NATIONAL INFORMATION TECHNOLOGY AUTHORITY

2018

STATISTICAL ABSTRACT

FOREWORD

The National Information Technology Authority-Uganda (NITA-U) is committed to the production and dissemination of integrated statistical information that meet the National and International standards quality requirements. Specifically, indicators are required for monitoring the progress towards achieving the goals for the National Development Plan II, 201516-2019/20, Government Performance with in the ICT sector and the United Nations (UN) Sustainable Development Goals (SDGs). This Statistical Abstract is NITA-U's major annual publication through which key statistical information derived from the Authority's operations and administrative records of other agencies that are involved in the production of Information Technology Authority (IT) statistics and International IT publications are disseminated for use in tracking outcomes of policies and programmes as well as decision-making.

The Authority would like to appreciate the continued Uganda Bureau of Statistics' (UBOS) technical support and cooperation of agencies in providing the requisite data to produce this publication. In a special way, I wish to thank the 2018 NITA-U Statistics Committee that compiled this publication.

It is my sincere hope that the statistical information in this publication will be used by the readers to make informed decisions.

James Saaka

Executive Director

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LIST OF ACRONMYS

EGDI	E-Government Development Index
FY	Financial Year
EPI	The e-participation index
GCI	Global Cybersecurity Index
ICT	Information and Communications Technology
IDI	ICT Development Index
IFMS	Integrated Financial Management System
IT	Information Technology
ISCI	International Standard Industrial Classification of All Economic Activities
ITU	International Telecommunications Union
LGs	Local Governments
MDAs	Ministries, Departments and Agencies
NBI	National Backbone Infrastructure
NITA-U	National Information Technology Authority-Uganda
UGX	Ugandan Shillings
UN	United Nations

EXECUTIVE SUMMARY

This NITA-U Statistical Abstract is an annual publication of some key statistics produced within the Authority under its mandate to coordinate, promote and monitor Information Technology developments. Other statistics are collected from agencies that are involved in the production of Information Technology statistics.

This publication is divided into five major thematic areas which include; NITA-U Human resources statistics, administrative statistics, other ICT statistics, ICT performance in the economy and Uganda's ICT rankings on the global scale.

NITA-U Human Resources statistics

This section presents organisational statistics related to NITA-U staff with the majority (65 percent) being male in FY2017/18.

NITA-U Administrative Statistics

This section presents statistics on NITA-U's core business covering: the national backbone infrastructure, e-Government services, priority IT standards, Certification of IT service providers, awareness of the existing cyber laws, information security and capacity building and skilling for e-government.

- Of the total number of connected sites to the NBI, 273 (77%) were utilizing various services (Internet Bandwidth, IFMS, Leased lines, Data Centre services, and dark fiber) delivered over the NBI in FY2017/18;
- In FY2017/18, 29 additional websites were developed and hosted at the datacenter bringing the cumulative total to 288;
- In FY2017/18, 17 National IT Standards were developed;
- Ten MDAs were assessed against the standards for structured cabling, standards for the acquisition of IT Hardware & Software, and E-Government Regulations, 2015 and their compliance levels were on average 62 percent, 67 percent and 42 percent respectively in FY2017/18;
- By the end of FY2017/18, the number of additional IT Service Providers certified under the Certification Framework were 115 leading a cumulative total of 157;

- The number of MDAs implementing National Information Security Framework (NISF) promoting initiatives improved from 7 in the previous FY2016/17 to 19 in FY2017/18.

Other ICT sector statistics

This section covers statistics on internet bandwidth, internet subscriptions, internet users and telephone subscriptions with the following highlights:

- The total internet bandwidth grew from 61,585.6Mbps in the previous financial year to 96,890.8Mbps in FY2017/18, resulting into a 51.8 percent growth in bandwidth per 1million inhabitants;
- The estimated total internet subscriptions declined by 36.8 percent from about 15.9million in FY2016/17 to about 10million in FY2017/18;
- In FY2017/18, a decline of 8.3 percent in mobile phone subscriptions was recorded from 23.6million subscriptions in FY2016/17 to a total of 21.8million.

ICT sector performance in the economy

This includes statistics on the ICT sector GDP, trade in ICT goods, ICT sector revenue collections and ICT planned investment with the following high lights;

- The percentage share of ICT activities on GDP was 9.8 percent by the end of FY2017/18 compared to 9.6 percent in FY2016/17;
- The estimated value of ICT exported goods in FY2017/18 declined by 51 percent from the previous FY2016/17 record of UGX 82.250billion;
- The ICT sector contribution to the total revenue collections declined from 7.6 percent in FY2016/17 to 6.5 percent in FY2017/18;
- There was an increase of 14 percent in the ICT planned capital investment from USD10.6million in FY2016/17 to about USD12million in FY2017/18.

Uganda's ICT ranking on the global scale

This section comprises of the e-government development index, e-Participation Index, ICT development index and the Global Cybersecurity index with the following highlights:

- In 2018, the e-government status for Uganda was estimated at 36 percent which is above the African average of 34 percent;
- The e-Participation Index improved from 0.4915 in 2016 to 0.6236 out of 1.0000 in 2018;
- The ICT development Index also improved from 1.9 in 2016 to 2.19 on a scale of 1 to 10;
- In addition, out of the 193 member states assessed globally in Cybersecurity in 2017, Uganda ranked the 50th with a score of 0.536.

GLOSSARY

Bandwidth:

This describes the maximum data transfer rate of a network or internet connection. It measures how much data can be sent over a specific connection in a given amount of time.

Cyber Laws:

These are laws put in place in to facilitate transacting and communicating using electronic platforms, specifically, consumer protection matters. They include; Electronic Transactions Act, 2011; Electronic Signatures Act, 2011 and Computer Misuse Act, 2011

Dark fibre service:

This refers to un-used fiber optic capacity on the NBI leased out to clients.

Data Centre

This is a large group of networked computer servers typically used by organizations for the remote storage, processing, or distribution of large amounts of data. The National Data Centre is fully equipped with state of the art technology which is utilised for Centralized hosting Services, Disaster Recovery Services and other Data Centre Services for Government Applications & Data.

E-Citizens Portal:

This a one-stop centre for Government online services (http://www.ecitizen.go.ug). Its main objective is to enhance Government service delivery to citizens, non-citizens, businesses and to Government Ministries, Departments and Agencies (MDAs).

E-Government:

This is the use of information and communication technologies to deliver public services in a convenient, efficient customer-oriented and cost-effective way.

E-Government Development Index:

The United Nations e-Government Development Index (EGDI) comparatively measures the e-Government readiness of states in terms of the scope and quality of online services (Online Service Index), the development status of telecommunication infrastructure (Telecommunication Infrastructure Index) and the human capital (Human Capital Index). E-Government Development Index ranges from zero to one.

E-Government Regulations:

These are regulations that aim at promoting e-government services and electronic communications and transactions with public and private bodies, institutions and citizens;

E-Participation Index:

The e-participation index (EPI) is derived as a supplementary index to the UN E-Government Survey. It extends the dimension of the survey by focusing on the use of online services to facilitate provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes ("e-decision making"). E-Participation Index ranges from zero to one.

E-Services:

These are services delivered through the use information and communication technologies (ICTs). The three main components of e-services are- service provider, service receiver and the channels of service delivery (i.e. technology).

Exports:

Outward flows comprising goods leaving the economic territory of a country to the rest of the world.

Global Cybersecurity Index:

This is a survey that measures the commitment of ITU Member States to cybersecurity in order to raise awareness. The GCI is a composite index combining 25 indicators into one benchmark measure to monitor and compare the level of ITU Member States

cybersecurity commitment with regard to the five pillars identified by the High-Level Experts Group and endorsed by the Global Cybersecurity Agenda. These pillars include legal, technical, organizational, capacity building and cooperation.

Hardware & Software Standards:

These spell out the rationale for establishing minimum specifications and guidelines for use in the procurement of Information Technology hardware and software products by MDAs for sustainable and manageable IT in Government.

ICT Development Index:

The ICT Development Index (IDI) developed by the International Telecommunication Union is a measure that serves to monitor and compare developments in information and communication technology across countries. The IDI is composed of ICT access, ICT use and ICT skills components. The IDI value ranges from one to ten.

ICT goods:

ICT goods are those that are either intended to fulfil the function of information processing and communication by electronic means, including transmission and display, or which use electronic processing to detect, measure and/or record physical phenomena, or to control a physical process.

ICT Sector:

The ICT sector combines manufacturing and services industries whose products primarily fulfil or enable the function of information processing and communication by electronic means, including transmission and display. This comprises ICT manufacturing industries, ICT trade industries and ICT services industries.

ICT services:

ICT services are those intended to enable the function of information processing and communication by electronic means.

IT Certification:

IT Certification is a formal procedure, by which NITA-U assesses, verifies and attests that a company/person providing information technology products or services meets the minimum requirements and standards.

Imports:

Inward flows of goods from the rest of the world into the economic territory of a country.

Information Technology:

This means the science of collecting and using information by means of computer systems and refers to computers, ancillary or peripheral equipment such as printers and scanners, software and firmware services including support services, and related resources and includes any equipment or interconnected systems that are used in the acquisition, storage, manipulation or processing, management, movement, control, display, transmission or reception of data or information.

Information Security:

This means the protection of information and information systems from unauthorised access, use, disclosure, disruption, modification or destruction.

Internet:

This is worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer – it may also be by mobile phone, PDA, game machine, digital TV or other device). Internet access can be via a fixed or wireless network.

Leased line:

This refers to a dedicated connection that allows for communication between two sites (a point-to-point leased line) or between a site and the internet (an internet leased line). Leased lines typically deliver bandwidth over a leased fibre connection, although copper local tails can sometimes be used as well.

Structured Cabling Standards:

These aim at providing guidance in the process of implementing structured cabling to enhance the delivery of voice, data and video conferencing services across the different Government MDAs.

Website:

This means a location on the internet and a collection of web pages, images, videos, data which are addressed relative to a common Uniform Resource Location (National Information Technology Authority, Uganda (E-Government) Regulations, 2015).

NATIONAL STANDARD INDICATORS

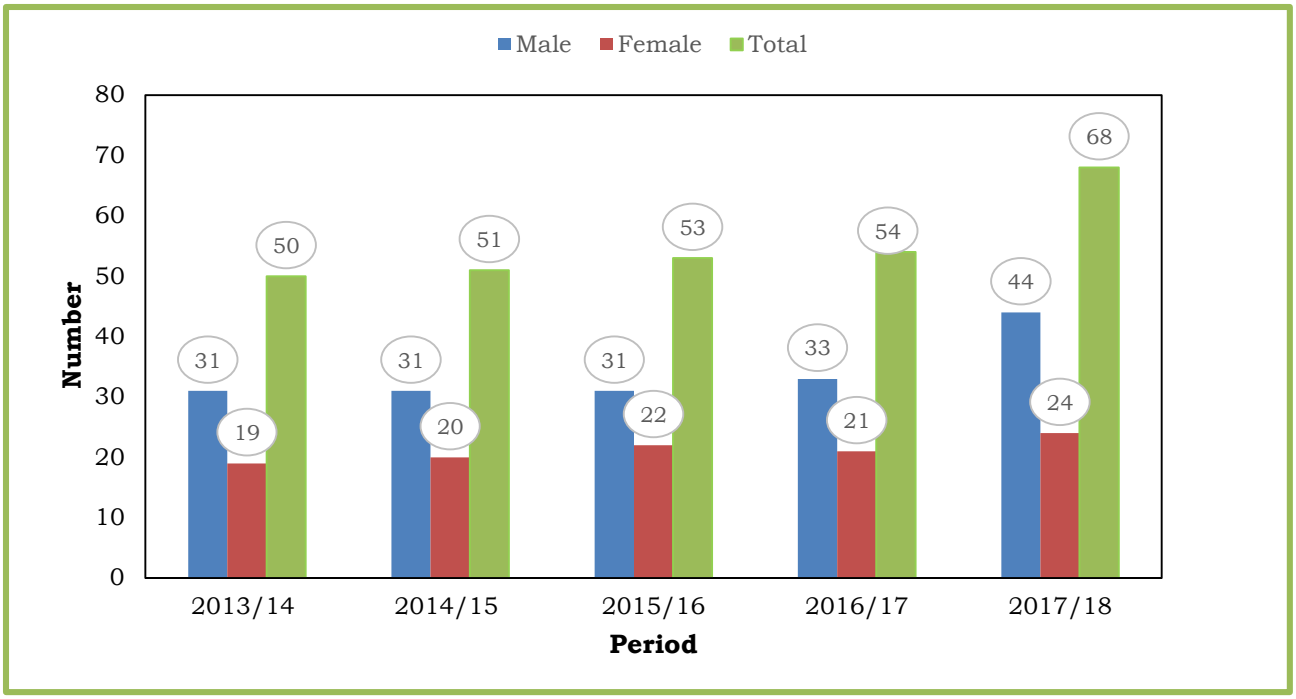
Indicator	2014/15	2015/16	2016/17	2017/18
Level 3: Sector Outcomes				
Percentage of households with internet access				10.8%
Percentage of population using internet				12.1%
Proportion of the population owning a mobile phone				70.9%
Proportion of population utilizing e-government services				62.6%
Percentage share of ICT to GDP	5.9%	8.8%	9.6%	9.8%
Percentage share of ICT revenue to total revenue	9.1%	8.5%	7.6%	6.5%
Level 4: Intermediate Outcomes				
Number of implementing government entities providing e-services	30	39	46	48
Level of privacy protection for personal or confidential data collected, processed and stored	-	100%	100%	80%
Level of availability for hosted public services	-	99.8%	99.8%	99.8%
Number of sites utilizing services (internet, data centre, IFMIS, Leased lines and Dark fibre) over the National Backbone infrastructure	-		180	273
Level of compliance with Structured Cabling Standards, 2013	-	65%	64%	62%
Level of compliance with Hardware & Software Standards, 2013	-	74%	73%	67%
Level of compliance with E-Government Regulations, 2015	-	-	35%	42%

1. NITA-U HUMAN RESOURCES STATISTICS

1.1 NITA-U Staff by Gender

This section covers statistics on NITA-U staffing levels by gender. In the FY 2017/18, the total number of NITA-U staff was 68 compared to 54 recorded in FY 2016/17. The majority (65 percent) were male and only 35 percent were female in FY 2017/18 compared to 61 percent and 39 percent in FY 2016/17 respectively (figure 1.1.1).

Figure 1.1.1: Number of Staff by Gender; FY2013/14-2017/18



Source: National Information Technology Authority-Uganda

2. NITA-U ADMINISTRATIVE STATISTICS

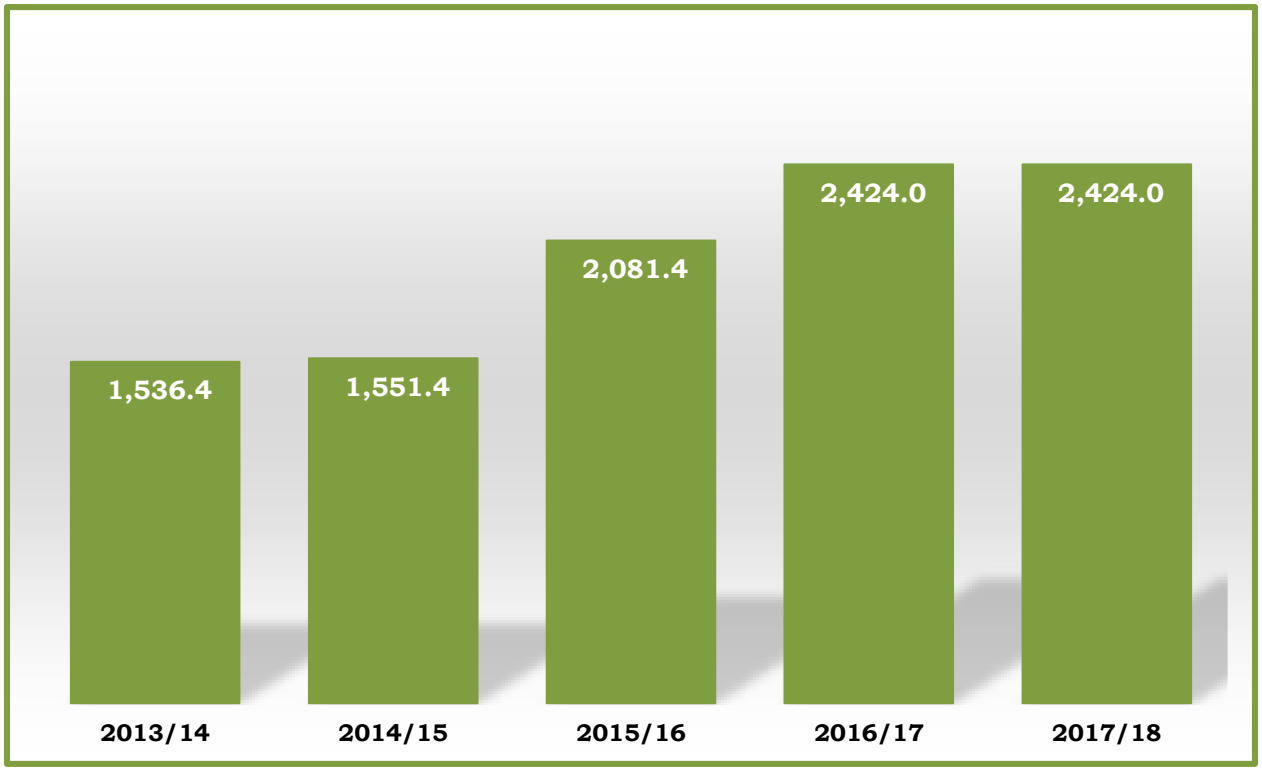
2.1 National Backbone Infrastructure (NBI)

This section provides information on the National Backbone Infrastructure whose major aim is to connect all major towns within the country onto an Optical Fibre Cable based Network and to connect Government entities onto the e-Government Network. Statistics on the kilometers of Optical Fibre Cable on the NBI; districts covered by the NBI; government sites connected to the NBI; government sites utilizing services over the government sites receiving Internet band width service over the NBI and government sites using other services over the NBI are presented on this section.

2.1.1 Kilometres of Optical Fibre Cable on the NBI

In FY2017/18, the kilometers of Optical Fibre Cable on the NBI remained at 2,424km (figure 2.1.1).

Figure 2.1.1: Kilometres of fibre Optical Cable on the NBI; FY2013/14-2017/18

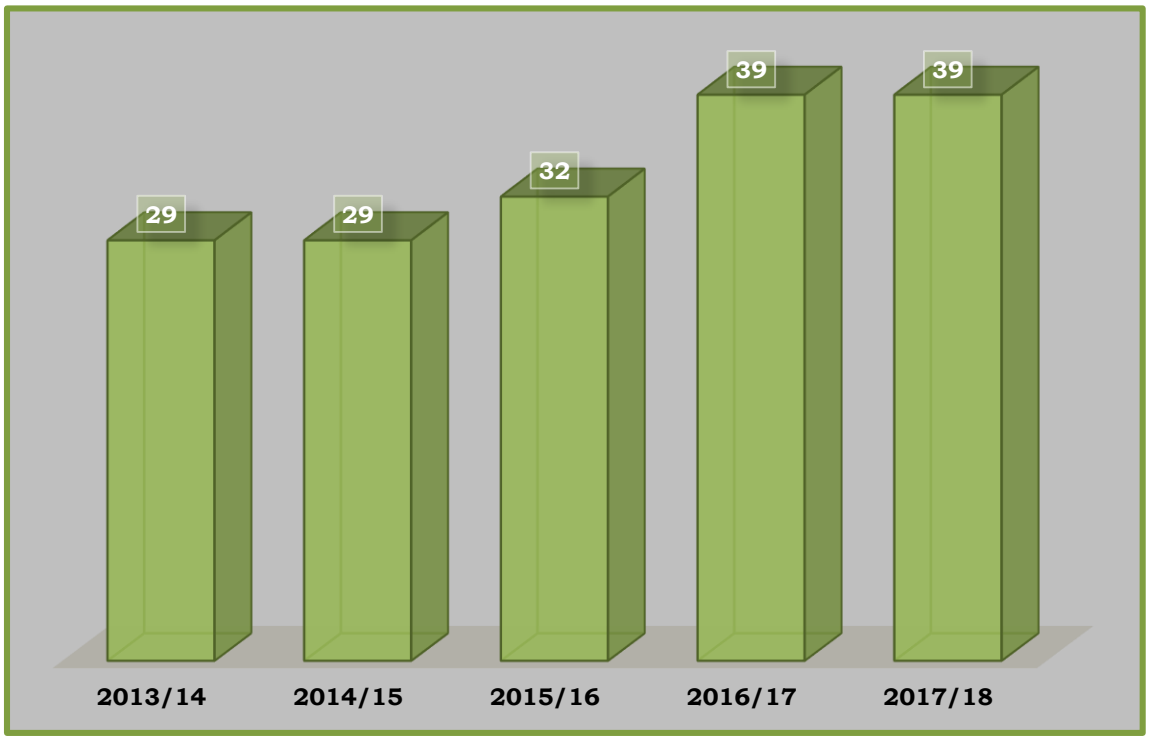


Source: National Information Technology Authority-Uganda

2.1.2 Districts covered by the NBI

The number of districts covered by the NBI also remained at 39 (figure 2.1.2).

Figure 2.1.2: Number of districts covered by the NBI; FY2013/14-2017/18

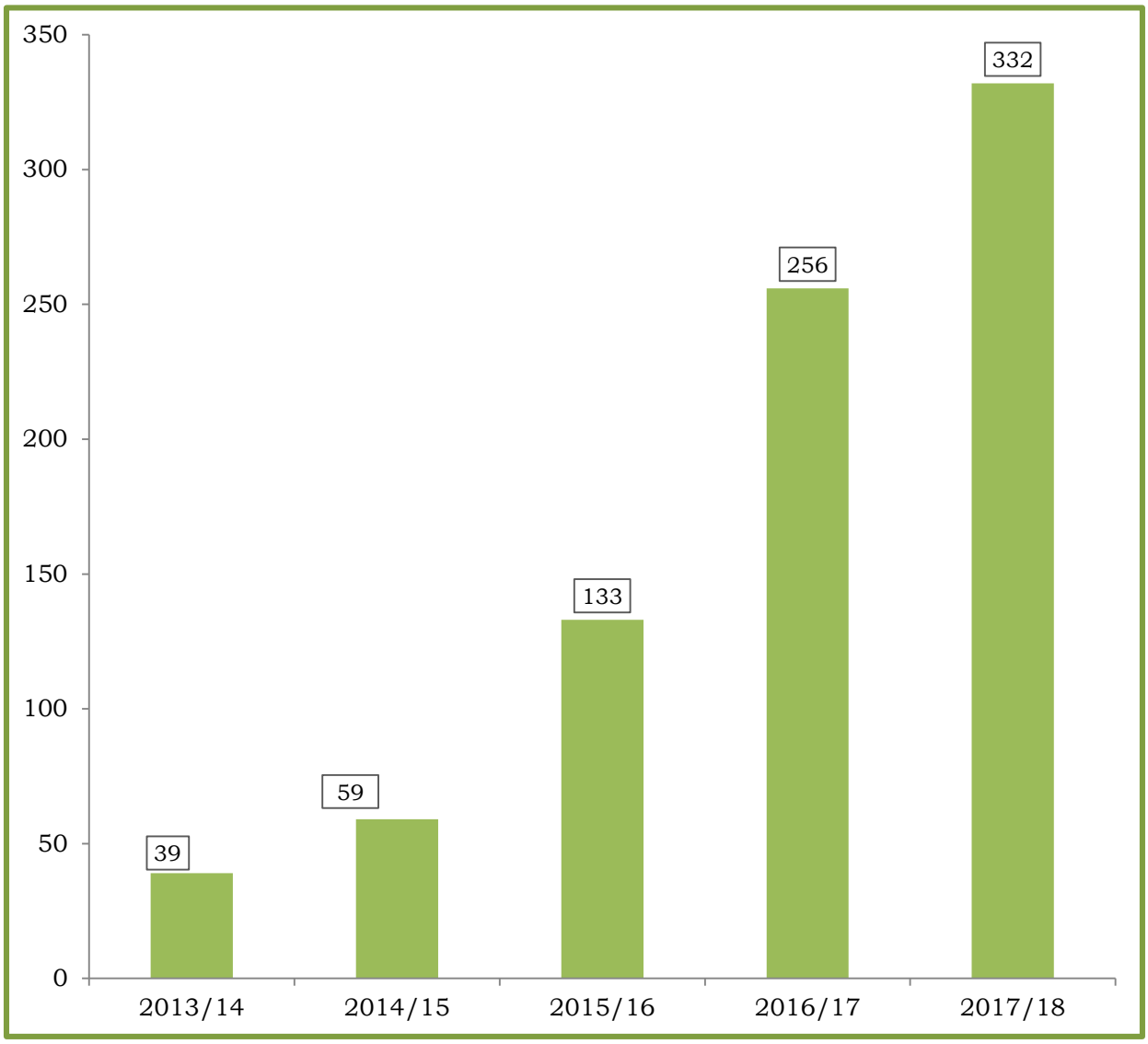


Source: National Information Technology Authority-Uganda

2.1.3 Government sites connected to the NBI

Similarly, 76 additional government sites were connected to the NBI increasing the total number to 332 compared to 123 added in FY2016/17 (figure 2.1.3).

Figure 2.1.3: Number of government sites connected to the NBI; FY 2013/14-2017/18

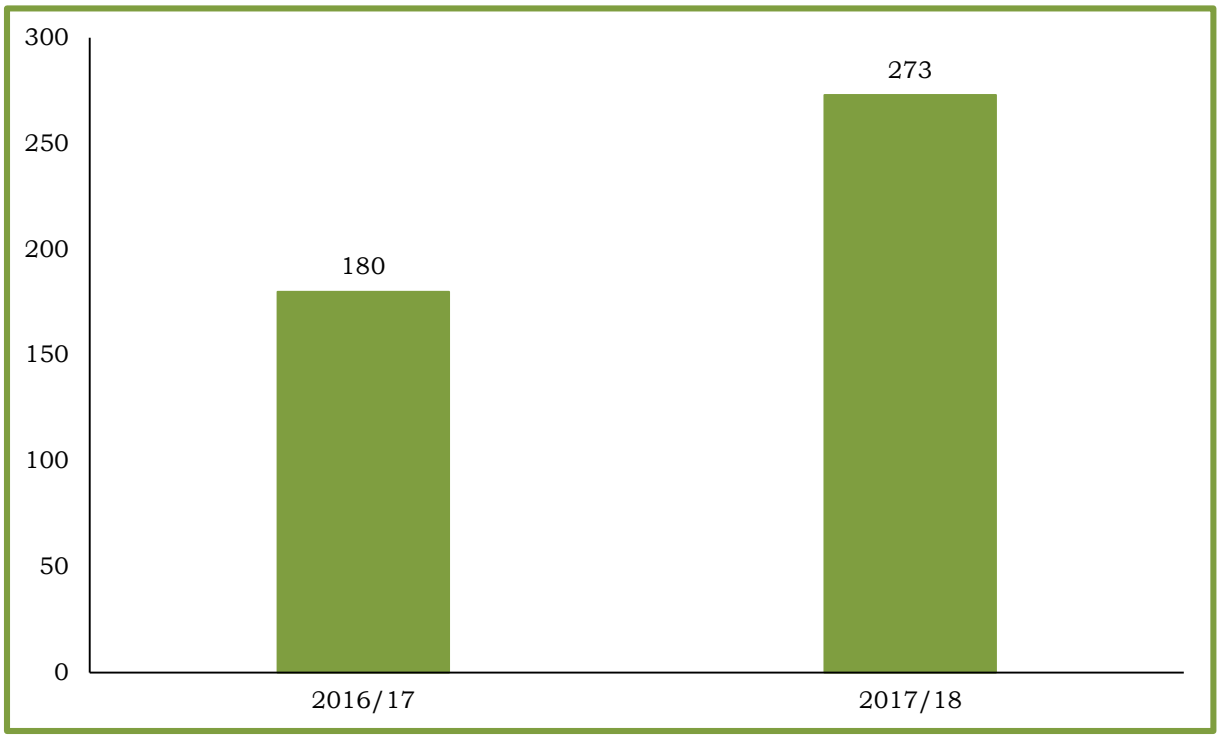


Source: National Information Technology Authority-Uganda

2.1.4 Government sites utilizing services over the NBI

Of the total number of connected sites to the NBI as illustrated in figure 2.1.3, 273 (77%) were utilizing various services (Internet Bandwidth, IFMS, Leased lines, Data Centre services, and dark fiber) delivered over the NBI in FY2017/18 compared to 180 sites out of 256 connected (66%) in FY2016/17 (figure 2.1.4).

Figure 2.1.4: Number of government sites utilizing services over the NBI; FY2016/17-2017/18

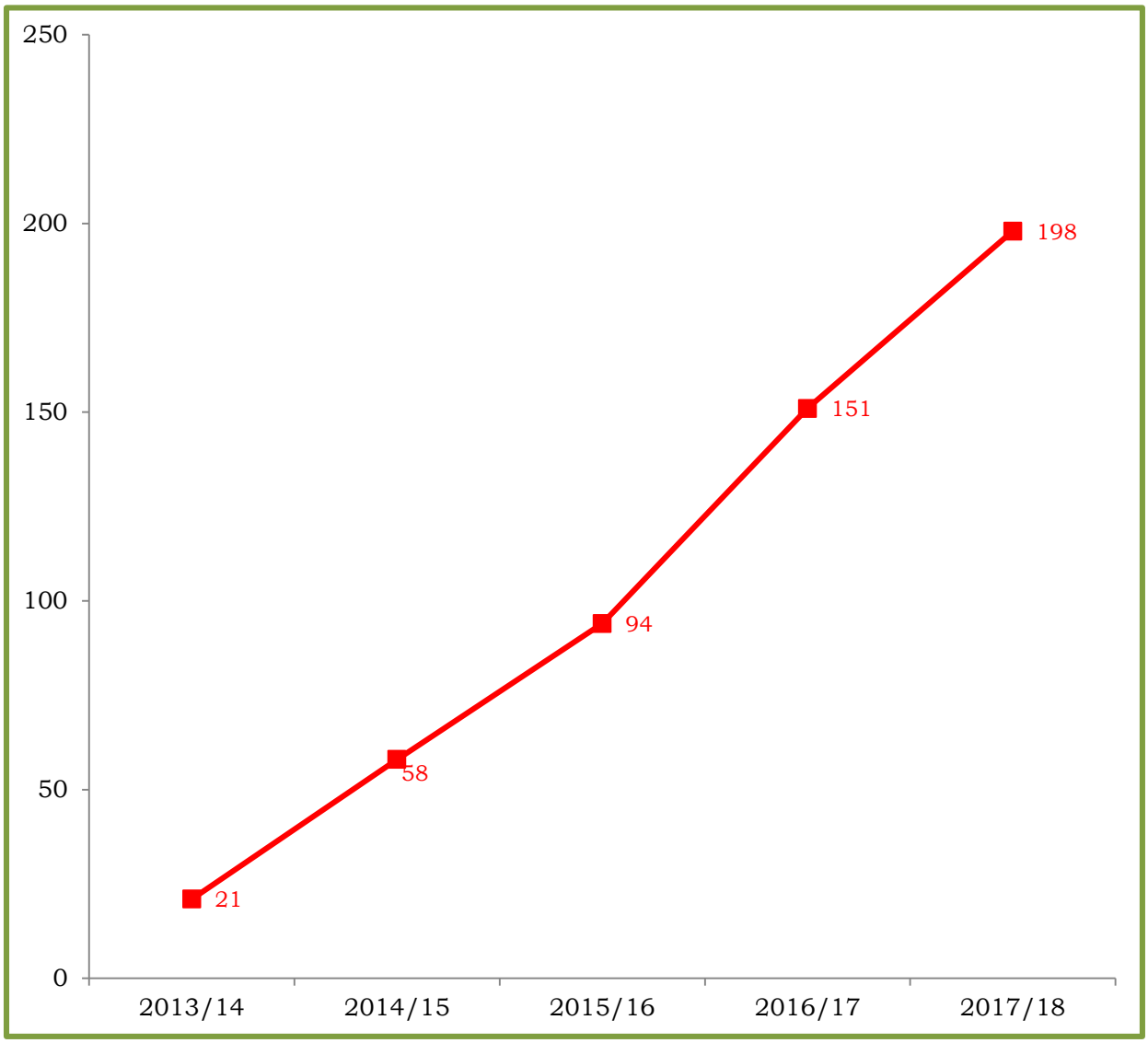


Source: National Information Technology Authority-Uganda

2.1.5 Government sites receiving internet bandwidth service over the NBI;

In FY 2017/18, 46 additional government sites were provided with Internet service over the NBI bringing the total number to 198 compared to 57 additional sites in FY2016/17 (figure 2.1.5).

Figure 2.1.5: Number of Government sites receiving internet band width service over the NBI; FY 2013/14-2017/18

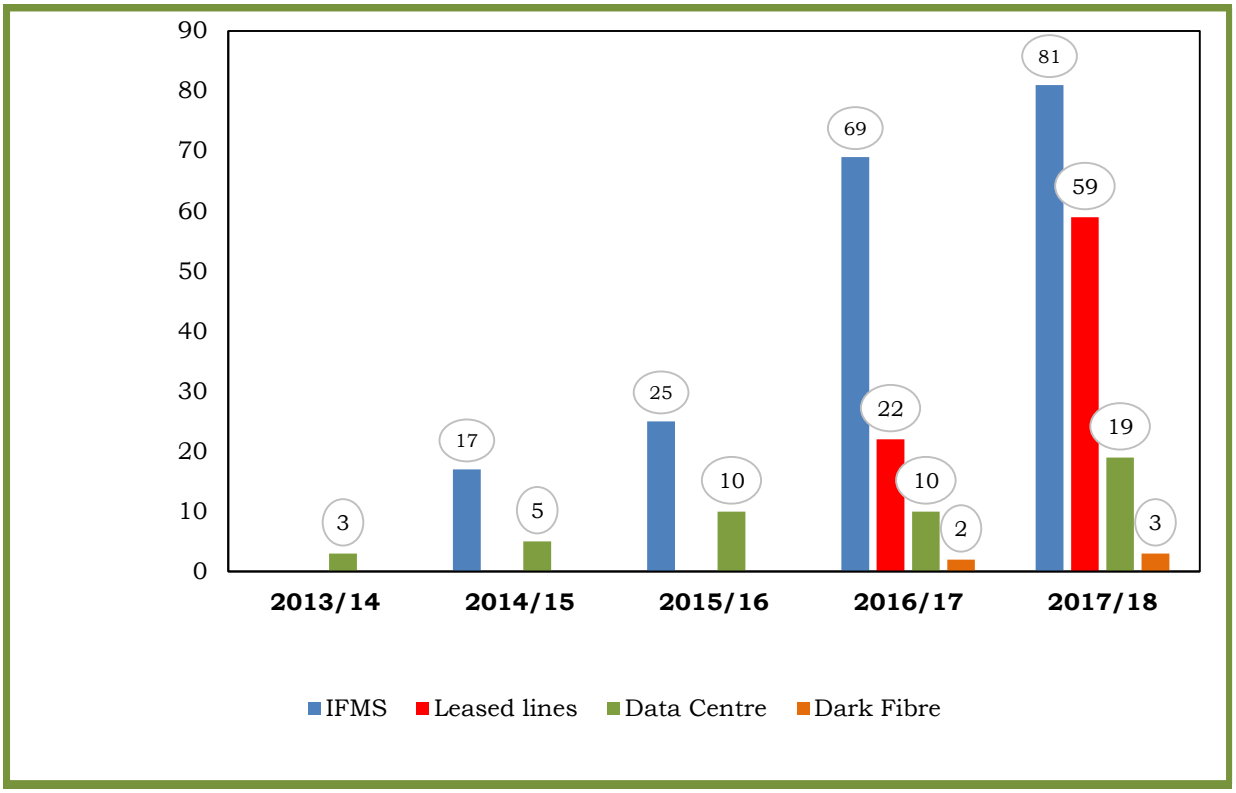


Source: National Information Technology Authority-Uganda

2.1.6 Government sites using other services over the NBI

Figure 2.1.6 also shows that in FY2017/18, the number of government sites using Integrated Financial Management System over the NBI increased from 69 in FY2016/17 to 81, those using Leased lines improved from 22 to 51, Data center services from 10 to 19 and leasing of Dark fibre services from 2 to 3.

Figure 2.1.6: Number of government sites using other services over the NBI; FY 2013/14-2017/18



Source: National Information Technology Authority-Uganda

2.2 Snapshot of e-government services

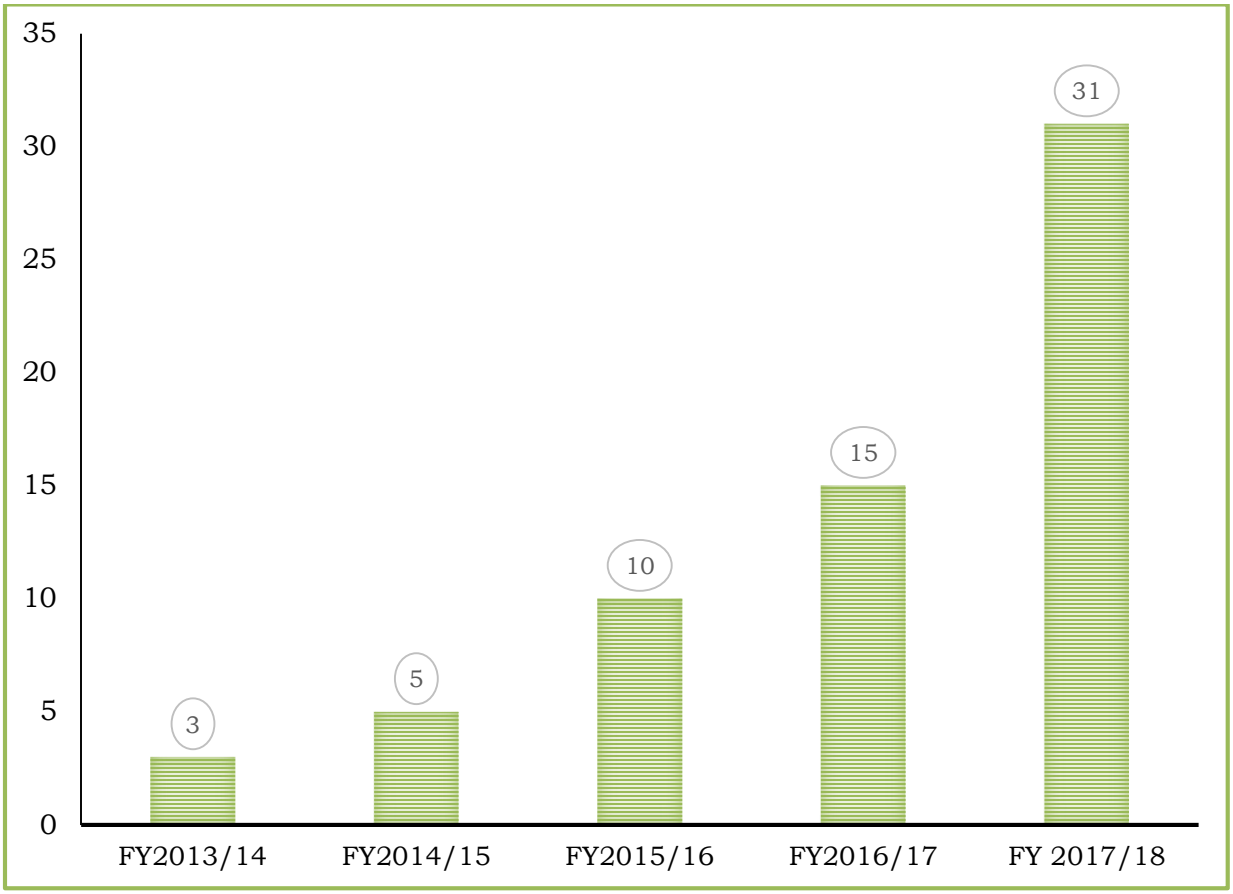
E-Government enables citizens, enterprises and organizations to carry out their business with government in a more efficient, transparent, and effective manner. Therefore, NITA-U is championing comprehensive implementation of information and communication technology in government Ministries, Departments, Agencies (MDAs) and Local Governments. The government has setup infrastructure and is promoting the roll out of e-services.

This section presents statistics on the applications hosted at the Data Centre, e-services accessed through the e-citizens Portal, implementing government entities providing e-services, MDAs/LGs provided technical assistance to in the implementation of e-Government projects and websites developed by NITA-U.

2.2.1 Applications hosted at the Data Centre

In FY2017/18, 16 new applications were added to be centrally hosted at the National Data Centre bringing the total to 31 while in FY2016/17, only 10 new applications were added (figure 2.2.1).

Figure 2.2.1: Number of applications hosted at the Data Centre; FY2015/16-2017/18

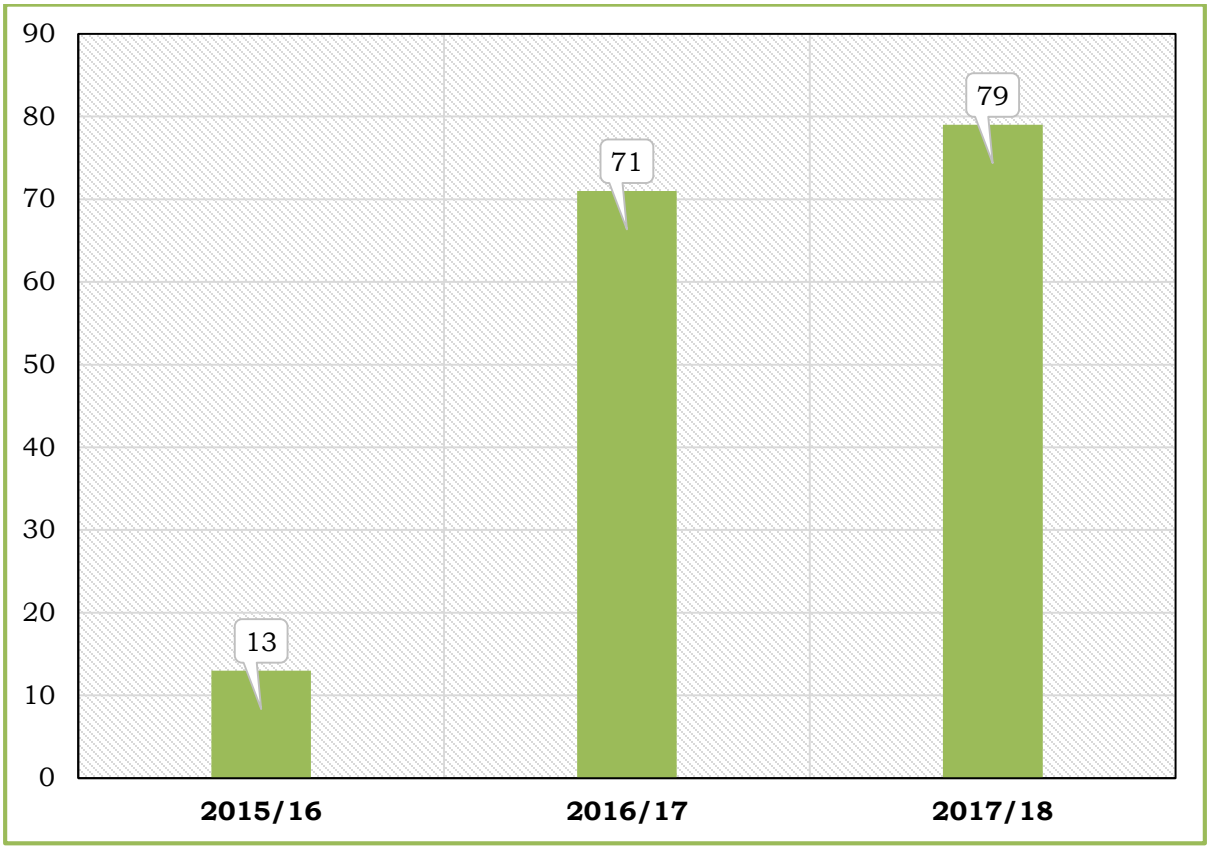


Source: National Information Technology Authority-Uganda

2.2.2 E-services accessed through the e-citizens portal

NITA-U has made commendable efforts to promote the usage of the E-Citizens portal (http://www.ecitizen.go.ug). In FY2017/18, 8 new e-services were added to the portal bringing the total to 79 (figure 2.2.2).

Figure 2.2.2: Number of e-services accessed through the e-citizens Portal; FY2015/16-2017/18

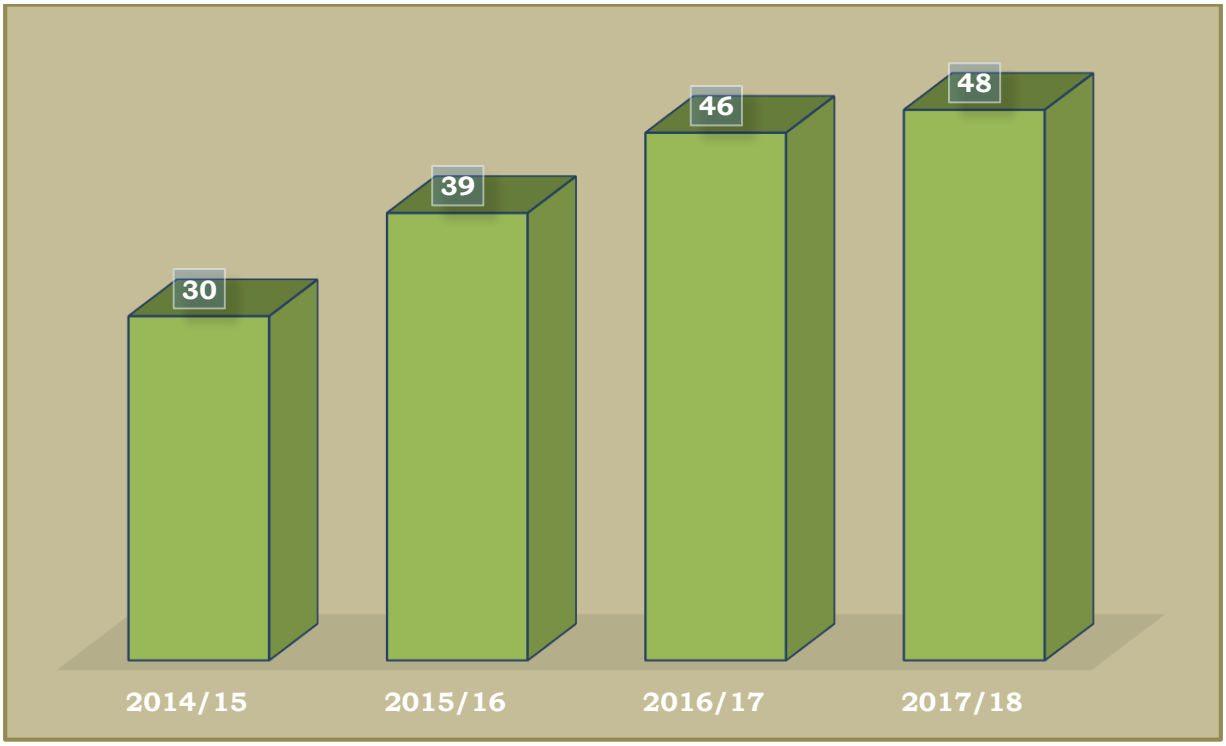


Source: National Information Technology Authority-Uganda

2.2.3 Implementing government entities providing e-services

The number of implementing government entities providing e-services increased from 46 in FY2016/17 to 48 in FY2017/18 (figure 2.2.3).

Figure 2.2.3: Number of implementing government entities providing e-services; FY2014/15-2017/18

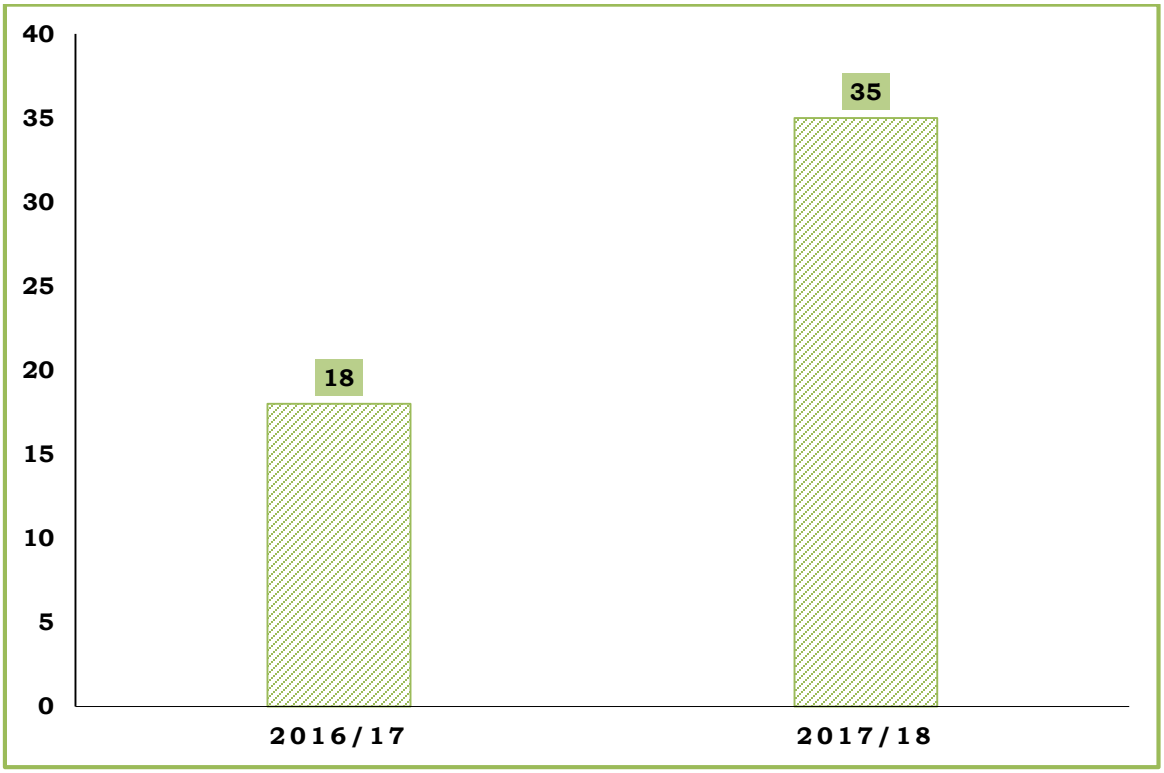


Source: National Information Technology Authority-Uganda

2.2.4 MDAs/LGs provided technical assistance to in the implementation of e-Government projects

In FY2017/18, technical support was provided to 35 unique MDA/LGs which has resulted into the development of E-Government services, capacity building, and improved compliance to national IT standards and improved efficiencies (figure 2.2.4).

Figure 2.2.4: Number of MDAs/LGs provided technical assistance to in the implementation of e-Government projects; FY2014/15-2017/18

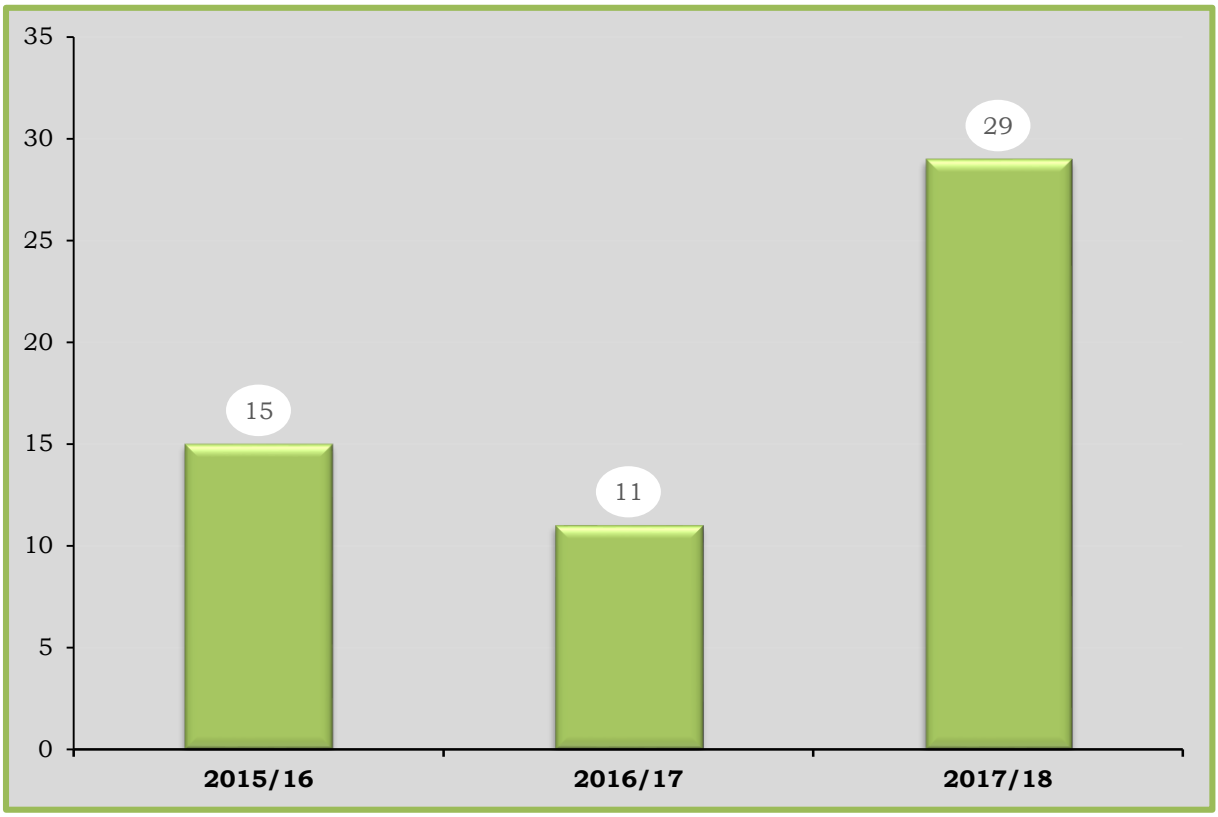


Source: National Information Technology Authority-Uganda

2.2.5 Websites developed

Furthermore, as per the national guidelines for development and management of websites, NITA-U developed a total of 29 websites for MDAs/LGs in FY2017/18 from 11 websites developed in the previous FY2016/17. Cumulatively 162 MDAs/LGs sites were being hosted and supported by NITA-U in FY2017/18.

Figure 2.2.5: Number of websites developed; FY2015/16-2017/18



Source: National Information Technology Authority-Uganda

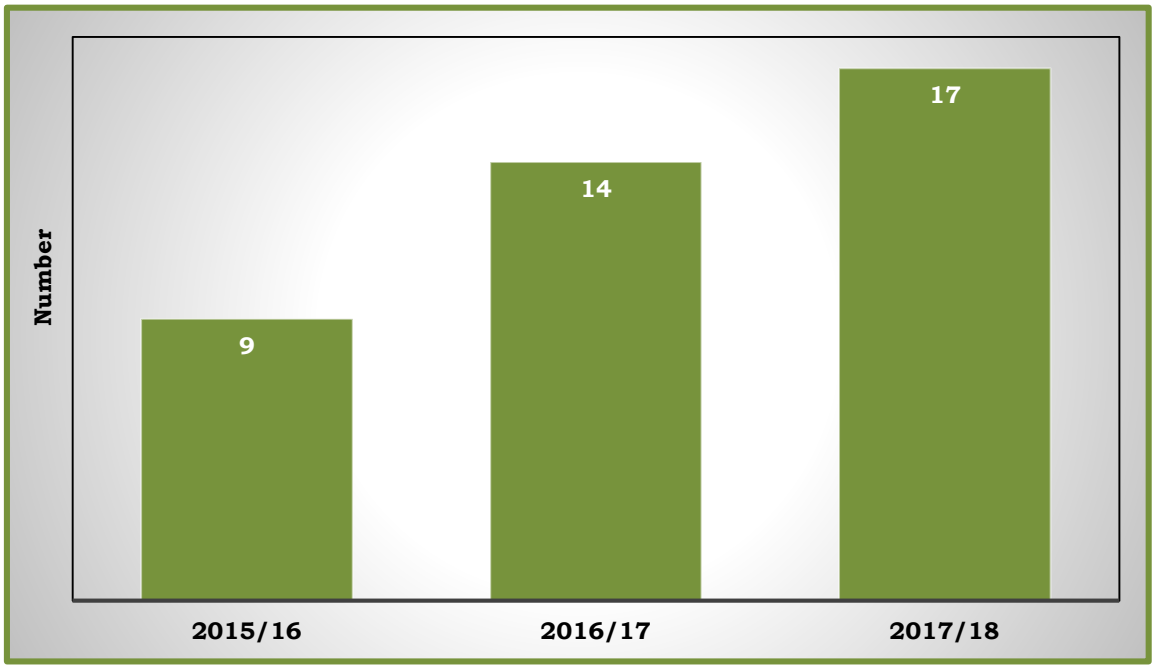
2.3 Priority IT Standards

NITA-U is charged with the responsibility of developing national information technology standards. These standards are developed through technical committees comprised of subject matter experts. These experts are sourced from different fields such as academia, industry, business, government regulatory bodies and independent researchers etc. In developing these standards, NITA-U prioritizes different competing needs and therefore the standards that have the greatest impact on the technological advancement of the country in line with the government's development programs are considered first for development. Such standards are considered to have a great impact on trade, security and affect positively the ability of government to deliver services in a fast, efficient, reliable

and effective manner for all citizens which in turn has the effect of propelling the socio-economic development of the country.

In FY2017/18, 17 National IT Standards were developed and presented to the National Standards Technical Committee for adoption while 14 national IT standards were developed and approved by the National Standards Council under the Uganda National Bureau of Standards in FY2016/17 (Figure 2.3.1).

Figure 2.3.1: Number of IT Standards developed; FY 2015/16-2017/18



Source: National Information Technology Authority-Uganda

2.4 Compliance to IT standards and e-government regulations

NITA-U conducts compliance assessments in entities against the standards for structured cabling and guidelines; Standards for the acquisition of IT Hardware & Software; E-Government Regulations, 2015 and the Electronic transactions Act.

In FY2017/18, 10 MDAs were assessed against the standards for structured cabling, standards for the acquisition of IT Hardware & Software, and E-Government Regulations, 2015 and their compliance levels were on average 62 percent, 67 percent and 42 percent respectively (table 2.4.1). However, follow-ups are being made with these entities to ensure compliance.

Table 2.4.1: Number of Compliance Assessments and Compliance levels; FY 2013/14-2017/18

Financial Year	Number of Entities assessed	Compliance levels (average score)			
		Structured Cabling Standards, 2013	**Hardware & Software Standards, 2013**	**E-Government Regulations, 2015**	**Electronic transactions Act**
2013/2014	17 MDAs	55%	-	-	-
2014/2015	9 online service providers	-	-	-	57%
2015/2016	21 MDAs	65%	74%	-	-
2016/2017	10 MDAs	64%	73%	-	-
	5MDAs	-	-	35%	-
2017/2018	10 MDAs	62%	67%	42%	-

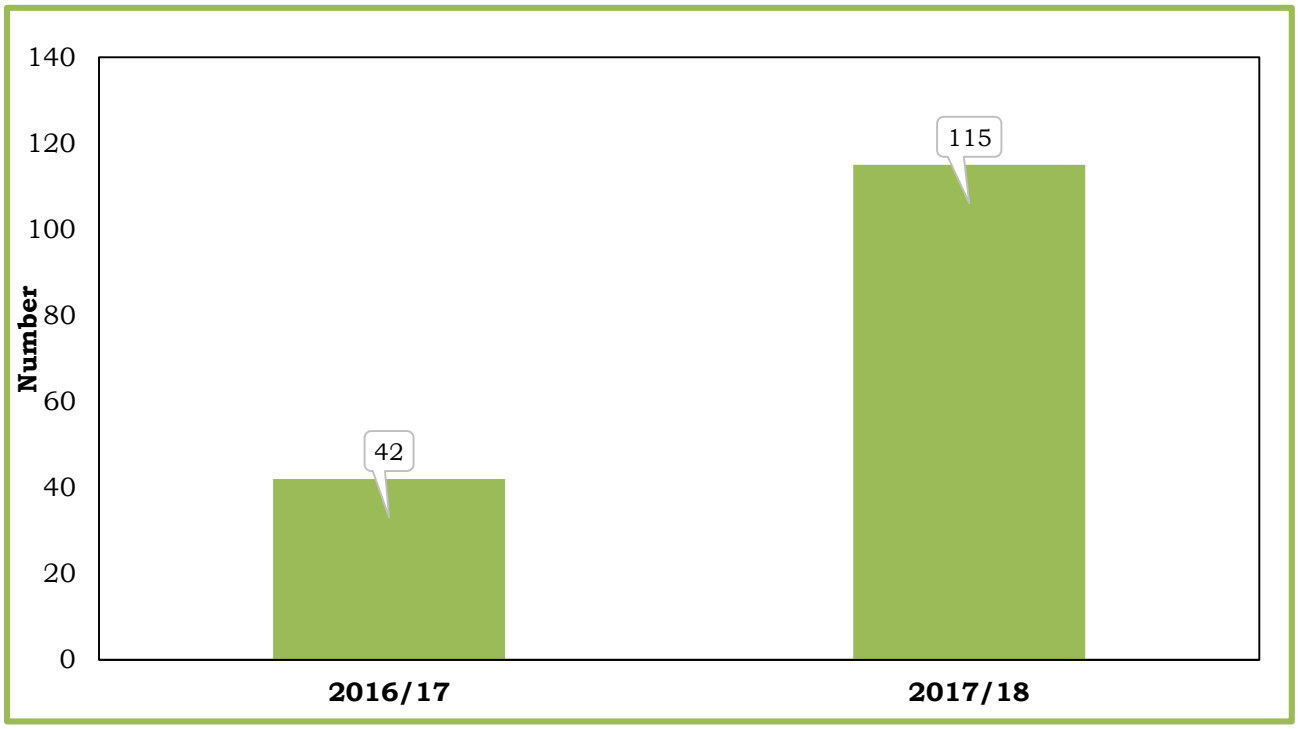
Source: National Information Technology Authority-Uganda

2.5 Certification of IT Service Providers

The National Information Technology Authority- Uganda (NITA-U) has been working on modalities for certifying and authenticating IT service providers and IT training institutions in Uganda for systematic growth of the sector and warrant of better quality IT services for the consumers.

By the end of FY2017/18, the number of additional IT service providers certified under the Certification Framework improved from 42 in FY2016/17 to 115 leading a cumulative total of 157 IT firms as shown in figure 2.5.1 below.

Figure 2.5.1: Number of IT Service Providers certified; FY2016/17-2017/18

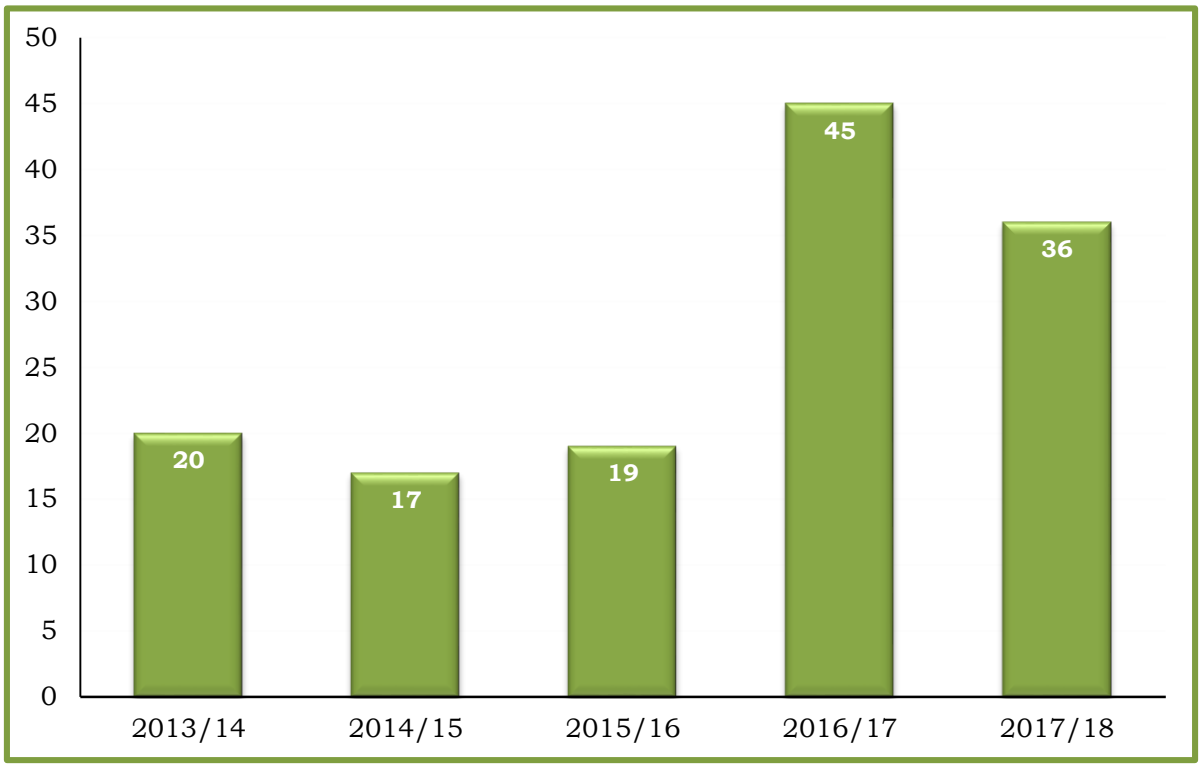


Source: National Information Technology Authority-Uganda

2.6 Cyber Laws Awareness

Sensitization activities to enhance awareness of the existence and application of the cyber laws have been conducted over the years. In FY2017/18, there was a decline of 20 percent in the number awareness sessions conducted across the MDAs and Local Governments from 45 sessions conducted in FY2016/17 to 36 sessions (figure 2.6.1).

Figure 2.6.1: Number of sensitization sessions on cyber laws; FY2013/14-2017/18



Source: National Information Technology Authority-Uganda

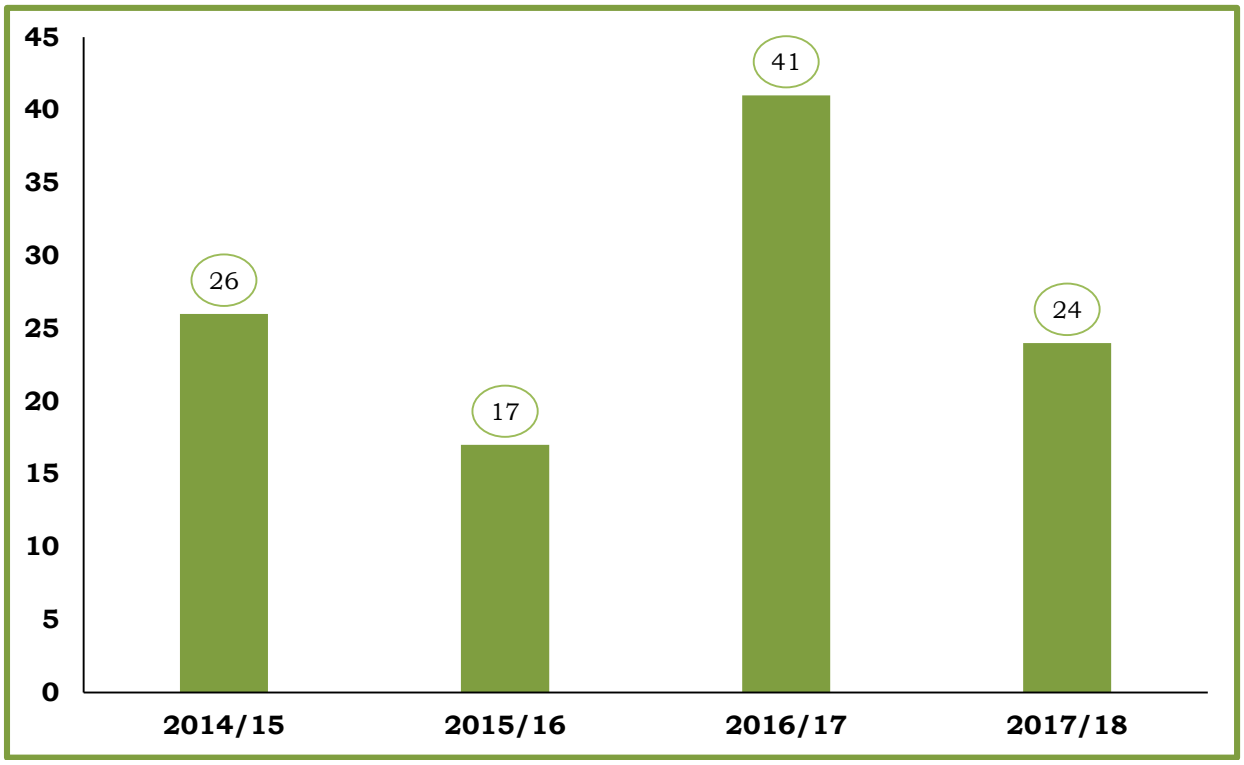
2.7 Information Security

This section presents statistics on Information Security awareness sessions targeting numerous stakeholder groups, MDAs implementing National Information Security Framework, privacy protection for personal or confidential data collected, processed and stored as well as the availability for hosted public services.

2.7.1 Information Security awareness sessions

In FY 2017/18, 24 Information Security awareness sessions targeting numerous stakeholder groups in the areas of risk management, implementation of Security Controls, Audits amongst others were conducted (figure 2.7.1).

Figure 2.7.1: Number of Information Security Awareness Events; FY2014/15-2017/18

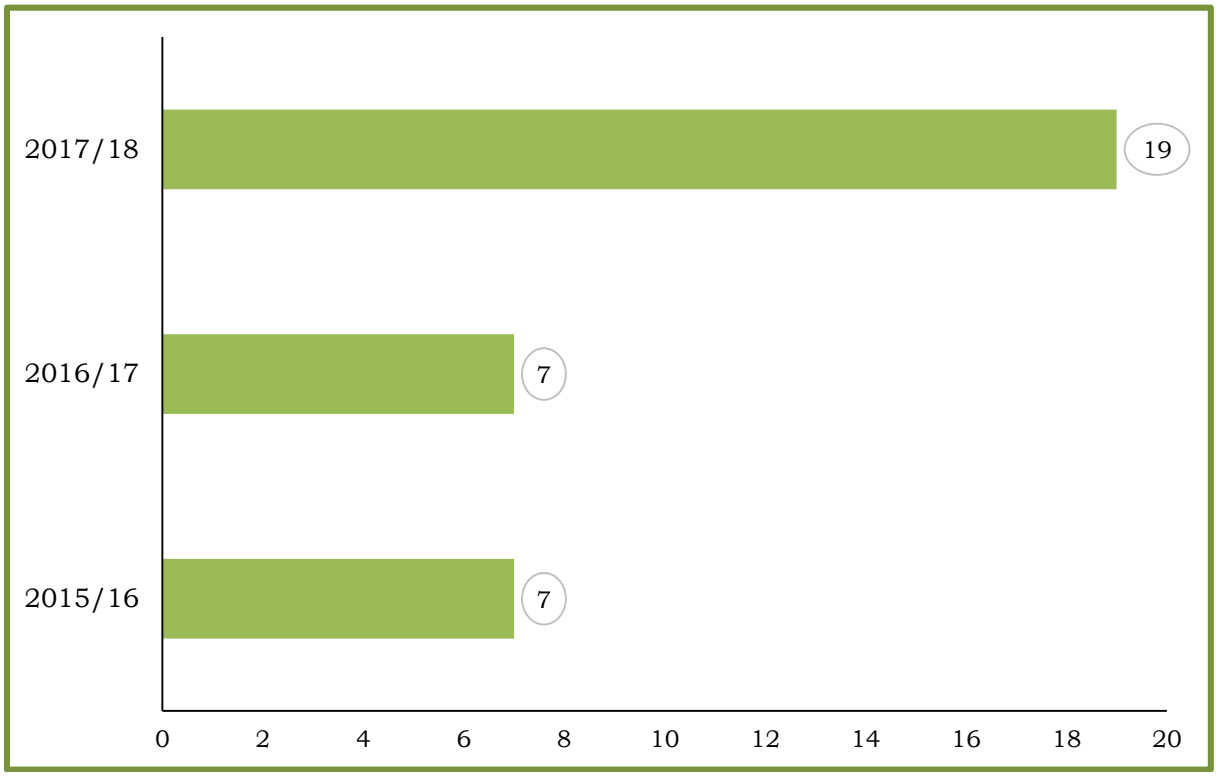


Source: National Information Technology Authority-Uganda

2.7.2 MDAs implementing National Information Security Framework

The number of MDAs implementing National Information Security Framework (NISF) promoting initiatives improved from 7 in the previous FY2016/17 to 19 in FY2017/18 (figure 2.7.2).

Figure 2.7.2: Number of MDAs implementing National Information Security Framework (NISF) promoting initiatives; FY2015/16-2017/18

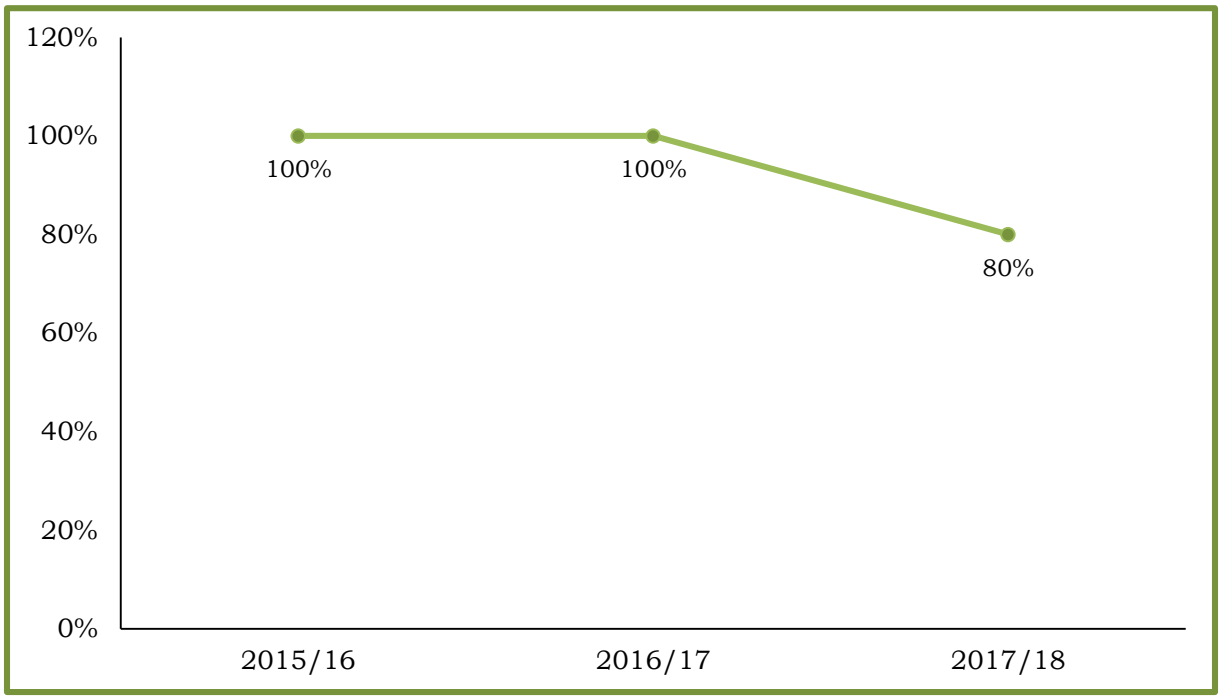


Source: National Information Technology Authority-Uganda

2.7.3 Privacy protection

From figure 2.7.3, the level of privacy protection for personal or confidential data collected, processed and stored was 100 percent in FY2016/17 implying that there were no incidents reported and 80 percent of incidents reported in FY2017/18 were resolved.

Figure 2.7.3: Level of privacy protection for personal or confidential data collected, processed and stored; FY2015/16-2017/18

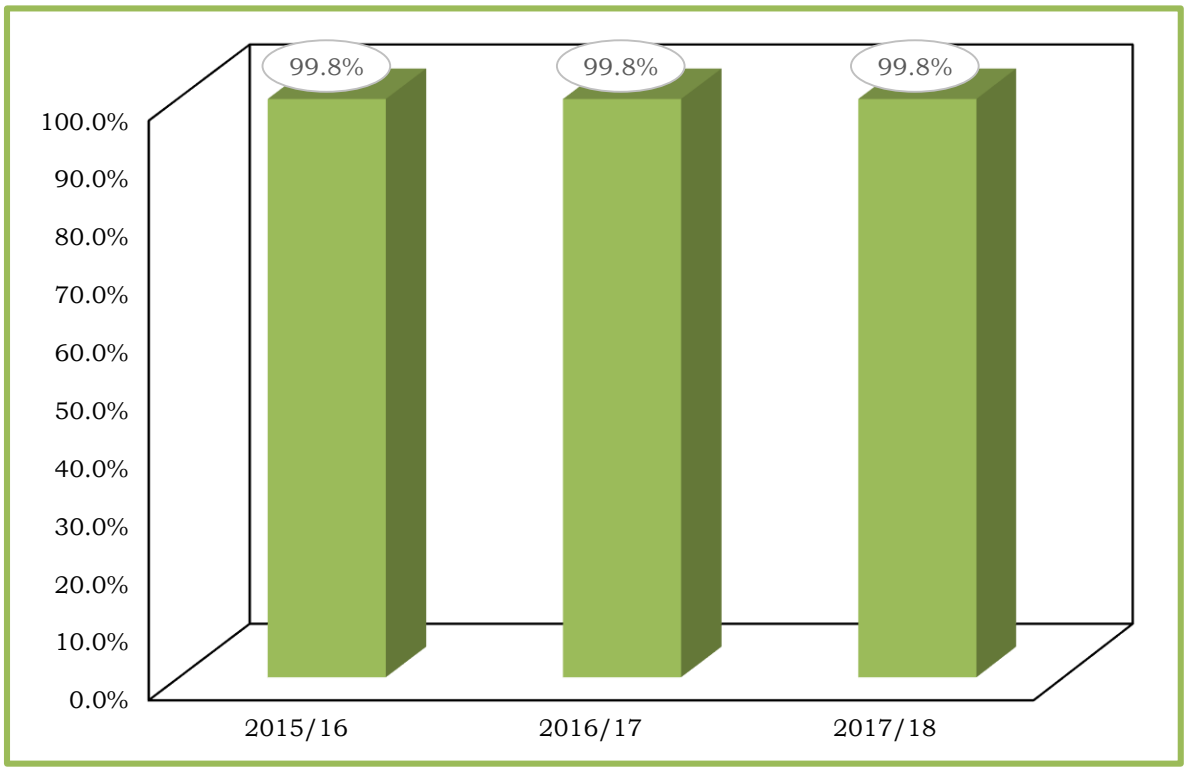


Source: National Information Technology Authority-Uganda

2.7.4 Availability for hosted public services

Furthermore, the level of availability for hosted public services (average uptime of the services hosted) has been 99.8 percent over the past three years (figure 2.7.4).

Figure 2.7.4: Level of availability for hosted public services; FY2015/16-2017/18



Source: National Information Technology Authority-Uganda

2.8 Capacity building and skilling for e-government services

NITA-U conducts training and builds capacity for e-government services to ensure increased uptake and effective utilisation among government employees. During the FY2017/18, 429 government employees were trained in various e-government services compared to 474 government employees trained in FY2016/17 (figure 2.8.1).

Figure 2.8.1: Number of government employees trained in e-government services; FY2014/15-2017/18

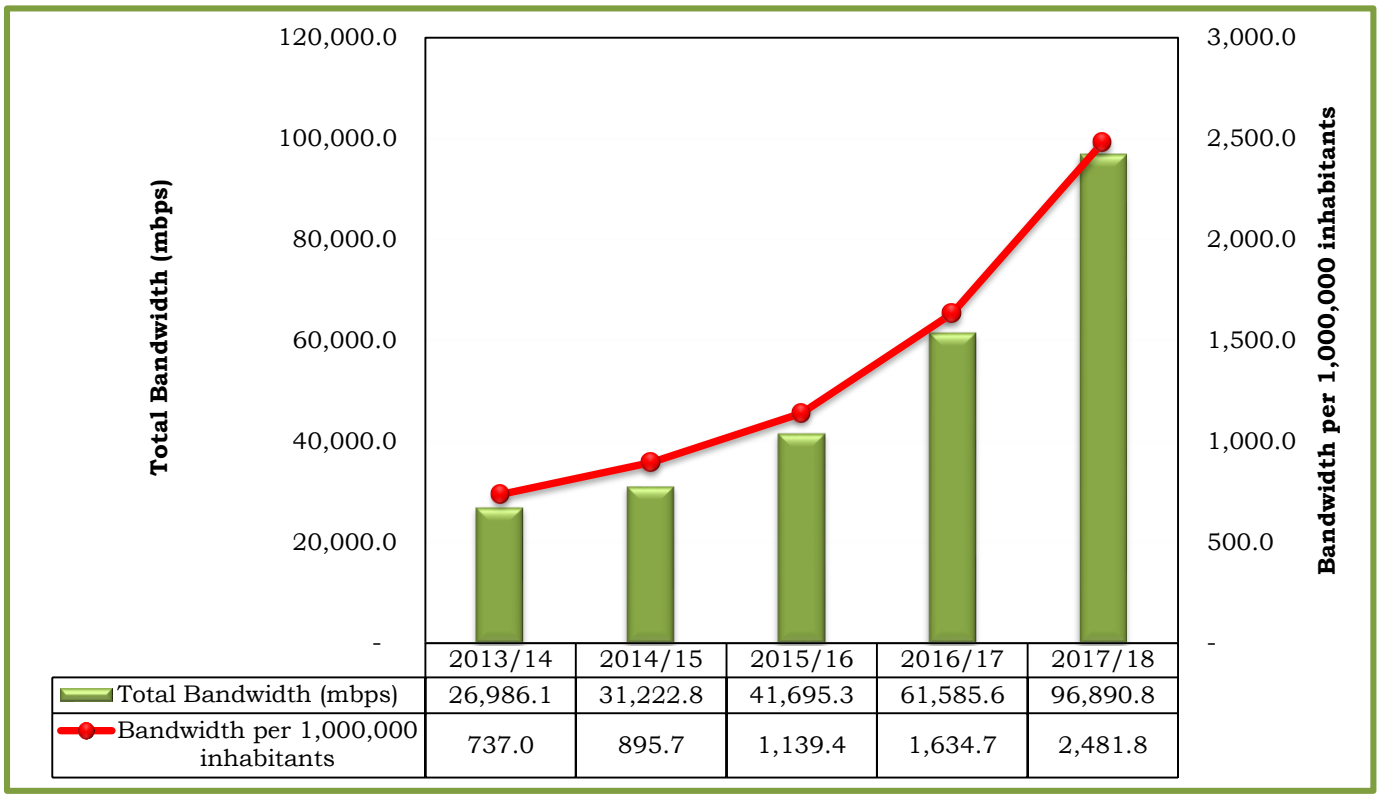
Source: National Information Technology Authority-Uganda

3. OTHER ICT STATISTICS

3.1 Total Internet bandwidth

This measures the total amount of internet traffic sent to and received from the country across a specific period of time. The total internet bandwidth grew from 61,585.6Mbps in the previous financial year to 96,890.8Mbps in FY2017/18, resulting into a 51.8 percent growth in bandwidth per 1 million inhabitants. This means increased network capacity to carry larger volume of information from one location to the next. This indirectly leads to improved network performance hence higher speed internet services to internet users (figure 3.1.1).

Figure 3.1.1: Total internet bandwidth and internet bandwidth per million inhabitants; FY2013/14-2017/18



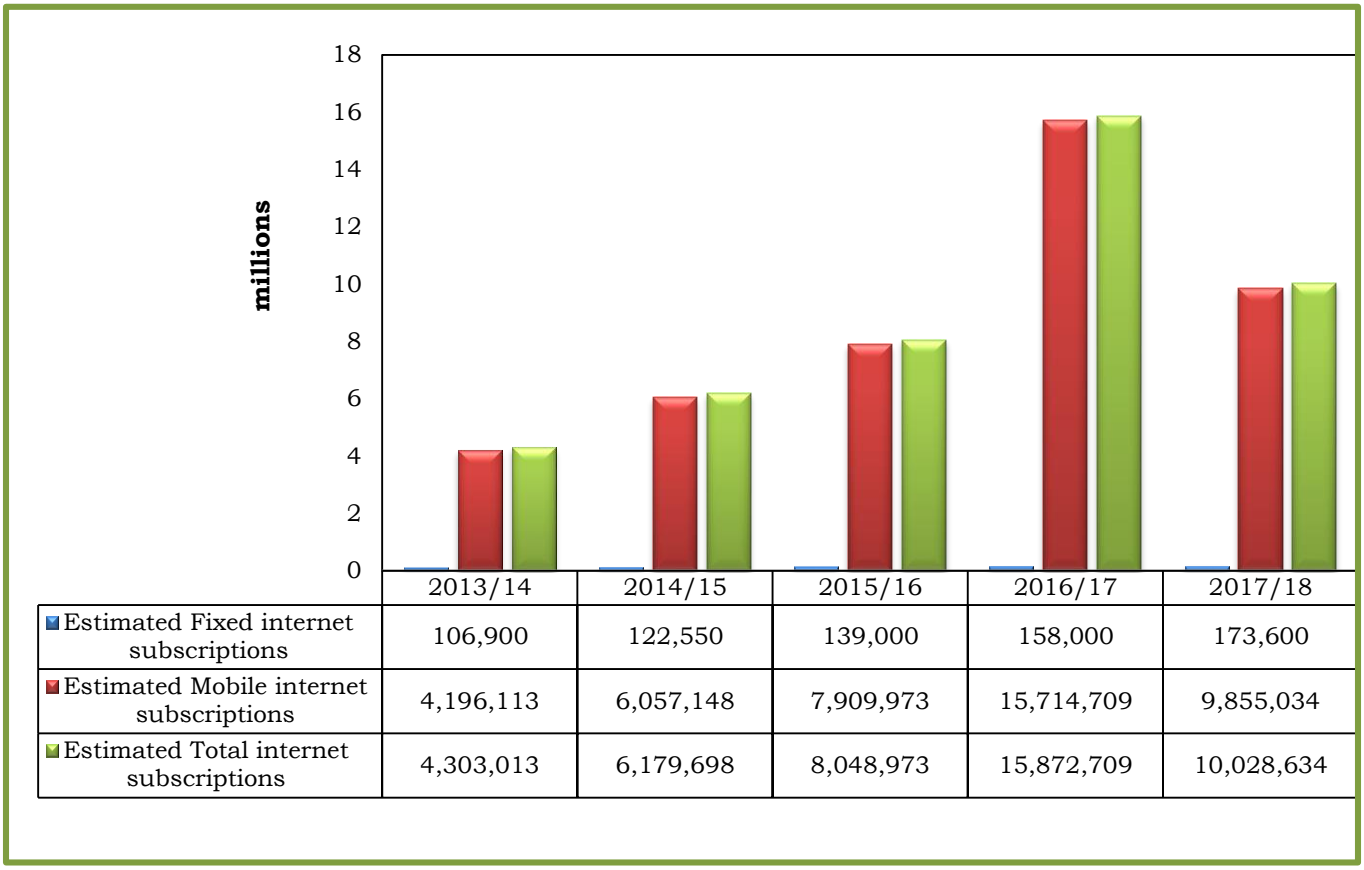
	2013/14	2014/15	2015/16	2016/17	2017/18
Total Bandwidth (mbps)	26,986.1	31,222.8	41,695.3	61,585.6	96,890.8
Bandwidth per 1,000,000 inhabitants	737.0	895.7	1,139.4	1,634.7	2,481.8

Source: Uganda Communications Commission

3.2 Internet subscriptions

As estimated, the number of mobile internet subscriptions in FY2017/18 declined by 37.3 percent from 15.7million in FY2016/17 to about 9.9million. There was also a 9.9 percent growth in fixed internet subscriptions from 158,000 to 173,000 subscriptions in the same period. The estimated total internet subscriptions declined by 36.8 percent from about 15.9million in FY2016/17 to about 10million in FY2017/18 (figure 3.2.1).

Figure 3.2.1: Estimated Internet subscriptions; FY 2013/14-2017/18



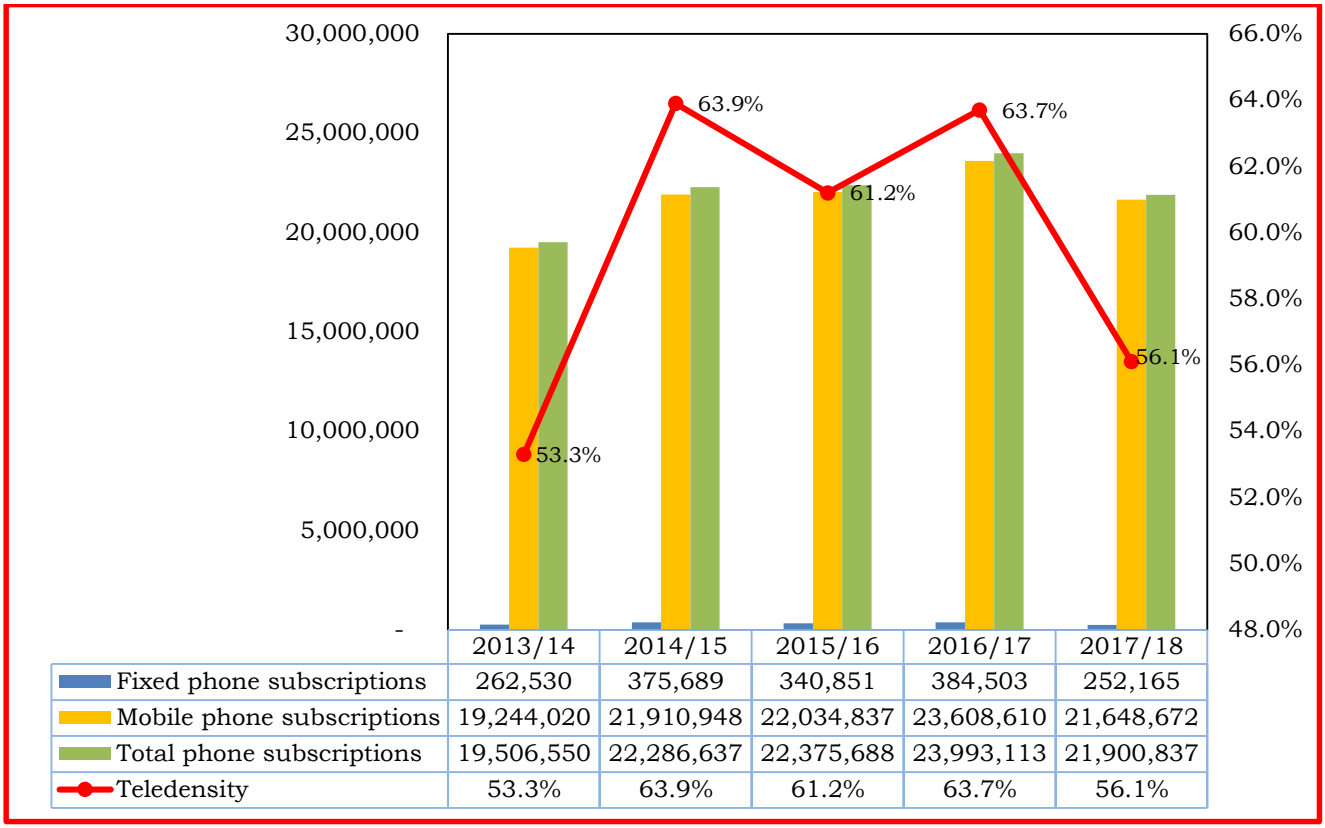
	2013/14	2014/15	2015/16	2016/17	2017/18
Estimated Fixed internet subscriptions	106,900	122,550	139,000	158,000	173,600
Estimated Mobile internet subscriptions	4,196,113	6,057,148	7,909,973	15,714,709	9,855,034
Estimated Total internet subscriptions	4,303,013	6,179,698	8,048,973	15,872,709	10,028,634

Source: Uganda Communications Commission

3.3 Phone subscriptions

In FY2017/18, a decline of 8.3 percent in mobile phone subscriptions was recorded from 23.6million subscriptions in FY2016/17 to a total of 21.8million. A total of 252,165 active fixed phone subscriptions was recorded in the FY2017/18 compared to 384,503 subscriptions in FY2016/17. In addition, the total telephone phone subscriptions resulted into a decline of 11.9 percent in tele-density, from 63.7 percent in FY2016/17 to 56.1 percent in FY2017/18 (figure 3.3.1).

Figure 3.3.1: Fixed, Mobile phone and Total phone Subscriptions and Teledensity; FY2013/14-2017/18



	2013/14	2014/15	2015/16	2016/17	2017/18
Fixed phone subscriptions	262,530	375,689	340,851	384,503	252,165
Mobile phone subscriptions	19,244,020	21,910,948	22,034,837	23,608,610	21,648,672
Total phone subscriptions	19,506,550	22,286,637	22,375,688	23,993,113	21,900,837
Teledensity	53.3%	63.9%	61.2%	63.7%	56.1%

Source: Uganda Communications Commission

4. ICT SECTOR PERFORMANCE IN THE ECONOMY

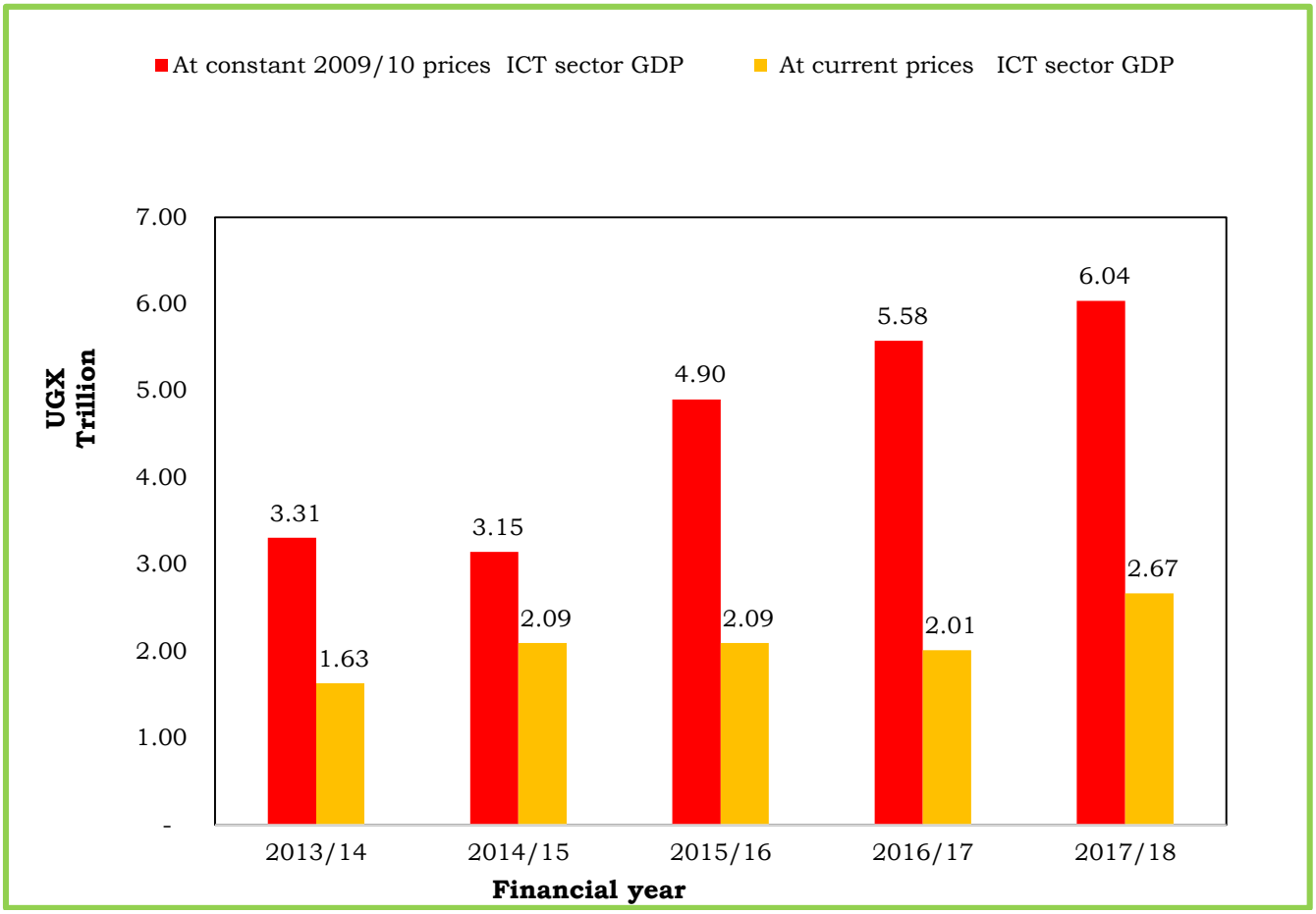
4.1 Gross Domestic Product (GDP)

This sub section covers statistics on ICT sector GDP, contribution of ICT sector to the national GDP, real GDP growth rate,

4.1.1 Value of ICT sector activities

In FY2017/18, the ICT sector real GDP (at constant prices) was UGX 6.04trillion compared to UGX 5.58trillion in FY2016/17. Similarly, ICT sector nominal GDP (at Current prices) increased from UGX 2.01trillion in FY2016/17 to UGX 2.67trillion in FY2017/18 (figure 4.1.1).

Figure 4.1.1: ICT sector GDP for FY2013/14-2017/18 (UGX Trillions);

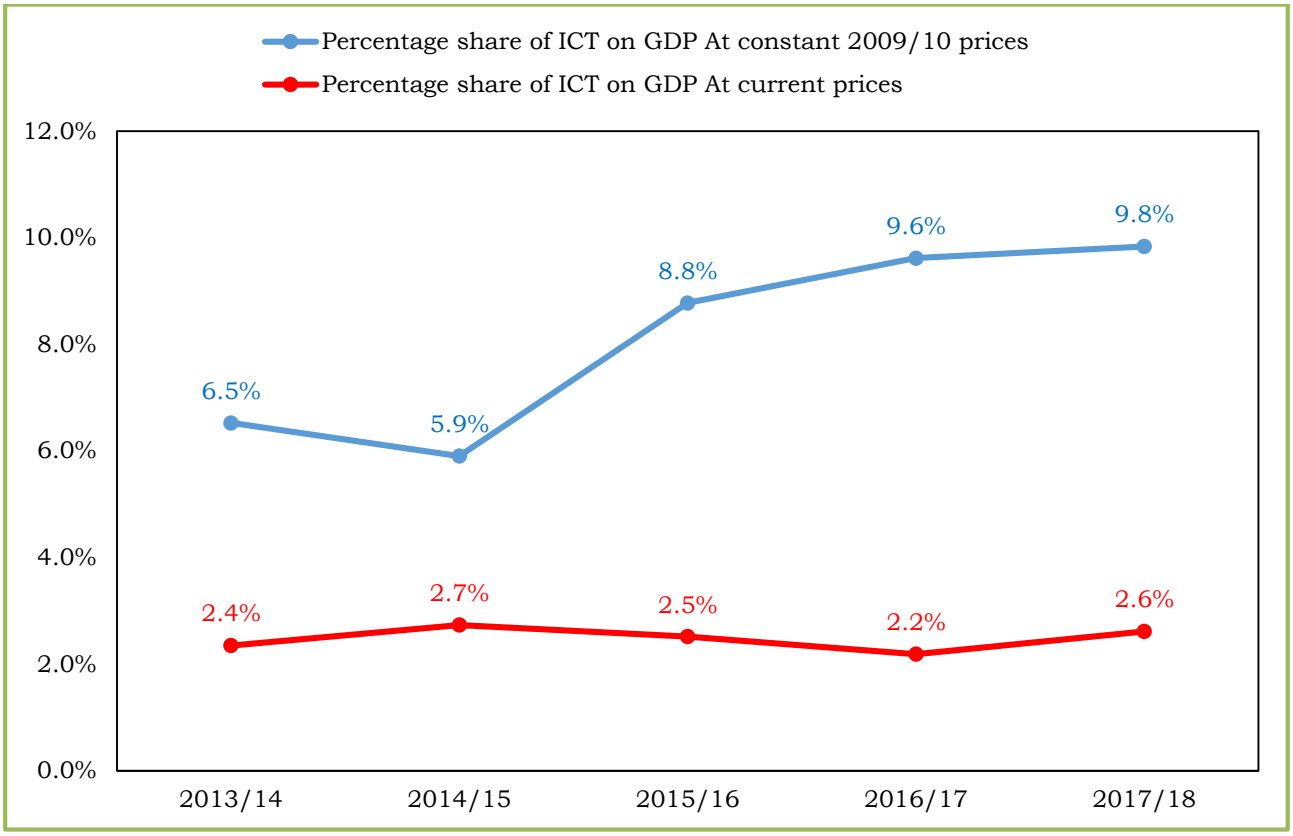


Source: Uganda Bureau of Statistics

4.1.2 Contribution of ICT sector to the national GDP

The contribution of ICT sector activities to the real national GDP accounted for 9.8 percent in FY2017/18 compared to 9.6 percent in FY2016/17. In addition, the ICT sector activities contribution to nominal GDP improved from 2.2 percent in FY2016/17 to 2.6 percent in FY2017/18 (figure 4.1.2).

Figure 4.1.2: Percentage share of ICT on total GDP for FY2013/14-2017/18

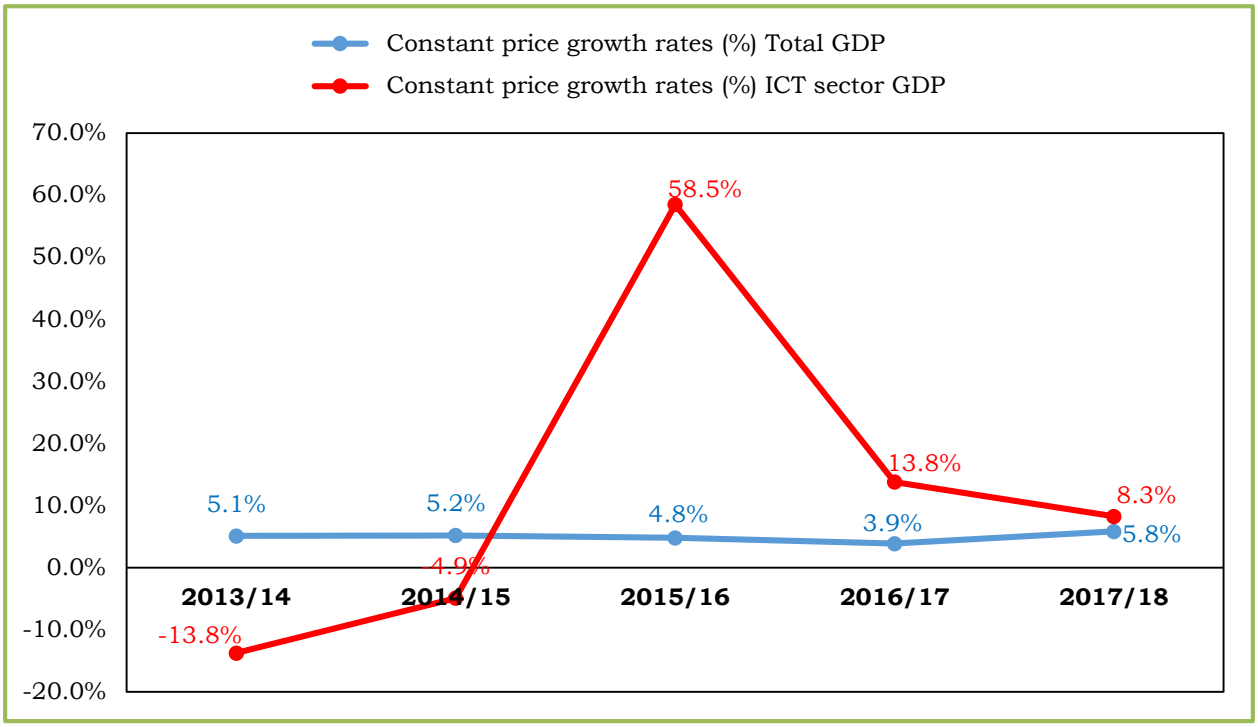


Source: Uganda Bureau of Statistics

4.1.3 Real GDP growth rate

Furthermore, ICT real GDP growth rate declined from 13.8 percent in the FY2016/17 to 8.3 percent in FY 2017/18 as that of national GDP grew from 3.9 percent to 5.8 percent respectively (figure 4.1.3).

Figure 3.1.3: Constant 2009/10 prices Growth rates for FY 2013/14 to FY 2017/18



Source: Uganda Bureau of Statistics

4.1.4 ICT GDP components

The ICT sector GDP is comprised of the following;

Category	Subcategory	Activity
Industry	Manufacturing	Computer, Electronic and Optical Products
Service	Transportation and Storage	Postal and Courier services
	Information and Communication	Audio-Visual Production and Distribution services
		Broadcasting and Programming services
		Telecommunications services
		Computer Programming, Consultancy and Related services
		Information Services
	Other Service Activities	Repair of Computers and Personal and Household Goods service

Overall, the ICT services element contributed most to the ICT sector GDP compared to manufacturing with information and communications having the greatest contribution among the services (tables 4.1.1 and 4.1.2) and with telecommunications service activities having the highest contribution (tables 4.1.3 and 4.1.4).

Table 4.1.1: Share of sub sectors on ICT GDP at Constant 2009/10 Prices for FY2013/14-2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Industry share	**0.02%**	**0.02%**	**0.02%**	**0.02%**	**0.02%**
Manufacturing of computers (UGX billions)	0.518	0.534	0.796	0.861	0.941
Service share	**99.98%**	**99.98%**	**99.98%**	**99.98%**	**99.98%**
Information and Communication services (UGX billions)	3,242	3,083	4,818	5,493	5,929
Other Service Activities (UGX billions)	53.486	53.868	72.911	77.507	99.687
Postal and Courier services (UGX billions)	11.136	9.055	9.869	5.898	8.562
ICT GDP (UGX billions)	**3,306.65**	**3,146.80**	**4,901.74**	**5,577.45**	**6,037.76**

Source: Uganda Bureau of Statistics

Table 4.1.2: Share of sectors on ICT GDP at current prices for FY2013/14-2017/18

Component	2013/14	2014/15	2015/16	2016/17	2017/18
Industry share	**0.05%**	**0.04%**	**0.06%**	**0.07%**	**0.06%**
Manufacturing of computers (UGX billions)	0.778	0.810	1.326	1.481	1.689
Service share	**99.95%**	**99.96%**	**99.94%**	**99.93%**	**99.94%**
Information and Communication services (UGX billions)	1,540	1,933	1,971	1,870	2,436
Other Service Activities (UGX billions)	70.778	73.268	107.913	130.792	216.162
Postal and Courier services (UGX billions)	19.500	14.506	14.525	8.398	12.397
ICT GDP (UGX billions)	**1,630.72**	**2,021.09**	**2,094.46**	**2,010.92**	**2,666.38**

Source: Uganda Bureau of Statistics

Table 4.1.3: Percentage share of activities on ICT GDP at constant 2009/10 prices for FY2013/14-2017/18

Activity	2013/14	2014/15	2015/16	2016/17	2017/18
Telecommunications services	*93.2%*	*92.9%*	*93.2%*	*94.5%*	*94.0%*
Broadcasting and Programming services	*3.4%*	*3.3%*	*2.8%*	*2.3%*	*2.7%*
Repair of Computers and Personal and Household Goods service	*1.6%*	*1.7%*	*1.5%*	*1.4%*	*1.7%*
Audio-Visual Production and Distribution services	*0.5%*	*0.7%*	*0.9%*	*0.7%*	*0.8%*
Information Services	*0.4%*	*0.4%*	*0.8%*	*0.7%*	*0.4%*
Computer Programming, Consultancy and Related services	*0.5%*	*0.7%*	*0.6%*	*0.3%*	*0.3%*
Postal and Courier services	*0.3%*	*0.3%*	*0.2%*	*0.1%*	*0.1%*
Computer, Electronic and Optical Products	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Source: Uganda Bureau of Statistics

Table 4.1.4: Percentage share of activities on ICT GDP at current prices for FY2013/14-2017/18

Activity	2013/14	2014/15	2015/16	2016/17	2017/18
Telecommunications services	*80.4%*	*84.0%*	*75.6%*	*74.9%*	*75.7%*
Broadcasting and Programming services	*10.0%*	*7.5%*	*10.3%*	*10.6%*	*10.1%*
Repair of Computers and Personal and Household Goods service	*4.3%*	*3.6%*	*5.2%*	*6.5%*	*8.1%*
Audio-Visual Production and Distribution services	*1.4%*	*1.5%*	*3.2%*	*3.0%*	*2.8%*
Information Services	*1.1%*	*0.9%*	*3.0%*	*3.0%*	*1.7%*
Computer Programming, Consultancy and Related services	*1.5%*	*1.7%*	*2.0%*	*1.5%*	*1.0%*
Postal and Courier services	*1.2%*	*0.7%*	*0.7%*	*0.4%*	*0.5%*
Computer, Electronic and Optical Products	*0.0%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*

Source: Uganda Bureau of Statistics

4.2 Trade in ICT goods

This section presents a summary of External Trade Statistics in formal ICT goods in Uganda shillings as shared by the Uganda Bureau of Statistics (UBOS). The compilation of External Trade Statistics is based on the General Trade System and coded according to HS2012 and the Standard International Trade Classification Revision Four (SITC Rev4) nomenclature.

4.2.1 Formal ICT export goods

During the FY2017/18, the total estimated formal ICT goods export earnings reduced to UGX 40.1billion from UGX 82.3billion in FY2016/17 translating into a decline of 51 percent. In addition, the contribution of the formal ICT goods export to the overall formal export earnings decreased from 0.8 percent in FY2016/17 to 0.4 percent in FY2017/18 (table 4.2.1).

Table 4.2.1: Summary of formal ICT export goods; FY 2013/14 – 2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Total value of ICT export goods (UGX Billions);	71.259	89.28	38.20	82.25	40.06
Percentage change in total value of ICT export goods	**-79%**	**25%**	**-57%**	**115%**	**-51%**
Total value of export goods (UGX Billions);	5,857.23	6,310.33	7,848.12	9,834.52	10,672.73
Percentage share of ICT export goods to Total value of export goods	**1.2%**	**1.4%**	**0.5%**	**0.8%**	**0.4%**

Source: Uganda Bureau of Statistics

4.2.2 Formal ICT import goods

The total estimated formal ICT goods imports bill in FY2017/18 increased from UGX 603.4billion in FY2016/17 to UGX 804.2billion translating into a 3.6 percent share to total formal goods import bill (table 4.2.2).

Table 4.2.2: Summary of formal ICT import goods; FY 2013/14–2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Total value of ICT import goods (UGX Billions);	719.73	677.25	713.42	603.65	804.21
Total value of import goods (UGX Billions);	15,234.86	16,652.14	20,132.79	19,012.25	22,226.20
Percentage share of ICT import goods to Total value of import goods	**4.7%**	**4.1%**	**3.5%**	**3.2%**	**3.6%**

Source: Uganda Bureau of Statistics

4.3 ICT Sector Revenue Collections

This section includes information on the Gross Revenues (Includes all non-tax revenue) from the ICT sector.

4.3.1 ICT sector Gross Revenue Collections to Total Gross Revenue Collections

ICT sector Gross Revenue collections reduced by 3 percent from UGX 974.3billion in the previous FY2016/17 to UGX 946.4billion in FY2017/18. This resulted into a 6.5 percent contribution to the Total Gross Revenue collection in FY2017/18 compared to a 7.6 percent contribution in FY2016/17(table 4.3.1).

Table 4.3.1: ICT sector Gross Revenue Collections to Total Gross Revenue Collections [UGX Trillion]; FY 2013/14 – 2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Total ICT revenue (UGX Billions)	752.4	918.3	974.7	974.3	946.4
Total revenue (UGX trillions)	8.4	10.1	11.5	12.9	14.7
Percentage share of ICT revenue to total revenue	**9.0%**	**9.1%**	**8.5%**	**7.6%**	**6.5%**

Source: Uganda Revenue Authority

4.3.2 ICT Sector Gross Revenue components

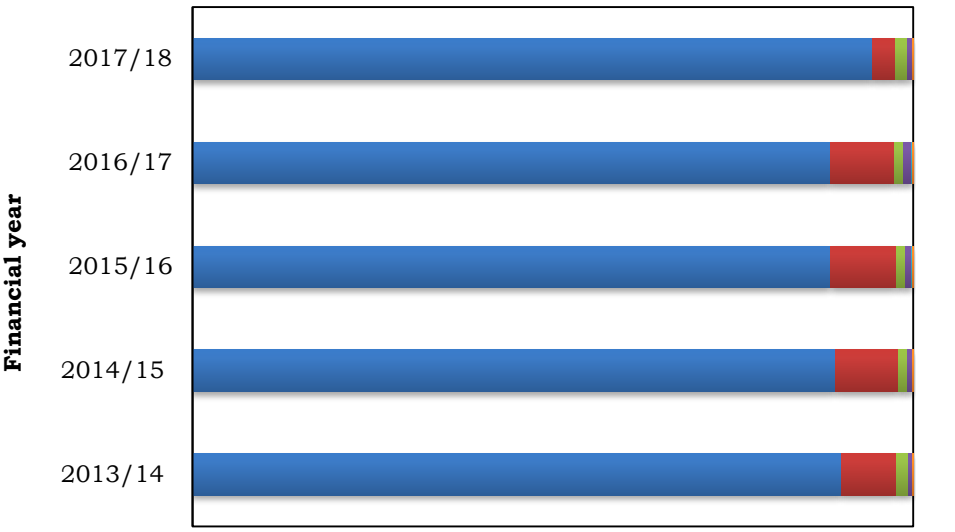
The ICT sector Gross Revenue is comprised of the following as per ISIC Rev4;

Sector Description	Division Description	Group Description	Class Description
C-Manufacturing	26-Manufacture of computer, electronic and optical products	261-Manufacture of electronic components and boards	2610-Manufacture of electronic components and boards
		262-Manufacture of computers and peripheral equipment	2620-Manufacture of computers and peripheral equipment
		263-Manufacture of communication equipment	2630-Manufacture of communication equipment
		268-Manufacture of magnetic and optical media	2680-Manufacture of magnetic and optical media
G-Wholesale and retail trade; repair of motor vehicles and motorcycles	46-Wholesale trade, except of motor vehicles and motorcycles	465-Wholesale of machinery, equipment and supplies	4651-Wholesale of computers, computer peripheral equipment and software
			4652-Wholesale of electronic and telecommunications equipment and parts
		531-Postal activities	5310-Postal activities

Sector Description	Division Description	Group Description	Class Description
H-Transportation and storage	53-Postal and courier activities	532-Courier activities	5320-Courier activities
J-Information and communication	58-Publishing activities	582-Software publishing	5820-Software publishing
	61-Telecommunications	611-Wired telecommunications activities	6110-Wired telecommunications activities
		612-Wireless telecommunications activities	6120-Wireless telecommunications activities
		613-Satellite telecommunications activities	6130-Satellite telecommunications activities
		619-Other telecommunications activities	6190-Other telecommunications activities
	62-Computer programming, consultancy and related activities	620-Computer programming, consultancy and related activities	6201-Computer programming activities
			6202-Computer consultancy and computer facilities management activities
			6209-Other information technology and computer service activities
	63-Information service activities	631-Data processing, hosting and related activities; web portals	6311-Data processing, hosting and related activities
			6312-Web portals
K-Financial and insurance activities	66-Activities auxiliary to financial service and insurance activities	662-Activities auxiliary to insurance and pension funding	6620-Activities of Mobile Money
S-Other service activities	95-Repair of computers and personal and household goods	951-Repair of computers and communication equipment	9511-Repair of computers and peripheral equipment
			9512-Repair of communication equipment
		952-Repair of personal and household goods	9521-Repair of consumer electronics

The information and communication services component contributed 94.4 percent to the ICT sector gross revenue (figure 4.3.1) and telecommunications division contributed 92.3 percent in FY2017/18 (table 4.3.1).

Figure 4.3.1: Percentage share of components to ICT sector Gross Revenue Collections; FY 2013/14 – 2017/18



	2013/14	2014/15	2015/16	2016/17	2017/18
Information and communication	90.1%	89.3%	88.6%	88.5%	94.4%
ICT Wholesaling	7.6%	8.6%	9.1%	8.9%	3.2%
Postal and courier activities	1.7%	1.3%	1.2%	1.2%	1.6%
Repair of computers and personal and household goods	0.6%	0.7%	0.9%	1.1%	0.7%
Activities of Mobile Money	0.0%	0.0%	0.1%	0.2%	0.1%
ICT Manufacturing	0.1%	0.1%	0.1%	0.1%	0.0%

Source: Uganda Revenue Authority

Table 4.3.2: Percentage share of ISIC divisions to ICT sector Gross Revenue Collections; FY 2013/14 – 2017/18

ISIC Division	2013/14	2014/15	2015/16	2016/17	2017/18
Telecommunications	*88.6%*	*87.5%*	*86.5%*	*86.2%*	*92.3%*
Wholesale trade	*7.6%*	*8.6%*	*9.1%*	*8.9%*	*3.2%*
Computer programming, consultancy and related activities	*1.3%*	*1.6%*	*1.8%*	*2.1%*	*1.9%*
Postal and courier activities	*1.7%*	*1.3%*	*1.2%*	*1.2%*	*1.6%*
Repair of computers and personal and household goods	*0.6%*	*0.7%*	*0.9%*	*1.1%*	*0.7%*
Information service activities	*0.2%*	*0.2%*	*0.3%*	*0.3%*	*0.2%*
Activities auxiliary to financial service and insurance activities (mobile money)	*0.0%*	*0.0%*	*0.1%*	*0.2%*	*0.1%*
Manufacture of computer, electronic and optical products	*0.1%*	*0.1%*	*0.1%*	*0.1%*	*0.0%*
Publishing activities	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

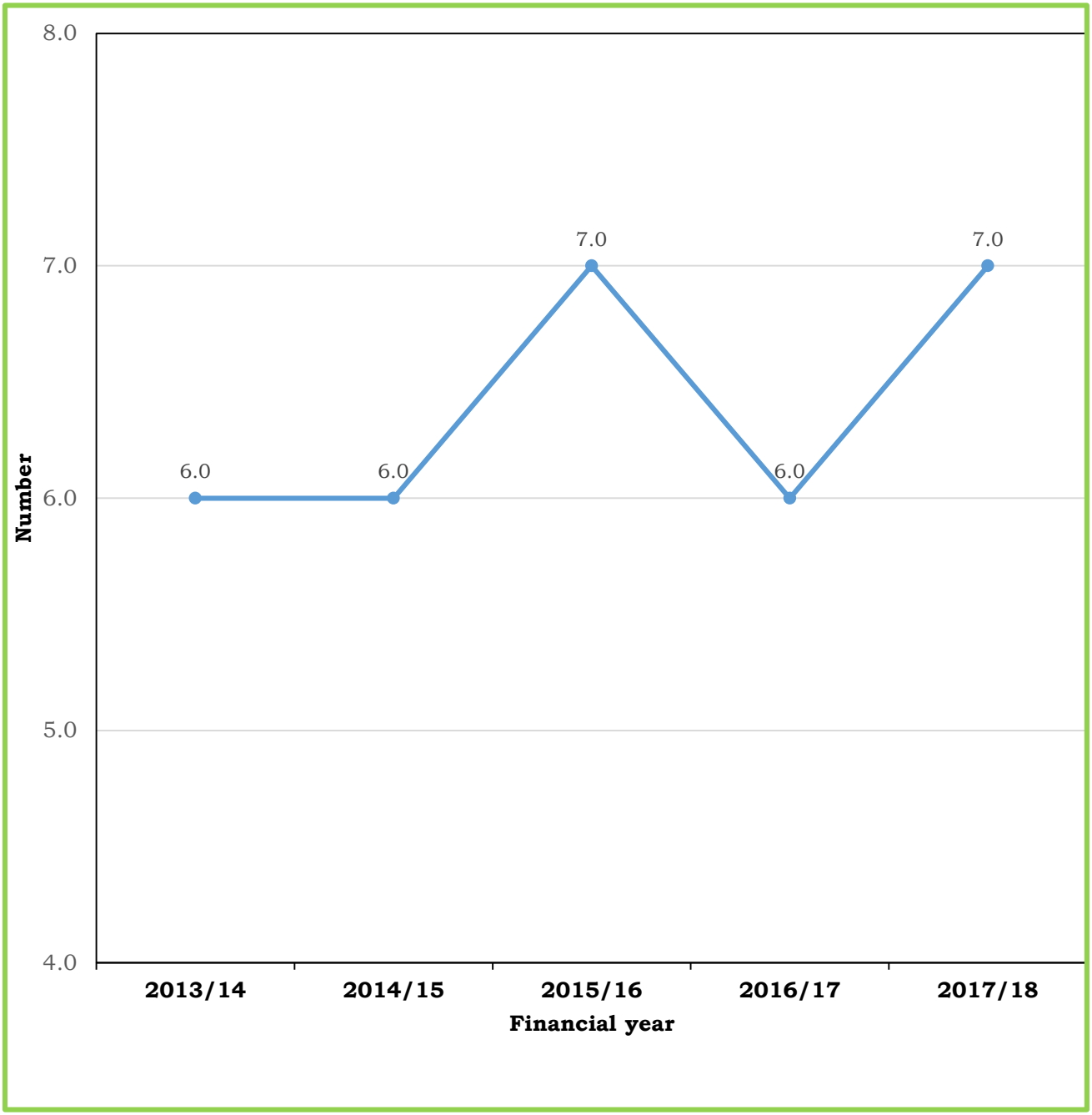
Source: Uganda Revenue Authority

4.4 ICT planned investment

This section contains information on the planned investment projects in ICT in Uganda. It contains statistics on licensed companies, planned capital investment and jobs.

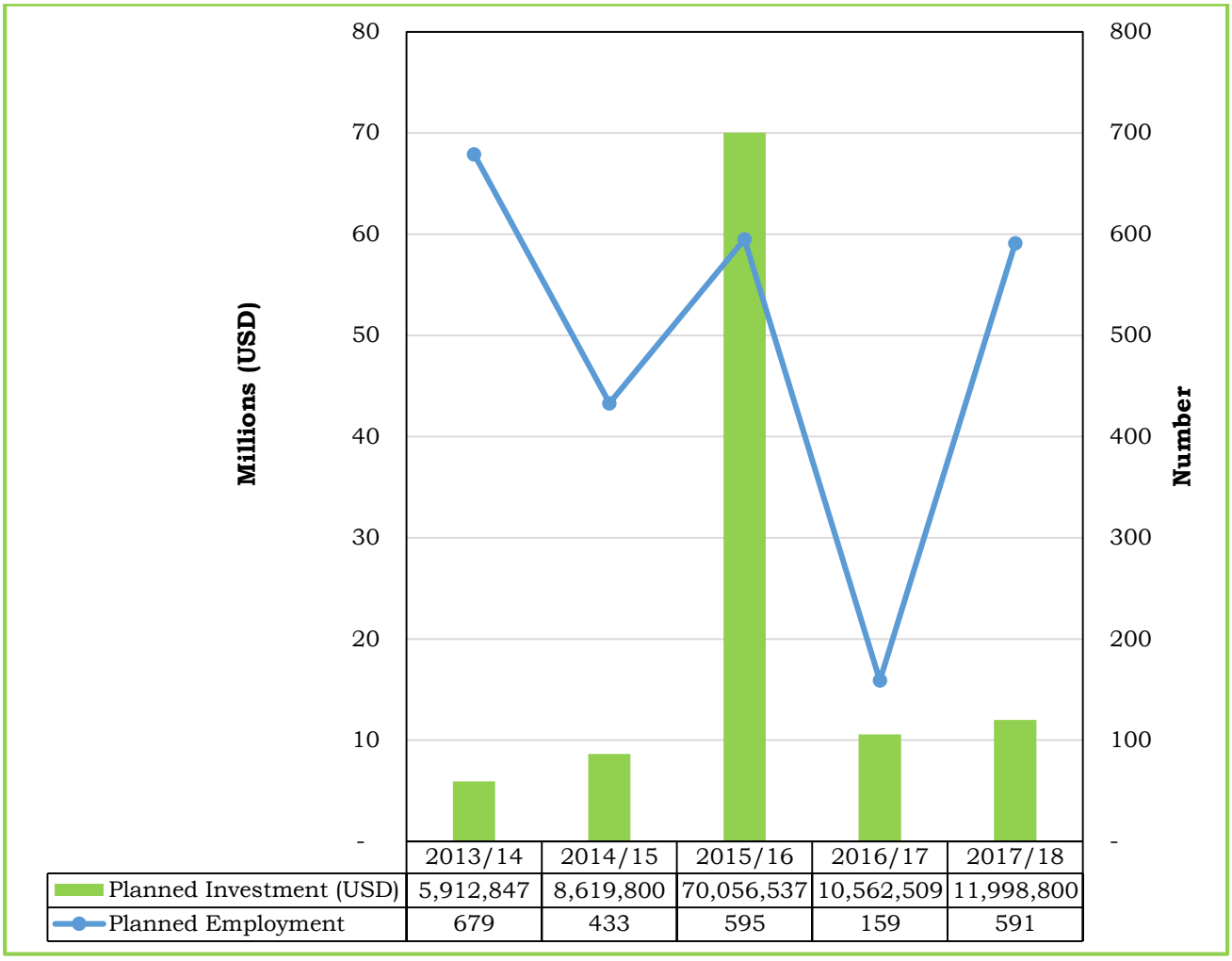
Over the past five years, the average number of licensed companies to carry out investments in ICT related projects/services is six (figure 4.4.1). Similarly, the total number of planned jobs to serve in ICT investments improved from 159 in FY2016/17 to 591 in FY2017/18 (figure 4.4.2). Furthermore, there was an increase of 14 percent in the ICT planned capital investment from USD10.6million in FY2016/17 to about USD12million in FY2017/18 compared to a decline of 85 percent in the planned capital investment from USD70.1million in FY2015/16 to USD10.6 million in FY 2016/17 (figure 4.4.2).

Figure 4.4.1: Number of licensed companies to carry out ICT projects/ services; FY 2013/14 – 2017/18



Source: Uganda Investment Authority

Figure 4.4.2: ICT planned capital investment (USD) and planned employment; FY 2013/14 – 2017/18



	2013/14	2014/15	2015/16	2016/17	2017/18
Planned Investment (USD)	5,912,847	8,619,800	70,056,537	10,562,509	11,998,800
Planned Employment	679	433	595	159	591

Source: Uganda Investment Authority

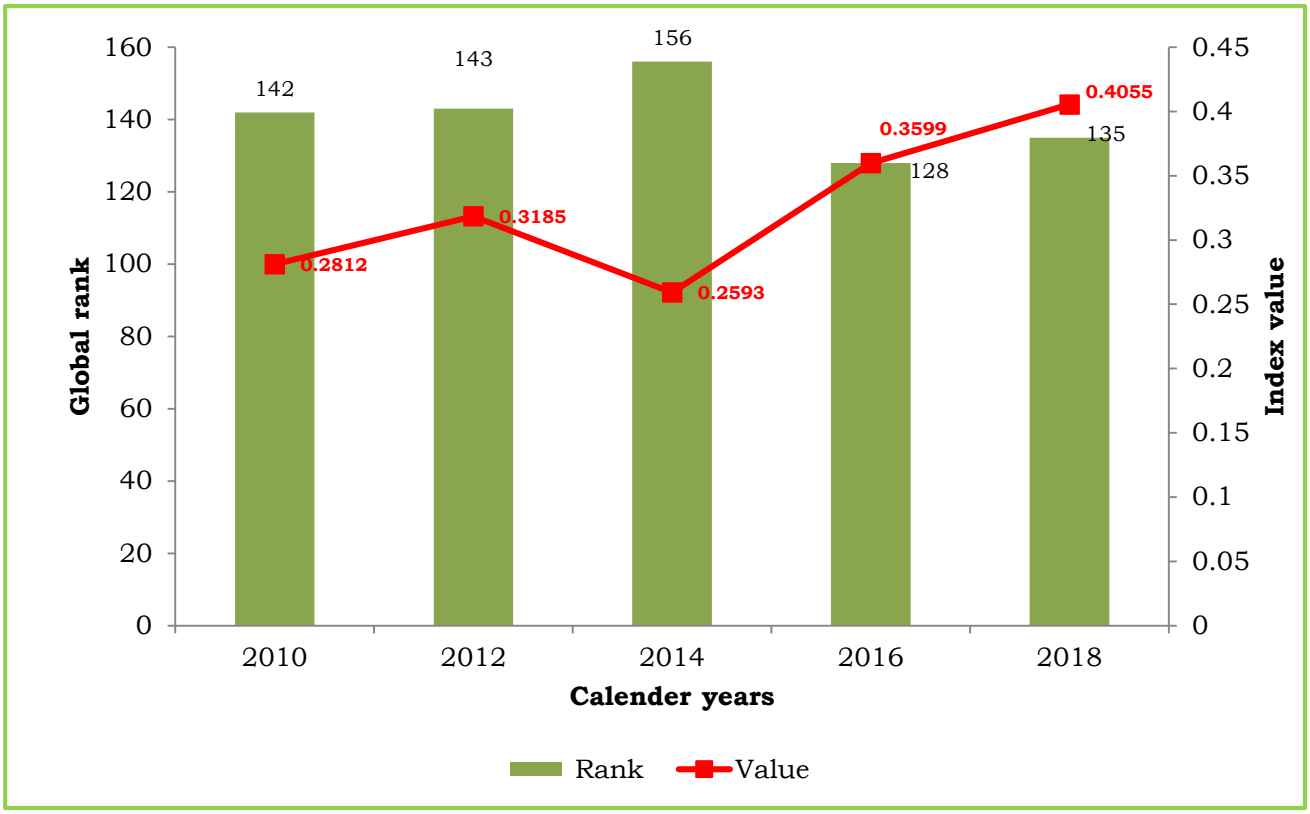
5. UGANDA'S ICT RANKINGS ON THE GLOBAL SCALE

5.1 E-Government Development Index (EGDI)

The UN e-Government Survey Report reflects that in 2018, the e-government status for Uganda was estimated at 36 percent which is above the African average of 34 percent. Out of 193 UN member states, Uganda ranked the 135th in 2018 compared to a rank of 128th in 2016 (figure 5.1.1).

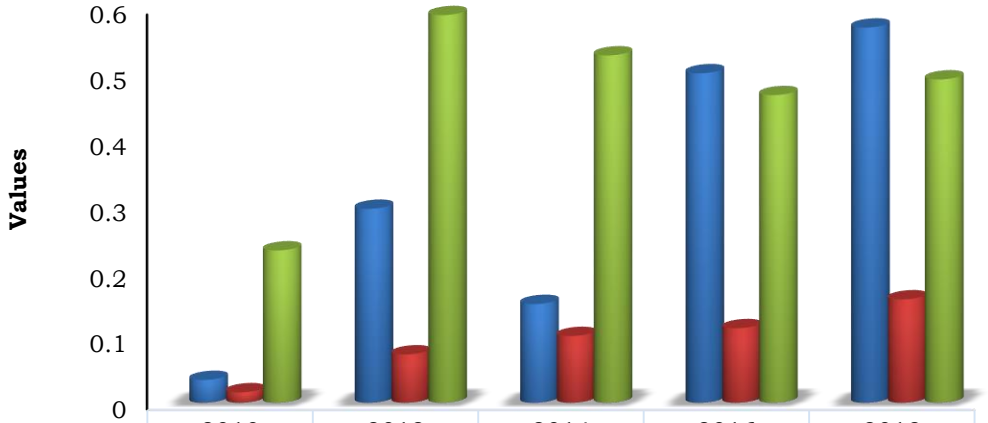
Uganda's online service index improved from 50 percent in 2016 to 57 percent in 2018 putting the country in the high online service index bracket. In addition, Telecommunication Infrastructure status is estimated at 15.7 percent in 2018 from 11.2 percent in 2016 and Human Capital component improved from 46.7 percent in 2016 to 49.1 percent in 2018 (figure 5.1.2).

Figure 5.1.1: Uganda's e-government ranking; 2010-2018



Source: UN E-Government Survey Reports

Figure 5.1.2: Uganda's E-government ranking by components; 2010-2018



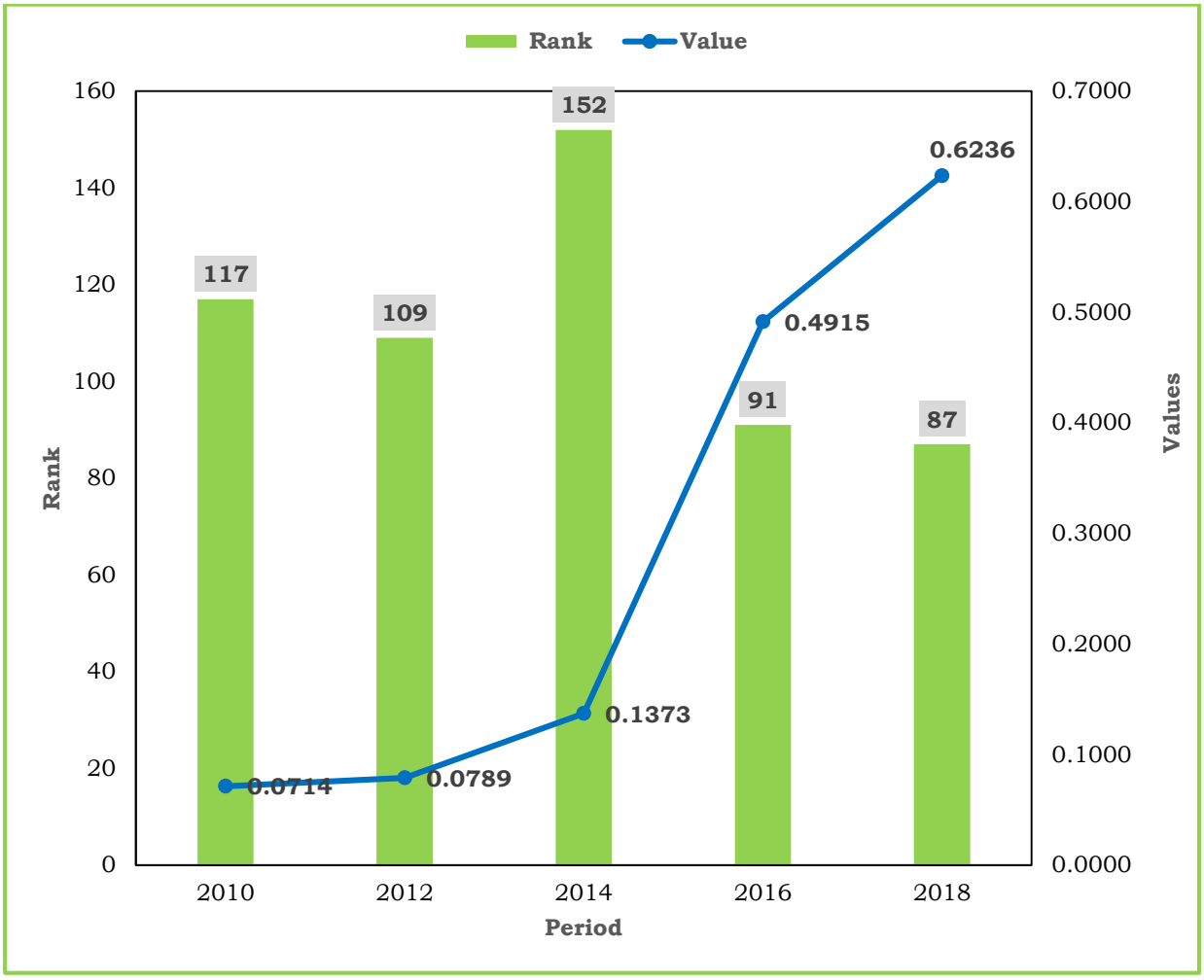
	2010	2012	2014	2016	2018
Online Service	0.0345	0.2941	0.1496	0.5	0.5694
Telecommunication Infrastructure	0.0158	0.0732	0.1011	0.1129	0.1566
Human Capital	0.2309	0.5883	0.5271	0.4668	0.4906

Source: UN E-government Reports

5.2 E-Participation Index

In 2018, Uganda ranked the 87th out of 193 countries in e-participation, up from position 91 in 2016. The e-Participation Index improved from 0.4915 in 2016 to 0.6236 out of 1.0000 in 2018 (figure 5.2.1).

Figure 5.2.1: Uganda's e-Participation Index; 2010-2018

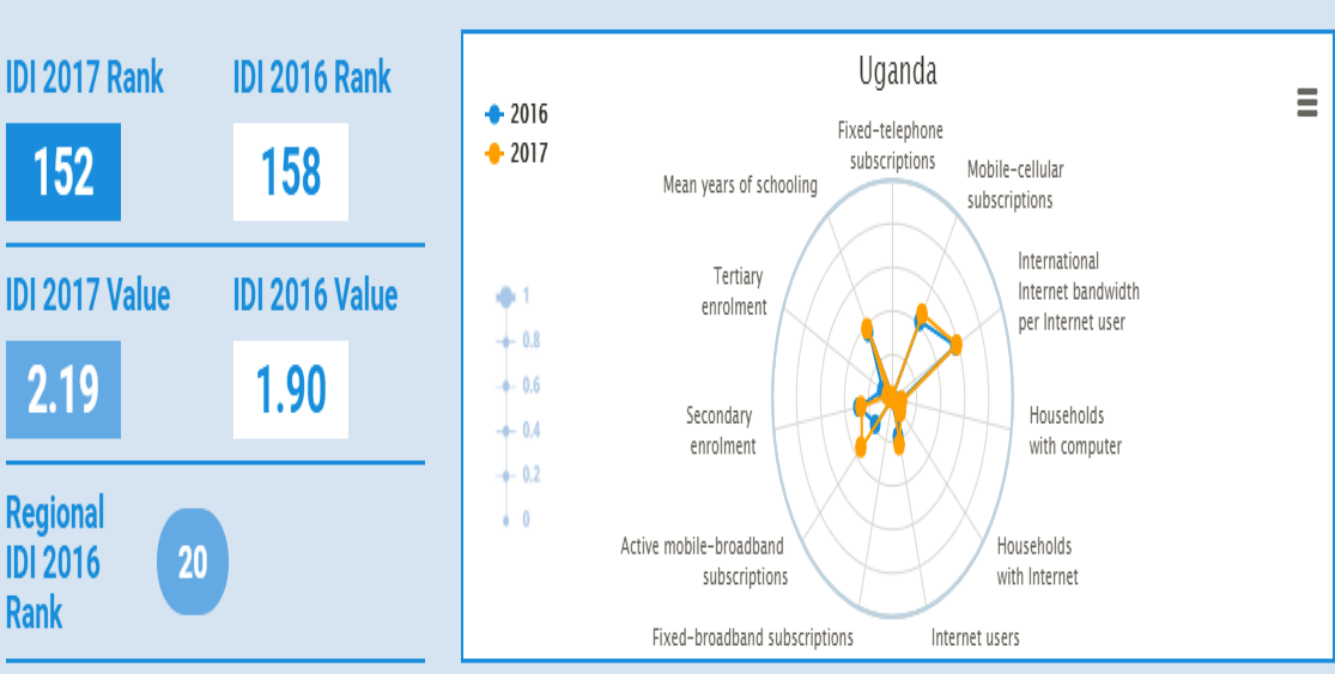


Source: UN E-government Reports

5.3 ICT Development Index (IDI)

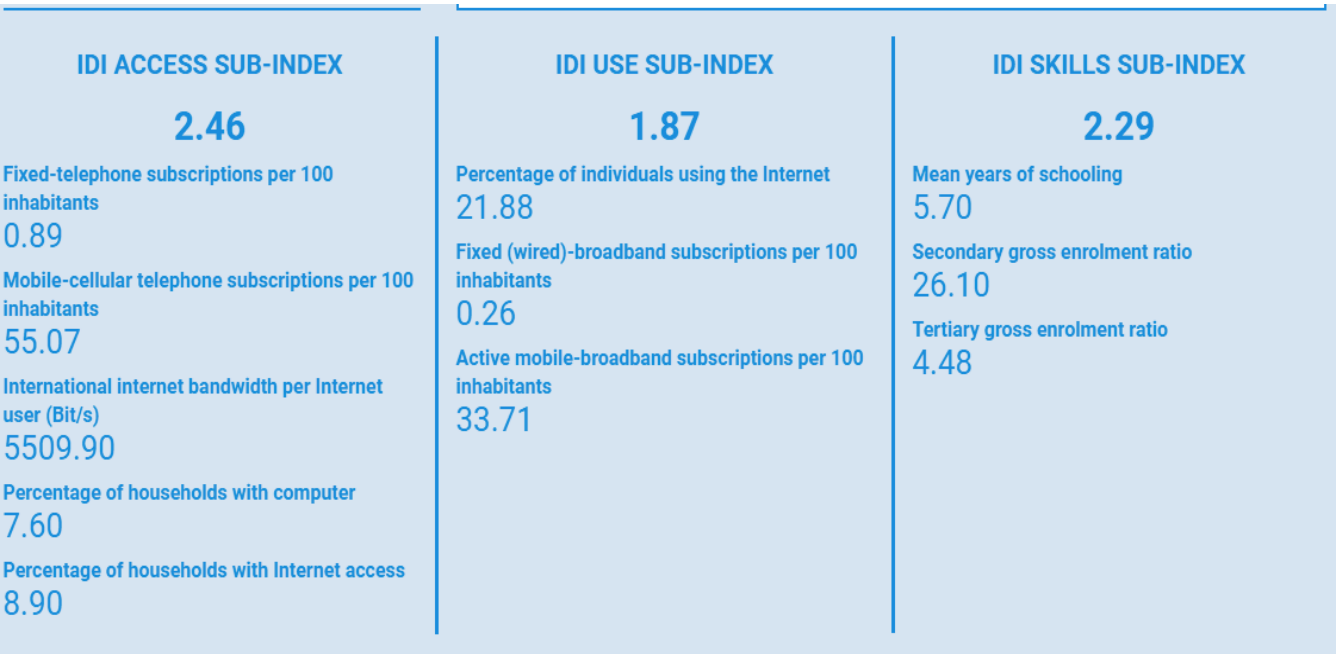
Uganda improved by six positions from rank 158 in 2016, to rank 152 out of 176 countries in 2017. The IDI value also improved from 1.9 in 2016 to 2.19 on a scale of 1 to 10 (Figure 5.3.1).

Figure 5.3.1: Uganda's ICT Development Index; 2016 and 2017



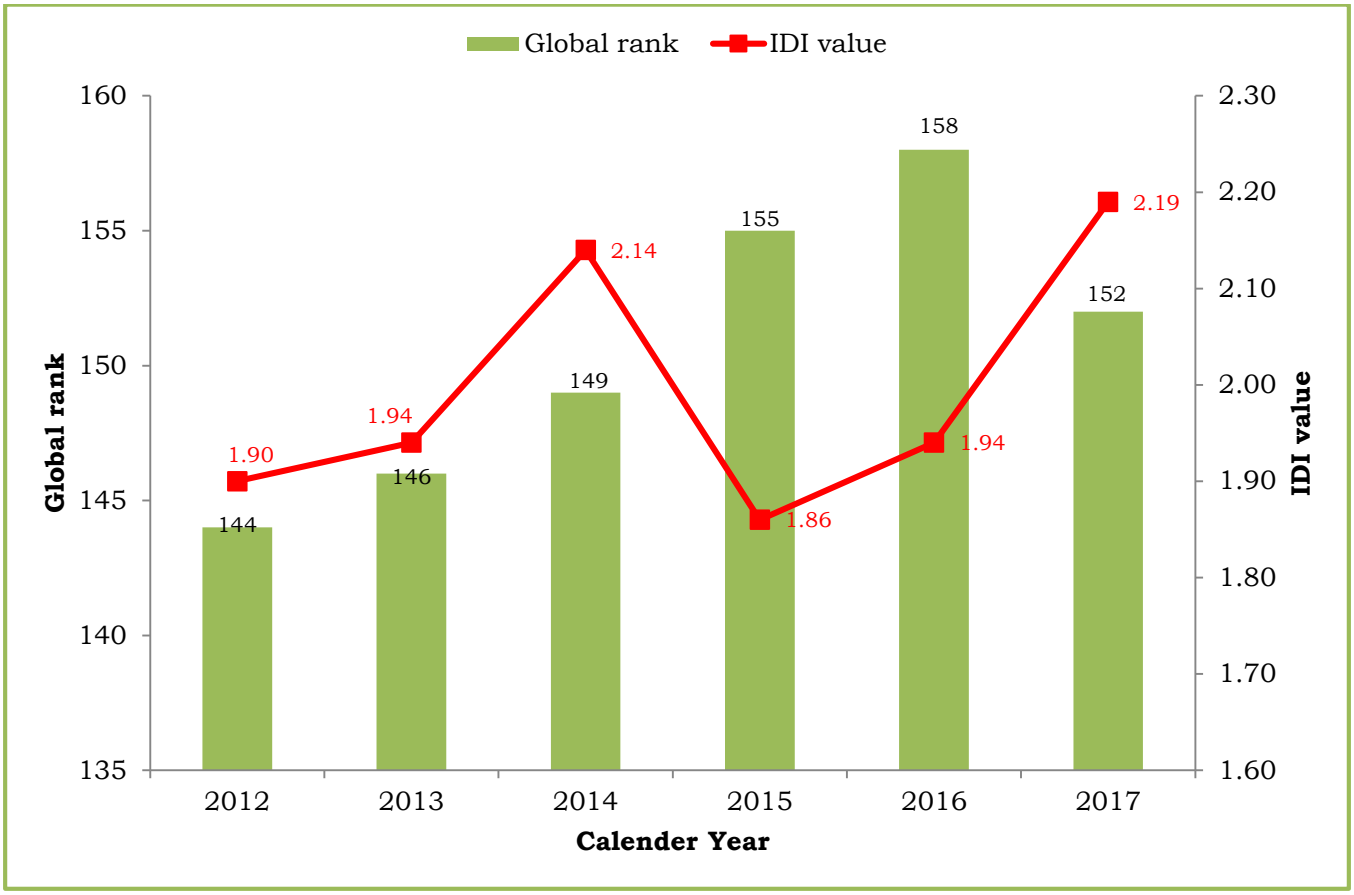
Source: ITU database

Figure 5.3.2: Uganda's ICT Development Sub-indices; 2017



Source: ITU database

Figure 5.3.3: Uganda's ICT Development Index; 2012-2017

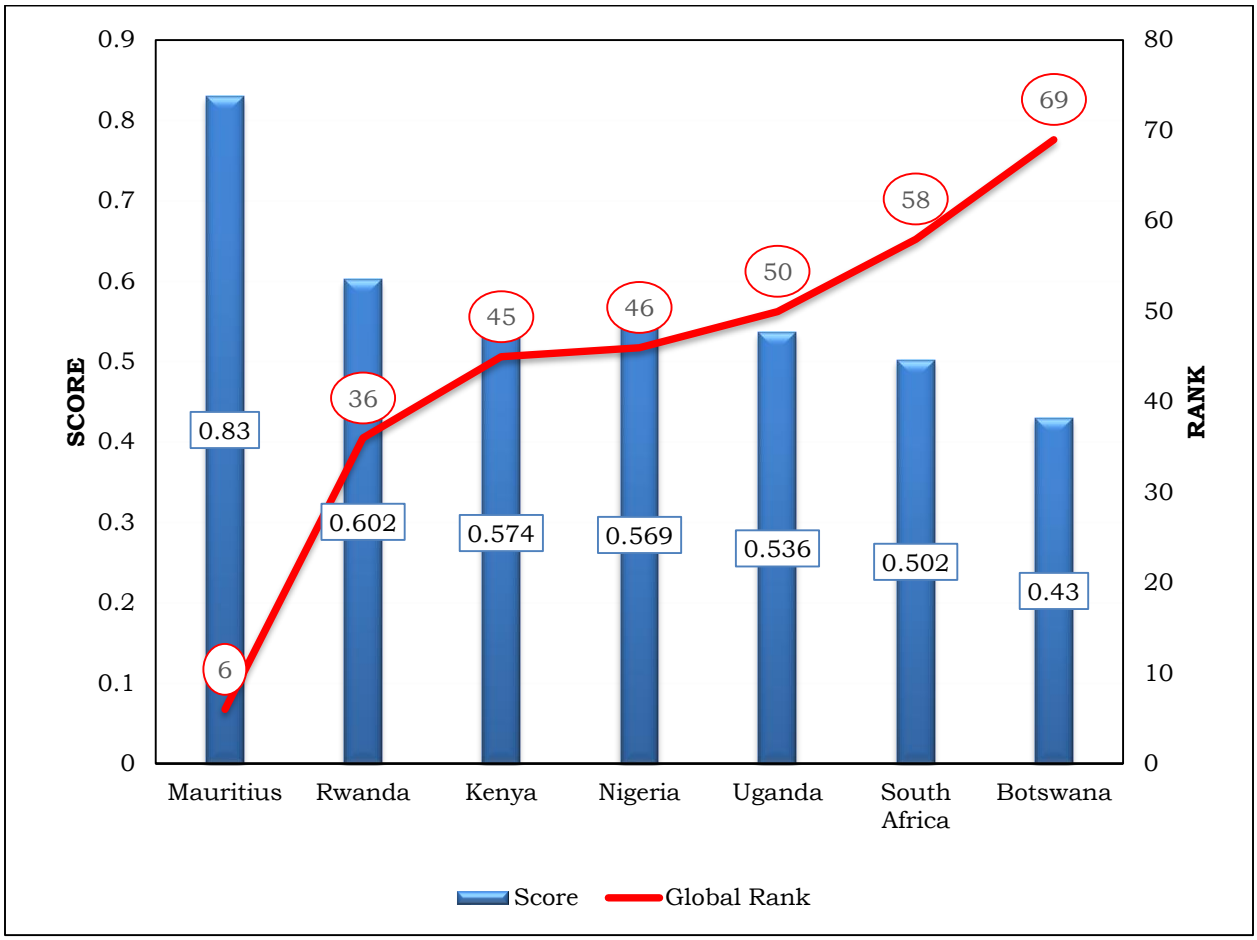


Source: Measuring Information Society reports by ITU

5.4 Global Cybersecurity Index (GCI)

Out of the 193 member states assessed globally in 2017, Uganda ranked the 50th with a score of 0.536 (Figure 5.4.1).

Figure 5.4.1: Uganda's Cybersecurity Index in the Africa Region; 2017



Source: Global Cybersecurity Index report by ITU