



UNIVERSITY of
RWANDA

SPIU

EASTERN AND SOUTHERN AFRICA HIGHER EDUCATION CENTERS OF EXCELLENCE
(ACE II) PROJECT

AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS
(UR-ACEIoT)

FINAL AUDIT REPORT FOR SEMI-ANNUAL
FINANCIAL YEAR ENDED 31st DECEMBER 2020

Prepared by;

S/N	Names	Position	Signature
1	MUNYANEZA Philippe	UR Internal Auditor	
2	TUGIRUMUREMYI Daniel	UR Internal Auditor	
3	MUSABYIMANA Moise	UR Internal Auditor	

Reviewed by;

S/N	Names	Position	Signature
1	MURERA Steven	UR Internal Auditor	

Supervised by;

S/N	Names	Position	Signature
1	MUKARUKIZA Felister	UR Internal Auditor Specialist	

April, 2021

**AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT**

1. INTRODUCTION.....	2
1.1. PROJECTS BACKGROUND.....	2
1.2. OBJECTIVES.....	2
1.3. SOURCES OF FUNDING.....	3
1.4. STRUCTURE.....	3
1.5. RESPONSIBILITIES.....	3
1.5.1. Auditor's responsibility.....	3
1.5.2. Management responsibility.....	4
1.6. AUDIT OBJECTIVES.....	4
1.7. SCOPE OF THE AUDIT.....	4
1.8. AUDIT APPROACH.....	5
2. EXECUTIVE SUMMARY.....	5
2.1. AUDIT ON FINANCIAL STATEMENTS.....	5
2.1.1. Basis of our independent audit observation.....	5
2. DETAILED FINDINGS.....	7
2.1. Lower budget execution rate comparative of action plan.....	7
2.2. Lower rate of execution of disbursement Funds as at December 2020.....	
2.3. Weakness noted for Unsupported expenses	
3. APENDICES	
4. STATUS OF IMPLMENTATION OF PREVIOUS AUDIT RECOMMENDATIONS.....	12



AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

1. INTRODUCTION

1.1. PROJECTS BACKGROUND

University of Rwanda, Centers of Excellence are composed of African Center of Excellence in Energy for Sustainable Development (ACE-ESD), African center of Excellence in Internet of Things (UR-ACEIoT), African Centre of Excellence for Innovative Teaching and Learning Mathematics and Science (ACE-ITLMS) and The African Center of Excellence for Data Science (ACE-DS) are 4 out of 24 centers initiated by the World Bank in Eastern and Southern Africa Higher Education Centers of Excellence Project (ACE II).

They are competitive loan won by the University of Rwanda-College Science and Technology (CST),College of Education(CE) and College of Business and Economics (CBE) respectively, on behalf of the Government of Rwanda to overcome the identified gaps in respective colleges, through delivering postgraduate studies, organizing professional courses and promoting collaborative research in the Eastern and Southern Africa.

The main objective of this project is; to establish and strengthen specialization and collaboration among a network of higher education institutions in the Eastern and Southern Africa region, to deliver quality post graduate education and build corroborative research capacity in the regional priority area to address key development challenges facing the region.

1.2. OBJECTIVE OF ACES

To strengthen selected Eastern and Southern African higher education institutions, to deliver quality post-graduate education, and build collaborative research capacity in the regional priority areas.

A handwritten signature in blue ink, appearing to be a stylized 'H' or 'M', is located in the bottom right corner of the page.

**AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT**

1.3. SOURCES OF FUNDING

University of Rwanda Centers of Excellence are financed through credit Agreement no 5796- RW signed on 17th June 2016 between the Government of Rwanda and International Development Association. The credit is valued at 20 USD million for a period starting from 30th September 2016 to 31 December 2022, where funds allocated to ACE-IoT worth USD 5.5 million for the period of 5 years.

Their funding mode is performance based whereby plans and achievements must be guided by the set indicators to lead to funds disbursement (Disbursement Linked Indicators and Disbursement Linked results).

1.4. STRUCTURE

The daily activities of the University of Rwanda, African Centers of Excellence academic programs are coordinated by Center Director while the Deputy Vice Chancellor for Finance and Administration, and SPIU coordinator coordinate the Finance and administrative services of ACEs.

1.5. RESPONSIBILITIES

1.5.1. Auditor's responsibility

Article 10 of Ministerial Order N° 003/17/10/TC Of 27/10/2017 setting out Regulations for Internal Audit and Audit Committees in Public Entities states that Internal Auditor must evaluate the adequacy and effectiveness of controls of governance, operations and information systems; provide assurance to management and the Audit Committee on the adequacy and effectiveness of the risk management process, provide appropriate recommendations for improving the governance process in accomplishment of its objectives; make recommendations to avoid waste and fraud and investigate the suspected fraud or irregularity; provide consulting services through training, support implementation of accounting systems, internal control documentation, risk management facilitation and other similar services on the request of management, Audit Committee or other high level authorities; communicate



AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

opportunities for improving management control, viability and sustainability of services or profitability identified during the audit to appropriate level of management.

1.5.2. Management responsibility

Article 19 of Organic Law No 12/2013 of 12/09/2013 on State Finances and Property requires the chief budget manager:

- To manage effectively, efficiently and in a transparent manner all the public funds for the public entity under his/her responsibility in accordance with relevant legal provisions;
- To establish and maintain effective, efficient and transparent systems of internal controls and risk management;
- To supervise and ensure proper use of public funds at the disposal of subsidiary entities under his/her responsibility.

1.6. AUDIT OBJECTIVE

The general objective of the review was to evaluate the adequacy and effectiveness of African centers of Excellence in Internet of Things (UR-ACEIoT) at UR, existing risk management controls, and governance processes are in order to provide, Independent opinion whether these processes are functioning as intended and the ACEIoT objectives and goals are met. We intended to provide recommendations for improving both efficient and effective performance.

1.7. SCOPE OF THE AUDIT

The audit exercise covered Semi-Annual financial statement of ACEIoT starting from 1st July to 31st December 2020.

**AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT**

1.8. AUDIT APPROACH

The following approaches have been used;

Documentations desk reviews and Interviews where applicable: we reviewed different documents and discussed with SPIU, ACE management, and Center different staff in order to understand the programs;

We have also performed audit procedures to obtain sufficient and appropriate evidence in order to provide reasonable assurance that resources deployed in ACEIoT are properly managed.

2. EXECUTIVE SUMMARY

2.1. AUDIT ON FINANCIAL STATEMENTS

2.1.1. Basis of our independent audit observation

We conducted an independent evaluation of the internal control system at UR-ACEIoT in accordance with the internal audit standards issued by the government of Rwanda and in compliance with the requirements of the Ministerial Order N° 003/17/10/TC of 27/10/2017. The Order setting out regulations for internal audit and audit committees in public entities. In accordance with those regulations, the evaluation entailed the assessment of the design and implementation of the different elements of the internal control system at UR-ACE notably; its control environment, risk assessment, control activities, information and communication, and internal control monitoring. Our audit approach was risk-based and as such our tests were tailored according to UR-ACEIoT risk analysis. The management of UR-ACEIoT provided us the information we deemed necessary for the audit, and we believe that we obtained sufficient evidence to support our independent opinion as stated below:



AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT

Observations;

1. The review of planned activities and the budget allocated to each activity revealed that the budget approved for six months from July to December 2020 was implemented at very lower rate. In total Budget has been executed at 11%. *See the details in the table below;*

CONCLUSION.

Based on the results of our evaluation above, in our opinion, the weaknesses noted bear medium risk on the operations of ACEIoT and except for the implications of those weaknesses, the internal control system at ACEIoT was satisfactory in design as at December 2020 when we concluded its evaluation.



**AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT**

2. DETAILED FINDING

2.1. Lower budget execution rate and implementation plan.

Observation;

During the period under review, we noted that, the ACEIoT planned activities and the budget allocated to each activity for the period of six months from July to December 2020 were implemented at very lower rate. In total Budget were executed at a rate of 11%. *For more information, see the details in the table below;*

Figure below shows ACE IoT, Execution of planned activities from July to December 2020

<i>Expenditure with activities planned</i>	<i>Planned</i>	<i>Execution</i>	<i>Variance</i>	<i>%</i>
<i>Learning and training excellence</i>	<i>972,500.00</i>	<i>67,899.22</i>	<i>904,600.78</i>	<i>7%</i>
<i>Teaching & research excellence</i>	<i>160,000.00</i>	<i>39,427.37</i>	<i>120,572.63</i>	<i>25%</i>
<i>Regional/ international partnerships & programmes</i>	<i>43,000.00</i>	<i>-</i>	<i>43,000.00</i>	<i>0%</i>
<i>Management & governance</i>	<i>217,723.00</i>	<i>52,312.05</i>	<i>165,410.95</i>	<i>24%</i>
<i>Sustainable financing</i>	<i>15,000.00</i>	<i>-</i>	<i>15,000.00</i>	<i>0%</i>
<i>Grand total uses of funds</i>	<i>1,408,223.00</i>	<i>159,638.64</i>	<i>1,248,584.36</i>	<i>11%</i>

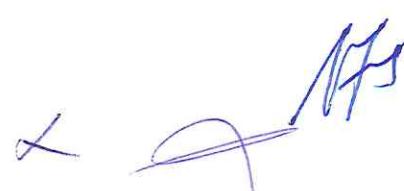
Source: Interim Financial Statement ended December 2020

Risk

There is a risk that, non-achievement of Disbursement Linked Indicators will affect the disbursement of funds and hence, the center may not achieve the intended goals.

Recommendation

The management of ACEIoT should investigate the reasons which affect the execution of the budget and take corrective measure in order to speed up the budget execution.



AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT)
INTERNAL AUDIT REPORT

Management comment:

The observation is noted. The low budget execution is due to the many activities that have been planned to be executed in the third and fourth quarter of the fiscal year 2020/2021.

- *Learning and Training Excellence is at 7% this is because there are activities, which were affected by Covid-19 restrictions: The 3rd cohort of Masters students was supposed to start in September 2020 but managed to enroll in December 2020. This affected the budget that was planned for Monthly stipend of students.*
 - *There are also some big activities which were not executed due to preparatory processes which took too long (Q1 and Q2) such as establishment of a Video-conference room of USD \$ 90,000; establishment of smart classroom of USD \$ 70, 000; Cost of two specialized IoT laboratories USD \$ 300,000 and international accreditation of USD (31,500 USD). These activities are ongoing.*
 - *The Lab is the one, which have been allocated a high budget, and we were not able to buy lab equipment due to negotiations, which were going at RDB and ministerial levels. RDB PPP Steering committee in March 2020 approved the project in form of a PPP management model where RIT would design, equip the labs and manage the daily operations of the lab. During the negotiations of the agreement, it became apparent that RIT was not interested in managing the laboratory and would only provide assistance to UR in laboratory design, training of lab technicians and procurement of equipment. UR will be entirely responsible for the management of the lab on a daily basis and this means that the arrangement would no longer qualify to be a PPP management agreement any more, as was approved by the PPP Steering committee. The agreement was further approved by RDB Private Investment Committee (PIC) and will be sent to Cabinet for approval.*
 - *In addition to that, the project got a non-cost extension up to 31 December 2023.*
- The Center expects to raise the budget execution rate in the 2nd semester once the payments related to these activities are done.*

3. APPENDICES

ACE IoT Pending planned activities from July to December 2020

Expenditure with activities planned	Planned	Execution	Variance	%
LEARNING AND TRAINING EXCELLENCE	\$972,500	\$67,899.22	\$904,600.78	\$7
Obtain International Accreditation of the new curricula	\$31,500	\$0.00	\$31,500.00	\$0
Train high level professionals in the field of IoT through Masters Programmes	\$336,000	\$38,926.64	\$297,073.36	\$12
Train high level professionals and academics in the field of IoT through PhD Programmes	\$110,000	\$28,972.58	\$81,027.42	\$26
Train professionals in IoT through Short Courses/Training Programmes	\$10,000	\$0.00	\$10,000.00	\$0
Review of programs for enhancement	\$5,000	\$0.00	\$5,000.00	\$0
Setting up the two specialized laboratories & equipments for prototyping the applied research results of PhD students	\$300,000	\$0.00	\$300,000.00	0
Setting up smart class room	\$70,000	\$0.00	\$70,000.00	\$0
Setting up smart video conference room	\$90,000	\$0.00	\$90,000.00	\$0
Purchase of software specialized in Internet of Things	\$20,000	\$0.00	\$20,000.00	\$0
TEACHING & RESEARCH EXCELLENCE	\$160,000.00	\$39,427.37	\$120,572.63	\$25
Increase IoT applied research through Internships for Masters, Research fees for PhD and master students and faculty	\$32,000	\$20,888.49	\$11,111.51	\$65
Quality Assurances for Teaching and Research Excellence	\$10,000	\$10,000.00	\$0.00	\$100
Organize special skills development workshops	\$5,000	\$0.00	\$5,000.00	\$0
Increase IoT applied research output through International conference Presentations and Journal Publications by staff and students	\$35,000	\$8,538.88	\$26,461.12	\$24

AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

Increase low-cost, innovative, open and sustainable solutions through community outreach based projects	\$5,000	\$0.00	\$5,000.00	\$0
Establishing virtual lab	\$60,000	\$0.00	\$60,000.00	\$0
Organize and conduct an open day during the induction week	\$3,000	\$0.00	\$3,000.00	\$0
Organize and conduct M4D 2021 7th international conference	\$10,000	\$0.00	\$10,000.00	\$0
REGIONAL/INTERNATIONAL PARTNERSHIPS & PROGRAMMES	\$43,000.00	\$0.00	\$43,000.00	\$0
Marketing of the center	\$10,000	\$0.00	\$10,000.00	\$0
Establish a framework for facilitating joint research collaboration with partners	\$10,000	\$0.00	\$10,000.00	\$0
Establish exchange programmes for strengthening the capacity of staffs	\$10,000	\$0.00	\$10,000.00	\$0
Create a forum for knowledge transfer and community outreach	\$3,000	\$0.00	\$3,000.00	\$0
Joint international conference organization with other centers	\$10,000	\$0.00	\$10,000.00	\$0
MANAGEMENT & GOVERNANCE	\$217,723.00	\$52,312.05	\$165,410.95	\$24,24
Establishment & Running of ACEIoT Office	\$47,523	\$8,304.08	\$39,218.92	\$17
Renovation works undertaken at the Center	-	-	\$0.00	
Coordination of regular Advisory board	\$5,000	\$0.00	\$5,000.00	\$0
Facilitation of travels Local/International) for IUCEA/AAU/World Bank workshops	\$15,000	\$154.80	\$14,845.20	\$1
Provide Salaries for non-academic staff /Support staff	\$130,200	\$43,853.17	\$86,346.83	\$34
To support the Center staff to attend professional short courses	\$17,000	\$0.00	\$17,000.00	\$0
Participation in center activities and preparation of center documents by all center staff	\$3,000	\$0.00	\$3,000.00	\$0
The monitoring and evaluation of the status of assets of the center	-	-	\$0.00	

Y

J. A. S.

AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

SUSTAINABLE FINANCING		\$15,000.00	\$0.00	\$15,000.00	\$0
Recruit self-sponsored students				\$0.00	
Development of the center business Plan and strategic plan		\$10,000	\$0.00	\$10,000.00	\$0
Facilitate Grant Proposal writing		\$5,000	\$0.00	\$5,000.00	\$0
Grand Total Uses of Funds		\$1,408.22 3.00	\$159,638.64 3.6	\$1,248,584. \$11	

2

AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

4. STATUS OF IMPLEMENTATION OF PREVIOUS AUDIT RECOMMENDATIONS
 (Refer to Internal Audit report, Period from 1st January to 30 June 2020)

S/ N	<i>Observations, Risk and Recommendations</i>	Person responsible	Current Status of implementation (%)	Time line
1	3.1.1 Lower Budget execution rate of action plan and allocated budget. Observation: The review of planned activities and the budget allocated to each activity revealed that the budget approved for Fiscal Year 2019/2020 was implemented at 52.24%. Recommendation: The Management of ACEIoT should investigate the reasons which affect the execution of the budget and take corrective measure in order to speed up the budget execution.	Center management	Not implemented. As it is shown in the Table (see the report), ACE IoT had low budget execution due to its lab equipment purchase. The Lab is the one, which have been allocated a high budget, and we were not able to buy equipment due to negotiations, which were going at ministerial level to get public private partnership approved so that Rochester Institute of Technology (RIT) can provide the lab equipment. Currently the public private partnership has been approved and they are in the process of contract negotiations once the contract is signed it might take two months from the date of signature to deliver some lab equipment. Sustainable financing: Variance was mainly caused by outbreak of COVID 19. Which hindered Centre activities.	
2	3.1.2 Lower rate of disbursement compared to useful life of the project Observation: The review of implementation of the project implemented by ACE IoT revealed that funds amounting to \$ 5,500,000 were allocated for project in 5 Years counted from January 2017 to December 2022. During our audit we noted that there is a lower rate of disbursement of funds related to the above project, it evidenced by the disbursement rate	Center management	Not implemented. The Project was supposed to start in 2016, however the first disbursement delayed to be provided to ACEIoT and the project started in 2017. Looking at the time the project started and the disbursement made so far, there is no lower rate of disbursement World Bank normally does the disbursement after verification of submitted results. The Center has submitted results in March 2020 and the results were verified and approved by NSC for disbursement. Upto now the total of	

AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

		of 49.6% as on 30/06/2020. The assessment revealed this lower rate of disbursement is due to non-achievement and delays in achieving of Disbursement Linked Indicators. (refer to table in report).	3,178,564\$ have been verified. There is no risk, the Project will implement the activities as planned. University of Rwanda through the Ministry of finance has requested for the Project extension period. There is no doubt that the Center will achieve 100% of disbursement rate.	
3	3.1.3 Planned Tenders not awarded Observation: Article 16 of the law No 62/2018 of 25/08/2018 relating to public procurement planning states that every procuring entity must produce an annual procurement plan indicating the objectives to be achieved in accordance with public procurement regulations. Further, the preparation and approval of public procurement plan is based on the budget definitively adopted by the relevant organ. However, from the review of procurement plans for financial year 2019/2020 reveals that there are tenders with Frw 13,878,784 not awarded.	Center management	Implemented. Terms of Reference for the Firm to develop the business strategy (sustainability plan) of all the 4 Centers. It was observed that the ToR that were submitted to procurement department were of low standard and hence there was a need to provide inputs from different stakeholders in order to have quality terms of reference and during the meeting of 12 th June 2019 it was decided that this tender be shifted to the next financial year 2020-2021 in order to have quality ToR.	
4	3.4.1 Weaknesses noted in management of fixed assets. - Fixed Assets not codified	Center Management	Not implemented. Observation In Sample taken for physical verification, we noted assets purchased by ACEIoT but not engrave for differentiation purposes (refer to Internal Audit report for the period ended 30 June 2020)	The Machine that was used to label the physical items of center cannot label small items. This is why the Tablet iPad 9.7 Inch Drones and Camera are not labeled. The visitor chairs are labelled except that they used metals to label them. Printer in the raw 7 have a code however HP Laser jet printer does not have code, the time they labelled other items this printer was under maintenance. The center will ensure that the items



AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (UR-ACEIoT) INTERNAL AUDIT REPORT

<p>Risk: It is hard to trace assets in case they are misallocated or they are missed. Recommendation: The management of ACEIoT should ensure that all fixed assets are codified for differentiation purposes.</p>	<p>are not tagged are tagged. The tender for electronic tagging is underway. Tagging will be fully implanted as soon as the successful bidder signs the contract in the financial Year 2020-2021</p>
--	--