of SRC as under the SRC Act of 1960

Objective: Customer productivity is increased and the quality of goods and services is improved through the provision of S & T solution

Strategy: Build, Commission and Monitor Wastewater Treatment Systems in the Region

Noel Homes/Lucea Hospital -

98% complete;
 Quotation received to correct problems with ponding the bed; letter accompanying quote forwarded to the subcontractor
****Variance****: Minor adjustments to be done to complete the system

Ulster Spring -

98% complete; Minor repairs are completed. Awaiting report from subcontractor

Savanna la mar Hospital -	99% complete; corrective work commenced at Savana-la-mar Hospital I subcontractor to continue works to adjust pipes.
Hampton Court, St. Thomas -	98% complete; Site is inactive. The system is not connected and there are no reeds in the bed. **Variance**: Matter of outstanding actions and payments forwarded to the PS, MICAF A letter was sent to the Ministry’s Transformation Unit detailing the outstanding actions to bring each project to a close, as well as outstanding amounts due to SRC. Executive Director has been in dialogue with the PS on the matter. Awaiting payments
Golden Grove, St. Thomas -	99% complete; the site remains inactive and areas around the BST remains flooded.
Spring Field Clarendon -	Spring Field Clarendon - 98% complete; Matter of outstanding actions and payments forwarded to the PS, MICAF Site meetings were held at Hampton Court and Golden Grove with representatives from the Ministry of Health, Parish Council and the Transformation Unit where sample results were presented by SRC. Agreement reached that the Transformation Unit should conduct remediation activities for both sites as outlined by the Ministry of Health **Variances**: System cannot be commissioned until the issues have been addressed.
Barham Phase II -	47% complete. Corrective works to the BST floor slab were completed. Construction continues during December at a slow pace due to insufficient supply of materials
Church of the Living God - Windward Road-	95% complete. SRC only offers technical supervision to the project. Reed planting and effluent sampling activities will commence when there is a flow through the system **Variance**: The church is under construction and so reed planting and effluent sampling activities cannot commence until there is a flow in the system
May Pen Tax Administration-	95% complete; Awaiting system to fill up and flow through at which time reeds will be planted and sampling commenced;
Carron Hall High School-	The system is complete and operational. Awaiting sufficient biogas pressure to make connections to slaughter house.
21 Edinburgh Avenue, Kingston	95% complete.
Massemure Phase 2 Westmoreland -	Construction of systems underway – 35% complete

Stanmore, St. Ann	Still awaiting contractual agreement to conduct the performance monitoring analysis
Guardsman Group Ltd. -	Commissioning of the system continues
Salvation Army -	100% complete: offering technical assistance to sewer line connections to the existing BST
Wolmers' Boys -	98% complete: flow from the reed bed is not visible; this is required to conduct sampling and analysis of the effluent in order for commissioning. Meeting held with subcontractor to resolve issues for the necessary repairs to be effected
Berger, 256 Spanish Town Road -	Reeds are yet to be replanted 98% complete; Charcoal and aeration experiment conducted successfully; proved to be an effective method of achieving Total Nitrogen reduction
Caribbean Products Company Limited -	98% complete.

Provide Food Technology Services to MSMEs to support Market Access and Competitiveness

- Hazard Analysis Critical Control Point (**HACCP**) meeting held and corrective action plan put in place; documents updated; follow up done by walk through to verify accuracy and completeness of the Plan; conduct food defence self-assessment check
- Average of thirty-three (33) clients utilize facility on a monthly basis- thirteen (13) for production of products (juices, water, sauce, seasoning, liqueurs, jams, jellies syrup, Solomon Gundy, drinks, chutney, fruit mix and purees etc.). Seven (7) packaging, three for technical support and ten (10) for milling and drying
- 1972.67 kg of raw materials dried and milled for clients
- 2082.7 kg of meats were processed for sale during the period.
- 346.7 Kg of material received for retorting
- 439.4 Kg of material received for grinding for client
- FDA filing conducted for one (1) client
- One (1) process schedule conducted
- One (1) vent schedule was conducted
- One (1) cold spot determination conducted
- Five (5) retort inspections conducted;
- Packaging of products done for seven (7) clients
- Production scale of all-purpose seasoning for one new client (287 – 10oz Jars)
- Conducted training in food safety for coconut farmers
- Two (2) Practical session (canning and meat processing) facilitated for UWI Chemistry MSc programme
- Five (5) practical sessions in Jams and Jelly, food and meat processing were facilitated for UWI undergraduate programme

- One (1) practical session in dehydration and meat processing facilitated for MICO University College
- Conducted training in Good Manufacturing Practices for Coconut Industry Board

****Variance**:** A shortfall of 12 due to major renovation works for HACCP certification. Additionally, meat processing was limited to SRC-related activities during the period October-December 2018

Support the growth and development of MSMEs through the provision of Analytical and Consultancy Services

Strategy: Reduce outsourcing of tests to increase turn-around time and increase revenue stream

- AA repaired and is now functional. Ion Chromatograph was installed. Commissioning being done by the technician from suppliers
- For the period 540 samples received; 407 of which involved microbial analyses; an average of 294 analysis/month done for the period
- Outsourced tests continue to affect overall turnaround time

Objective: Customer productivity is increased and the quality of goods and services is improved through the provision of S & T solutions

Strategy: Develop 30 new personal care products to support MSME's

- 26 projects overall
- Two (2) completed for this reporting period, 24 remaining; progress made with seven (7) primarily through prototype development, sensory evaluations and scale up
- Nine (9) of the projects are on hold
- Three (3) Certificates of Analyses completed during the period
- Technical assistance provided to six (6) clients
- One (1) clarification meeting held
- Submission (including schedule of activities and budget) made to Compete Caribbean to secure funding for Castor Oil project,
- Preparation of concept paper in progress
- Progress Report for six (6) active projects
- Plant is being monitored. Currently on fertilization schedule to nurture it to a healthy state prior to initiation
- The phytochemical profile of the aqueous extracts of two samples has been completed. Preliminary radical inhibition assay did not yield anticipated results.
- Preliminary lab antifeedant assay was conducted with two plant extract. Based on results modification to the plant extract concentration will be made
- Project proposal completed.
- Relevant documentation is being prepared to satisfy regulatory requirements
- Relevant documentation prepared to satisfy regulatory requirements
- Sample of seeds were sent to BSJ for proximate and mineral analyses. Awaiting results.

- Preparation underway for second review paper : Review of Diseases Affecting Crops of Economic Importance in Jamaica: Prospects for Treatment using Biotechnology Solutions - Draft 70%
- Editing continues on previously prepared paper: Pre-formulation Capsules Studies and Characterization of the Pungent Principles from Jamaica Ginger Oleoresins” – Data files are under review to clarify results presented in paper
- Literature is being reviewed for preparation of Natural Products Unit paper on “the antioxidant activities of the leaves and fruits of seaside grapes (*Coccoloba uvifera*) and almond (*Terminalia cattapa*)
- Follow - ups made to establish partnerships RADA and Bodles Research Station

****Variance**:** Delays in supply of ingredients by clients/delayed feedback from clients and technical challenges in product formulation continue to hamper timely completion of some projects

Strategy: Support the growth and development of Agriculture through provision of techniques leading to disease free plants and disease resistant ginger and sweet yam.

- Seven Hundred and Fifty Three (753) jars (3 plants per jar) of ginger obtained after sub culturing during the period
- Ninety (90-3 plants per jar) were obtained after subculture during the period
- Three hundred and thirty six (336) jars were obtained after subculture during the period
- One hundred and sixty (160) plantlets hardened in the shade house
- One hundred and forty one (141) jars obtained after subculture during the period; first batch of 55 micro tubers harvested
- Three hundred and ninety nine (399) tubes of sweet potato obtained after subculture during the period
- One hundred and fifty eight (158) plantlets hardened during December
- Three (3) endemic varieties of Orchids fertilized and maintained in shade house for generation of explants
- Completion of production 2 - D2O labelled beans
- First batch of irradiated ginger plantlets received from Austria and transferred to new media
- Three hundred and eighty two (382) plantlets sub cultured during December.
- Gene bank maintained
- Monthly reports completed for October - December

Strategy: Support the growth and development of MSMEs through R & D products and Food Processing

- Six (6) contracts signed
- five (5) sensory evaluations completed
- Fourteen (14) prototypes accepted
- Eight (8) formulation documents completed
- Nutritional Facts Panel

- Database 31; Analyses 0

Objective: Continual sensitization on the importance and value of S&T to the nation, through the activities of the Science & Technology Education Unit (STEU)

Strategy: S & T Fair (2018) hosted with at least 30 entries and at least 1500 participants

- Commenced call for application; 16 persons registered
- Distribute letters for the panel and entrepreneurs
- Bulletin forwarded to the Ministry of Education Youth and Information
- 281 students and 53 teachers registered for ideation session; 8 companies confirmed participation
- Site visits conducted to determine venue
- Launch of S & T month activities at the Terra Nova Hotel on October 30 with 70 persons in attendance; five (5) schools represented
- S& T month church service held at Mona Heights Chapel attended by 22 staff members
- Hosted the bi-annual conference at the Jamaica Pegasus Hotel over a two-day period November 19-20, 2018 under the theme ST&I in Business ; Facilitating Trade and Global Competitiveness; over 300 persons were in attendance
- Hosted (in partnership) with NCST and MST, National Medal for Science and Technology and Innovation Awards ceremony. Awards were issued to Ms. Joy Spence winner of the National Medal for Science and Technology, winners for the eight (8) categories in the Innovation Awards, the Overall Innovator and an award to the Most Hon. Edward Seaga for his contribution to Jamaica in culture and politics. The event was well attended with over 450 guests in attendance and is dubbed the “best ever” by the guests and partners alike
- Discussions underway for 2019 staging of the competition between January – March 2019; flyer circulated to schools

Strategy: Streamline energy info services to support innovation and policy decision towards regional implementation of renewable and other energy systems

- Solicitation for funding for both programme continues
- Contract partnership signed for media advertisements for CEIS on CARIF platform.
- New partnerships being solicited with
 - (i) Renewable Energy Asia – June 2019
 - (ii) Renewable Energy India Expo September 2019

Strategy: Support the growth and development of entrepreneurs through the programmes of the Climate Change Innovation Centre (CCIC)

- Hosted boot camp in Suriname;
- Hosted the CCIC Summit and demo day
- Hosted webinar with World Bank and Micro Mentor for the Climate Business Innovation Network

1.4 THE INTERNATIONAL CENTRE FOR ENVIRONMENTAL AND NUCLEAR SCIENCES (ICENS)

Security and Safety

Objective: Strengthen the anti-crime capability of law enforcement agencies

Strategies: Strengthen existing partnerships and seek new collaborators through joint undertakings

- F11021 First year Progress Report submitted on time and feedback from IAEA expected in the 4th quarter of 2018/2019. Sampling of international coffees to compare with Jamaican coffees continues

****Variance**:** Analysis of coffee samples associated with F11021 suspended due to unplanned maintenance of the SLOWPOKE-2 reactor at the end of the quarter

A Healthy and Stable Population / World-Class Education and Training

Objective: Strengthen the linkages between health and the environment/Ensure that adequate and high quality tertiary education is provided/ Integrate science and technology into all areas of development

- The regional training course was attended and successfully completed. Also, there was the receipt of additional sampling equipment (High Volume Air Sampler) under the RLA7023 regional project

Objective: Support national food/Strengthen the linkages between health and the environment

- All analytical work completed, data analysis completed, manuscript 70% complete
- Meeting (November 15) with representatives of NEPA and JBI in preparation for NEPA's attendance at Minamata COP2

Objective: Strengthen disease surveillance, mitigation, risk reduction and the responsiveness of the health system

Strategy: Design ICENS' strategic research programmes and activities to target the most critical areas of the Jamaican economy - Elements for priority attention will include arsenic, cadmium, lead and mercury which are potentially toxic and can pose health problems for the population

- Mercury standards were acquired and several performance tests run

Variance:** Mercury analyser still not operational

Sustainable Management and use of Environmental and Natural Resources

Objective: Integrate environmental issues in economic and social decision-making policies and processes

Strategy: Design ICENS' strategic research programmes and activities to target the most critical areas of the Jamaican economy

- ICENS Collaboration with World Bank's Program on Forests (PROFOR – P146965), 2017 — Assessment and economic valuation of coastal protection services provided by mangroves in Jamaica

Hazard risk reduction

Objective: Develop measures to adapt to climate change/Contribute to the effort to reduce the global rate of climate change

Strategy: Conduct research on climate change

- Data collection, data analysis completed, manuscript 60% complete.
- Field work completed, data analysis completed, manuscript in prep
- Second order draft completed and under global expert review
- Soil sample collection 30% complete, field data collection 50% complete, socio-economic data collection 70% complete
- Field data collection advanced, data analysis underway

Target: Field equipment to be acquired from IAEA and delivered under the project

- Project proposal submitted to IAEA to acquire Gamma irradiation cell for project. Proposal moved to phase 2 of development

2.0 TECHNOLOGY PORTFOLIO:

Main Drivers: MST, Spectrum Management Authority, Universal Service Fund, e-Learning Jamaica, Post and Telecommunications

2.1 INTRODUCTION

One of the main issues related to the development of the Information and Communications Technology Sector includes making the sector attractive by implementing the requisite regulations and legislations were absent. Some of the key priorities for this sector in this financial year are:

- Government of Jamaica ICT Transformation Programme;
- Strengthening of the cyber security systems and framework;
- Facilitating job creation in ICT through the Youth Employment in the Digital and Animation Industry Project; and
- Promulgation of the e-Learning projects to impact educational development.

2.2 ICT DIVISION

As the Ministry with responsibility for technology, the Division seeks to facilitate the access and use of ICT towards the improvement of services to internal and external stakeholders.

Objective: Improve Legal and Regulatory Framework

Legal and Regulatory Framework for the ICT Sector

- **Targets not met**

****Variance**:** Draft concept note for revised Policy prepared by the Policy Division. Still under review by the Division

****Note**:** Concept Note to be finalized and submitted to Cabinet for approval by the end of the first quarter of FY 2019/2020.

Objective: Develop a Spectrum Management Policy

- Target not met

****Variance**:** Division was involved in the planning and hosting of the Accessible Americas V Conference

****Note**:** Draft Concept Paper and related Cabinet Submission to be submitted to the Spectrum Management Authority for review.

Objective: Develop a Postal Sector Policy

- Target not met as procurement of Consultant was unsuccessful.
- However, presentation made to the Hon. Prime Minister on the status of post offices and the need for the postal services sector survey
- Current procurement to be terminated. Alternate methodologies/modalities to be explored

****Variance**:** Recommendation made to the Prime Minister and Minister of Finance and the Public Service for the International Finance Corporation (IFC) to be asked to undertake the market study due to the poor response to the Procurement of a Consultant to execute the Postal Services Sector Survey

Objective: Promulgate a new ICT Act

- Target not met

Objective: Promulgate Data Protection Act

- Further research being conducted based on the comments and objections raised to specific provisions
- Comments received from stakeholders still being reviewed by the Ministry; Attorney General's Chambers and the Legal Reform Division of the Ministry of Justice

Objective: Provide inputs to support the promulgation of Regulations for the management, reuse and disposal of electronic waste (e-Waste)

- Target met

Improve the Integration and Delivery of Public Services Using ICTs

Objective: Development of an Open Data Policy

- Target met.
- Final draft of policy along with Cabinet Submission submitted to the Policy, Planning, Development and Evaluation Division for review; comments received incorporated into both documents

****Variance**:** Division involved in the completion of inputs into the Blueprint Report 2.0.

Increase Security of ICT Infrastructure and Electronic Communication

Objective: Implementation of the National Cyber Security Strategy which is aimed at pursuing activities to address technical, measures, legal and regulatory framework, human resource and capacity and public education and awareness, by:

- a) **Implementing Government wide Information Technology and Information Security standards**
- Target not met.

Improve legal and regulatory framework for the ICT Sector

Strategy: Establish a Single ICT Regulator

- Target not met
- Cabinet Submission withdrawn from the Cabinet's agenda by the Cabinet Secretary
- Presentation made to HPM on the arguments in support of a single ICT Regulator. Presentation to be updated based on comments/recommendations.

Establishment of the ICT Authority

- Target partially met

- Sensitization by Consultant on the practises of the new ICT Authority commenced
- Monthly Transition Progress Reports submitted
- Quarterly presentations made

Ensure technical and policy input provided to MDAs regarding government ICT initiatives and the interest of Jamaica as appropriate advanced in ICT related regional and international fora.

Objective: Participate in consultation; provide comments on legislative, policy and other government initiatives

Participation in Meetings and Conferences:

- American Registry for Internet Numbers (ARIN) Meeting in Vancouver, Canada, October 2018

Accounts Division

- Reviewed and provided inputs in request made to the Special Economic Zone Authority

ICT Division

Telecommunications

- Prepared Affidavit and provided instructions to the Attorney General's Chambers in response to court challenge instituted by licensee against the Minister
- Prepared briefs in relation to spectrum allocation and imposition of licence fees

Microsoft

- Completed the Software Asset Management (SAM) exercise
- Awaiting the final analysis report from SoftwareOne

Open Data Portal

- Full migration of the Open Data Portal was completed in October 2018. The portal is now hosted by eGovJa

Accessible Americas V

- Participated in planning meetings held with the ITU for the Accessible Americas V Workshop hosted in Jamaica, November 2018 (Montego Bay)
- Conducted post conference activities including preparation of documentation to enable payment of service providers

Establishment of the ICT Authority (ENICTA)

- High level organisation framework for the ICT Authority submitted to the ICT Council and PS Board
- The MIS Change Champions met with the wider change management team and discussions held about the impact of the ENICA Project on the various MDAs.
- Completed high level organisation framework for the ICT Authority
- Reviewed Cabinet Submission and Drafting Instructions for the ICT Authority Act

Technology

- Organized forum for MIS Officers across the GOJ in October 2018. At this Meeting the CIO gave his final update on the ENICTA process and also the work of the Office of the CIO

Jamaica Cyber Incident Response Team

- Provided inputs and comments in the review of the Commonwealth Cyber Declaration
- Reviewed and provided support in the completion of the CARICOM Cyber Strategy Questionnaire

Office of the Prime Minister

- Participated in User Acceptance Testing for the Amanda System. Recommendations were made with respect to changes to User Interfaces for some of the Modules

Ministry of Education, Youth and Information

- Attended ICT in Education Steering Committee Meetings where a Bring Your Own Device Policy for schools was the main discussion point.
- Continued review of the National ICT in Education Strategic Plan

eLJam

- Participated in Technical Committee Meetings where Internet Supply to schools was the main focus of discussion

National Commission on Science and Technology

- Participated in NCST Innovation Awards

Ministry of Labour and Social Security

- Participated in Work Permit Committee Meetings

Ministry of Foreign Affairs and Foreign Trade

- Reviewed documents and attended meetings for the transposition of the CARICOM-EU Economic Partnership Agreement (EPA) into the CARICOM-UK EPA
- Prepared briefs in support of candidatures for the ITU elections

2.3 JAMAICA CYBER INCIDENT RESPONSE TEAM (CIRT)

The Cyber Incident Response Team (CIRT), aimed at safeguarding Government information technology (IT) systems against cyber threats was set up through technical assistance from the International Telecoms Union (ITU) and the Inter-American Committee against Terrorism (CICTE), an arm of the Organization of American States (OAS), which provided funding for the purchase of equipment and training of personnel. The team is mandated to deal with critical technical issues as they relate to cybersecurity and is charged with creating a framework to build and enhance confidence in the use of cyberspace, with a view of advancing Jamaica's economic interests and maintaining national security under all conditions.

CIRT is responsible for coordinating cyber-related incident response, timely recovery from incidents, rapid distribution of advisories and alerts within the Government; and continuous monitoring of threats to the Government's IT resources.

Increased Security of ICT Infrastructure and electronic communication

Strategy: Implementing Government wide Information Technology and Information Security standards, policies and guidelines and monitor and enforce their implementation.

- Discussion has begun with Stakeholders [CIO's office] for the development of the standards

****Variance**:** Discussions began late

Strategy: Leveraging regional and international partnerships

- Initial discussion taking place with local and international partners to include the Forum of Incident Response and Cyber Security Teams (FIRST)

Strategy: Raising and promoting awareness in the key areas of cyber security

- Three partners Identified

****Variance**:** No discussion regarding long term sustainable awareness programmes has taken place

Strategy: Identifying and accessing available resources (national, regional and international) that provide capacity building for cyber security

- Two partners identified, *Stay Safe Online* and *Cyber Essentials*

****Variance**:** Initial discussion taking place with Stay safe online to decide on the scope of the partnership

Establishing a proper governance framework for cyber security

Strategy: Legislative framework that supports assessment of cyber security issues with a view of identifying gaps and recommending measures to fill these gaps

- Legislation identified include the update of the Cyber Crime Acts 2015

Strategy: Governance framework for cyber security, including roles and responsibilities of different entities, reporting structure and coordination mechanisms defined

- Committee /council meeting was to be held for the reporting quarter, however this target was not met

****Variance**:** Officer engaged in other duties

2.3 E-GOV JAMAICA LIMITED

The former Fiscal Services Limited's (now e-Gov Jamaica Limited) mandate was expanded from its current provision of fiscal services through ICT to include the implementation of Information and Communications Technology (ICT) projects into the operations of the GOJ. The roles and functions also include being the provider of IT as a shared service to the GOJ, as well as providing management oversight and master planning for GOJ/ ICT investments and assets.

Objective: GIT1. To provide ICT expertise leading to the efficiency and effectiveness of the GOJ ICT Governance Framework GIT1 to contribute to the modernization of the GOJ ICT Governance Framework

Strategy: Strengthening of the Enterprise Portfolio Management capacity to support the Programme Portfolio Management Committee (PPMC) of the GOJ ICT Council

- MDA Guideline is approx. 70% completed; dispatched in January 2019 for PPMC and PIMSEC review and input.

Strategy: GIT1.2 Develop IT Policy Governance Framework to contribute to the build out of the GOJ ICT Management Framework

- 2018/19 performance to-date:-
- 7 days target measured from request receipt to report dispatch: 0% met;
- 7 days target measured from commencement of appraisal to report dispatch: 25% met

****Variance**:** Multiple and lengthy cycles of client clarifications / interactions.

Limited availability of technical staff to conduct assessment; technical resources cannot remain dedicated over protracted cycles of clarifications.

Objective: GIT 2. To Modernize the GOJ ICT Infrastructure to Allow for High Speed, High Quality and Low Cost Communication, with Widespread Use Across all MDAs over the Next Three (3) Years.

Strategy: GIT 2.2 Design and Implementation of the Government Wide Area Network (GovNet)

- No further progress on engaging the Consultant

Strategy: GIT2.2 Achieve Tier 3 Data Centre Standard

- Terms of Reference (TOR) for the Consultancy (Assessment, Design and Managed Implementation) being finalized for submission to PSTIU. Specification and Scope of Work for the power Infrastructure upgrade (Generators, UPSs & ATS Switches being finalized for procurement)

GIT 3: Support the development and implementation of Core and Common GOJ ICT

Strategy: GIT 3.2 Provide project management, application integration and infrastructure support services

- Development of the Jamaica Data Exchange Platform (JDXP) is being done to facilitate the NIDS. The GDXP has been rebranded to JDXP, with the "J" representing Jamaica.
- Procurement completed for five (5) of 17 items; eight (8) in train at various stages; procurement for four (4) items terminated (two (2) of which are to be re-tendered)
- Limited progress in development of the Government Data Exchange Platform (GDXP) to facilitate NIDS

****Variance**:** Mostly off target; Pending IDB “No Objection”

GOJ Transformation Programme

Strategy: GIT 3.3 Provide project management support to the establishment of the new ICT Authority (ENICTA)

- Feedback provided on Programmes and Innovation Division, particularly the Application Engineering related Department.
- Process Framework/Standard Operating Manuals for Revised Processes - Draft submitted for review.

- New/Updated Job Descriptions – Draft submitted for review
- Implementation/Transition Plan – 0%
- Business Plan 0%,
- Communication and Change Plan for Implementation - Pending Approval
- Cabinet granted approval for the legislation to be promulgated. The Chief Parliamentary Council provided some recommendations on the draft bill; these changes were made and have been submitted.

****Variance**:** Business Plan, Implementation/ Transition Plan delayed.
Revised timelines provided for Q3 deliverables and these are now to be submitted by end of Q4.

Strategy: GIT 3.4 Development of an Enterprise Architecture (EA) capability within eGovJa

- Training for TOGAF Level 2 started.
- Standards for Application & Data Architecture identified and research commenced.

Strategy: GIT 3.5 Fostering strategic partnerships to aid in the research and innovation process

- No additional whitepapers were developed during this quarter

Strategy: GIT3.6 Development of solutions/prototypes to address problems identified

- Working alpha prototype/solution of the TAJ Mobile App for Motor Vehicle documents renewal was developed and demonstrated to TAJ.
- GOJ E-Participation Prototype developed using Adobe XD.

Customer Experience Programme

Strategy: CSE 1.1 Improving our Service Delivery Culture

- Eleven (11) projects were surveyed; two (2) responses received; the survey was closed on December 31, 2018. Analysis of responses will be done in Jan 2019.

****Variance**:** Reasons for low take-up include survey is too long.

Objective: OE1 Increase software delivery efficiency from 34% to 62% over the next three (3) years

OE1.1 Implement BizDevOps

- CDMM Status as at December 4, 2018:
- Base Level: 96%
- Beginner Level: 45%

- Intermediate Level: 10%

****Variance**:** BizDevOps activities are being done to support improvement of the Software Delivery efficiency. Measurement of the efficiency rate will be done in the next half of the year.

2.5 E-LEARNING JAMAICA COMPANY

The e-Learning Jamaica Company continued its implementation of e-learning projects in collaboration with the Ministry of Education as well as promoting technology in the education system. The main programmes were the e-Learning High School and Tablets in Schools Pilot Project. Approximately \$485M was allocated for the completion of the High School Project, with a view to handing it over to the Ministry of Education. The project's main components are ICT materials for teachers and students, as well as technology infrastructure for storage/ dissemination. This requires ICT equipment; software and a central repository for the educational materials to store reproduce and continuously update and distribute material, teacher training, remedial support and continuous assessment through standard examinations across all grades at high schools.

Objective: Technology Infrastructure Management and Support

**Computer and Audio-visual equipment and networks previously provided to high schools maintained and upgraded as allowed by available funds
Funding for equipment replacement provided through USF/MOEYI assumed responsibility of maintaining High School Project Intervention**

- 100% Complete
- Ministry reviewing in order to present Cabinet submission

Objective: Content on Central Repository for Educational Materials (CREM) and social media sites available at all times to education system and updated with new content related to e-Learning projects implemented Diagnostic Tests Administered

CREM hosting services provided by EGOV through contract with MOEYI (Ministry of Education Youth and Information)

- The signing of agreement for the provision of CREM hosting services between EGOV and MOEYI is 100% Complete
- Ministry reviewing in order to present Cabinet submission

****Variance**:** Obtain approval from Cabinet, sign contract with vendor and place order deliver equipment

Content maintained and access to content managed

- Complete

Interface simplification and content organization carried out

- On-going

Provision of Content to Phase 1 institutions

MOEYI provided list of free content to be pre-loaded on tablets. Content/ Cache Server with additional content and functionality being investigated

- 100% Completed

Client Support and Teacher Training of Phase 1& 2 institutions

Objective: Teachers and lecturers in the project institutions trained and certified in the skills, methodologies and techniques required in integrating the tablets and other technologies in instructional delivery

- 95% Complete
- Mind Set Change and Basic ICT training completed
- November 2018 was the original date established to receive inventory, however, no tablets received to date

Pilot Project using 1:1 Tablet Strategy

Target: Facilitate clearance of tablets and charging carts through customs/Train Technology Management teams

- No updates provided on this programme

2.6 UNIVERSAL SERVICE FUND (USF)

The USF is a statutory entity geared at facilitating the provision of universal access to the information superhighway by accelerating the deployment of broadband services island-wide. The USF also covers the collection of universal service obligation (USO) levy and funding for e-Learning Projects. The Mission of the USF is to facilitate the provision of universal access to Internet services by stimulating and accelerating the deployment of broadband and related services island-wide. This will be achieved through the effective collection and astute management of the universal service levy and disbursing such funds in a transparent and non-discriminatory manner to finance appropriate projects.

****The Agency did not provide a report with its achievements for the reporting period****

2.7 SPECTRUM MANAGEMENT AUTHORITY (SMA)

The SMA in its 2018 – 2022 Corporate Strategic Plan document indicated that its ultimate goal is to manage the spectrum effectively; through the use of modern technology, and employing international best practice to regulate efficiently. In light of this, and in keeping with the mandate and the stated objectives of the SMA, principal performance targets (Appendix 1) were established, to guide our efforts, in support of the Government of Jamaica’s Information and Communications Technology (ICT) objectives. In addition to the principal performance targets, the SMA as is customary has in place quality performance standards, which compares with or are better than our counterparts globally.

HIGHLIGHTS OF PERFORMANCE/ACHIEVEMENTS AGAINST TARGETS

The SMA’s Corporate Operational Plan forms the basis for evaluating the performance of the company for the 2018/19 fiscal year (FY). The plan identifies quantitative and qualitative KPIs that are measured against the SMA’s performance in order to determine the level of success throughout the year. As at the third quarter of the FY, the SMA’s performance, in relation to its core operational activities, for the period ending 2018 December 31, augurs well for the fiscal year (FY). The SMA continued the trend in exceeding its core operating activities of licensing (new and renewal), interference management and financial management. The snapshot below gives a summary of the SMA’s performance for the 9 months ending 2018 December 31.

Capital Development Projects

RMDFS Project - During the 2017/18 FY, the SMA embarked on a project to enhance its monitoring capacity. The project comprised 2 phases: phase 1 related to the upgrade of both the St. Ann and St. James’s Radio Monitoring and Direction Finding System (RMDFS) with additional features. Phase 2 of the project featured the installation of new sites in Portland and Manchester. Phase 1 was completed during 2017/18 FY, and phase 2 is being implemented in this 2018/19 FY. The status/achievements of the RMDFS sites as at the end of the third quarter of the fiscal year are as follows:

- The commissioning of the Manchester RMDFS site was completed on 2018 November 11, and the site is operational.
- Finalization of the Lease arrangement for the Portland site was still pending. An alternative site in Savanna-La-Mar was being explored. TRN and proof of Ownership (Certificate of Possession) information was requested and received on 2018 December 24. A draft Lease is being prepared.

Licensing

Processing time for new applications

Summary of Performance

Particulars	HALF YEAR		
	Projected April – Dec	KPI April – Dec	Variance

% of new applications processed within service standards	99%	80%	19%
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For the third quarter of the FY, the SMA having brought forward 31 applications, received an additional 170 applications, of which 157 was granted. Of this 157 licences, 155 or approximately 99% were processed within their respective standard processing time.

Renewal Licences

Summary of Performance

Particulars	HALF YEAR		
	Projected April – Dec	KPI April – Dec	Variance
Number of Licences Renewed	355	328	27
No. of licences renewed within the service standards.	355	320	35

A total of 355 licences were renewed for the period ending 2018 December 31, representing a performance rate of approximately 92%. The target was 358 existing licences, however there were 6 cancellations, and 34 clients requested to be reinstated; which results in a plus 28 net effect on the target of 358 bringing it to 386. The performance rate projected is above the SMA's KPI of 85% or 328 (85% of 386) licences for renewals. Note that licences are only renewed after receipt of payment. All 355 or 100% of the licences renewed, were processed within the established processing standard. The KPI for this activity is 90% or 320 (90% of 355).

Summary of Renewal Licensing Activities as at 2018 Dec 31

Particulars	April – Jun 2018	July – Sept. 2018	Oct – Dec 2018	Jan – Mar 2019	April – Jun 2018 (YTD)
Renewal Target	208	84	66		358
Additions	7	10	17		34
Cancelled*	2	1	3		6
Renewable Amount	213	93	80		386
Granted/Approved	166	114	75		355

Interference Management

No. of Interference Cases: As at the third quarter of the 2018/19 FY, the SMA has investigated 10 cases of interference reports. Of the 10 cases investigated, 9 were resolved at 2018 December 31. All or 100% of the 9 cases projected to be resolved, are projected to be completed within the slated resolution time. **The KPI for resolution within slated time is 90%.**

Financial

Income and Collections

For the 9 months ending 2018 December 31, the SMA targeted total income of approximately \$278.97M to be booked, and a KPI of \$251.08M. For the period under consideration, the SMA booked \$297.92M, or approximately 107% and 119% of budget and KPI respectively. See in table below, details of income categories and a comparative distribution of income for the period under review.

Revenue	Projected April – Sept	Amount Budgeted April – Sept	KPI April - Sept	KPI Variance	Amount Collected YTD
	\$'M	\$'M	\$'M	\$'M	\$'M
Processing Fees	11.31	7.59	6.83	4.48	11.31
Regulatory Fees	279.93	262.89	236.60	43.33	303.29
Interest Income	6.60	8.47	7.62	1.03	6.60
Other Income	0.08	0.03	0.02	0.06	0.08
	297.92	278.97	251.08	46.84	321.28

Total Income projected to be collected totaled \$321.28M. These amounts usually include amounts collected relating to the previous year, the current year, as well as pre-payments.

Regulatory Fees – Actual regulatory fees totaling approx. \$279.93M was well above the budgeted and KPI amounts of \$262.89M and \$236.60M respectively. This positive variance is due to applications received being above that which was anticipated. This was particularly so for microwave and broadband license applications.

Processing Fees – Processing fees are primarily charged for new applications, in addition to type approval certification, and so an estimate is made each year of the possible revenue to be earned from this line item. For the 9 months in the FY, the SMA targeted \$7.59M. Actual performance of \$11.31M is above the anticipated budgeted target and the KPI of \$6.83M.

Interest Income – Interest income realized for the 9 months in the FY amounted to approximately \$6.60M; while the budgeted amount for the same period was \$7.62M and the KPI was \$8.47M. The negative variance realized, when compared to budget, may be attributed to the lower than expected interest rates, and the levels of investments

Other Income - A total of \$81,664 is projected for the period.

Spectrum Licence Fees

Spectrum Licence Fees are collected on behalf of the GoJ and are remitted to the Tax Administration Jamaica. For the 9 months ending 2018 December 31, the SMA collected a total of \$109.690M in spectrum licence fees, and remit \$172.43M, (including amount brought forward from the previous FY). Please note that spectrum licence fees are remitted in the month after they are collected, with the exception of fees collected on mobile access spectrum that are remitted in the month collected.

Expenditure

Recurrent Expenses – For the period under review, the SMA's incurred total expenditure (including depreciation) of \$255.99M, in comparison to the budget target and KPI of \$294.87M. This variance is due primarily to Salary & Related Costs, (whereby 4 vacant positions as well as 4 new positions and additional 3% for salary increase did not materialized), and for Depreciation.

Capital Expenditure – As at 2018 December 31, the SMA added \$39.29M to fixed assets, compared with budgeted amount of \$188.00M. Approximately \$50.0M additional acquisition is pending requisite approval.

2.8 POST AND TELECOMS & POSTAL CORPORATION OF JAMAICA

The Post and Telecoms Department (PTD) constitutes a network of post offices and postal agencies across the country and is responsible for all mails in Jamaica and has been mandated to ensure access for all Jamaicans to affordable postal services. The Postal Corporation of Jamaica (Post Corp) is a limited liability company operating parallel to Post and Telecom, whose priorities include the enactment of the Postal Service Bill. This is to fully commercialize and modernize the PTD, adding value to the products and services being offered, identifying and introducing new revenue streams, increased application of ICT across all functional areas and increased competitiveness.

Increase Revenue

Objective: Identify and introduce new revenue streams and increase the competitiveness of the Department

- Television advertisement created for Zip Mail to be aired in January 2019
- Commenced official operations in October 2018
- Corporate office in Liguanea Post Mall opened December 10.

Strategy: Introduce Jamaica Post branded remittance and bill payment service

Focus was shift to partnering with Money Gram to offer remittance services. Operations in 2 Post Offices (Luidasvale & Kellits) commenced in October 2018

Strategy: Property Rental

- No activity

****Variance**:** Several spaces identified for rental but no further action taken to renovate same date due to other prioritized projects

Objective: Increase application of ICT across all functional areas

- Portal not yet in use
- Portal developed, however, consideration being given to include other functions/use

Strategy: Upgrade IPS Light to full version

- Hardware and software not yet procured

****Variance**:** In the process of preparing procurement documents for tender/Implementation date moved to March 2019

Objective: To improve service quality and delivery

Strategy: Achieve and surpass UPU and PTD delivery standards

- Partnered with Customs to reduce bottlenecks and improved inbound processing.
- Established new international mail routes
- Finalized ground transportation tender process – new contract commences January 2, 2019

Strategy: Employ measurement systems to measure customer service quality

- Surveys conducted
- Assessment visits conducted at 18 offices
- Five (5) Post Offices upgraded with camera devices

****Variance**:** The resignation of 2 travelling officers within the quarter impacted the number of visits conducted

Initiative: Support for the implementation of the National Identification System (NIDS)

- Quantity Surveyor identified. Recruitment drive continues for NIDS Coordinator

****Variance**:** Changes in scope for PTD's component of the project has changed the initial timelines set. PTD was tasked to conduct recruitment of critical staff for the project.