

REPUBLIQUE DU CAMEROUN
Paix - Travail - Patrie

MINISTRE DES POSTES ET
TELECOMMUNICATIONS



REPUBLIC OF CAMEROON
Peace - Work - Fatherland

MINISTRY OF POSTS AND
TELECOMMUNICATIONS

Posts, Telecommunications and ICT: **Precious assets of the seven-year mandate**



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I have instructed the Government to accelerate the creation of conditions necessary for our country's industrialization.

Such pre-requisites are:

- availability of adequate and permanent energy supply;
- modernization of our agriculture and processing of its production;
- exploitation and processing of mineral resources;
- constant improvement of the business climate to attract more investors;

- mobilization of the required financing; and
- development of communication and telecommunication infrastructure.

Concerning the last domain, we must rapidly bridge the digital economy development gap. This is a genuine growth driver as well as a niche for new jobs for our youth. We should make the most of it.

In its organization, the Government will give this sector all the attention it deserves.

H.E. Paul BIYA

President of the Republic of Cameroon
Head of State's New Year Message to the Nation
31 December 2015



Philemon YANG
Prime Minister, Head of Government



By **Mrs Minette Libom Li Likeng**
Minister of Posts and Telecommunications

What A Lofty Seven-Year Mandate!

"In this last sector, we must rapidly bridge the digital economy development gap. This is a genuine growth driver as well as a niche for new jobs for our youth. We should make the most of it. In its organization, the Government will give this sector all the attention it deserves".

Who does not recollect these words of the Head of State, H.E. Paul BIYA delivered during his Address to the Nation on the occasion of the 2015 end of year and 2016 New Year ? Each observer felt the urge for this call. Especially the Government that took note of its prescriptive content. In several occasion in the past, the President of the Republic addressed issues relating to Information and Communication Technologies (ICT), therefore showing to what extent, he is a man of his time, very keen to the challenges of this time, he granted a prominent place to what the Economist and Nobel Price, Jean Tirol called "digital revolution".

Without further ado, and under the coordination and supervision of the Prime Minister, the Government got to work.

In the month of March 2016, the First National Days of Digital Economy took place in Yaoundé.

The International Forum on Digital Economy in Cameroon, took place in the political capital, in May 2017 under the high patronage of the President of the Republic. It was followed by the Sub-regional Conference on digital economy, that brought together countries of Central Africa in May 2017 in Yaounde, under the auspices of the International Telecommunication Union.

These important events enable us to seek relevant means, examine credible opportunities and address the challenges in a bid to allow Cameroon properly position itself and make the most of the digital economy, a present day unappeasable phenomenon...

The establishment of the development plan for 2020, compass of the Government with regard to the development of digital economy, will make the most of it. It stands tall and represent the sign of a tangible political will of the highest authorities in this domain.

Besides, while waiting to proceed with its implementation, the Government has multiplied actions and has taken initiatives to materialise the presidential Vision. It is in this light that its contributed in establishing itself as a Regulator and Facilitator State. On the one hand, the negotiations conducted with telephone operators of the private sector, resulted in a better comprehension of the challenges and duties of each other, to ensure a quality of service anchored to international standards. On the other hand, the Permanent Public/Private Consultation Committee in the posts and telecommunications sector was created. The creation of this body responsible to organise discussions, exchanges was welcomed by the private sector.

Likewise, strategies supporting initiatives and projects stemming from the youth whose creativity and ingenuity are sources of pride for this country. This is the meaning, inter alia, of the "Digital Economy Globe trotter" project.

In this respect, the purpose of bridging the digital divide has not been abandoned. The organisation of ICT holiday camps and Digital Divisional Rewards of Excellence therefore appeared as a proactive response to this special challenge.

Elsewhere, and without much fanfare, despite the actual difficulties, the postal sector has recorded significant and reassuring developments that fall in line with this digital transformation that encompasses every domain...

This document published by the Ministry of Posts and Telecommunications in a context full of challenges, will there include several actions effected, initiatives transformed into projects, while giving them meaning, consistency and shape. It shall also help assess all what has been covered and take the necessary measures for what is left to be done. The classification of Cameroon on various points is the cause of pride. These points throw a special light on the "**Major Accomplishments**" seven year mandate that began in 2011.

I. Cameroon : the Digital Revolution on the Move

Presidential messages of the recent years and throughout the seven-year mandate that is closing up, reflect a consistency in the vision of the Head of State with respect to Digital Economy: it is the cornerstone of our economic revolution.

It is a clear indication that Cameroon has definitely embarked into the “new economy”, known as the digital economy. Nowadays, it is universally recognised as the “most dynamic sector of the global economy”, and is therefore “a growth, productivity and competitiveness driver for companies and countries”.

1. General Situation of Cameroon at the Digital Economic Level

A. Commitment of Public Authorities

The development of digital economy, which is an actual challenge for public authorities whose determination is clearly evident.

In 2011, the Head of State, in his role as forward looking leader, lay down the bedrock of the modernisation of the postal sector within the framework of its “Major Achievements” programme.

The President of the Republic, in his end of year address to the nation on 31 December 2015, strongly insist that “...we must rapidly bridge the digital economy development gap. *“This is a genuine growth driver as well as a niche for new jobs for our youth”.*”

He further declares that “...*The major challenge for the country in 2016 will be to create conditions conducive to real industrialization (...) Such pre-requisites are... development of communication and telecommunication infrastructure...*”

It is a truism that Cameroon is a wide building site in which the postal, telecommunication and ICT sector is one of the development pillars. And projects carried out to this effect, raised the telecommunication and ICT sector among the first two growth areas of national economy.

B. Implementation

Throughout the 2011-2018 seven-year mandate, the vision of the Head of State with regard to the development of the Digital Economy has been materialised. Within the framework of strategies established for this purpose, some projects were executed in three sectors that make up the core of the digital economy, that is, the Posts, Telecommunications and ICT.

This include:

- The construction of quality telecommunication and ICT infrastructure, deployed to support digital economy;
- The promotion of quality access to telecommunication/ICT networks and modern services, at affordable prices, to all social groups, notwithstanding their geographical location;
- Anchoring the postal sector to the prerequisites of digital economy and fostering a generalised access to postal products and services, nationwide.

Significant progress were recorded at the level of national coverage be it on the telephone networks, Internet access and modern postal services. Furthermore, the access cost to services has dropped significantly.

2. Results obtained: Statistics

A. Infrastructure

The Government is committed to develop appropriate telecommunication infrastructure in bid to promote the industrialisation of Cameroon. The ICT infrastructure have recorded a significant improvement.

To this end, the capacities of submarine cables have increased:

- from 0.155 Gbps in 2002 to 36.645 Gbps in 2016 for SAT3
- from 12.3 Gbps in 2015 to 57.7 Gbps in 2017 on the WACS
- In 2017, the capacities increased to 40 Gbps between Kribi and Lagos and 10 Gbps between Lagos and Portugal on the Main One cable and will reach approximately 2.8 Tbits, expandable to 32 Tbits as of September 2018 for the Cameroon-Brazil South Atlantic Inter Link (SAIL) cable.

Cameroon currently owns a total line of about 12,000 km of interurban optical fibre, (as against 2150 km before 2012) that is 209 out 360 subdivisions and 52 divisions out of 58 connected by optical fibre, with stretches to neighbouring countries, especially Chad, Gabon, Equatorial Guinea, RCA and Nigeria.

B. Internet penetration and mobile penetration

ICT Penetration

- Fixed telephone penetration: the fixed telephone line segment has witnessed a sharp improvement, increasing from 55,229 subscribers in 2010 to 71,463 in 2016
- Mobile telephone penetration: 18,819,852 subscribers in 2016, that is a penetration rate of 83% (against 44% in 2010)
- Internet penetration: Internet access has increased from 0.24% in 2011 to 35.43% in 2016
- ICT development Index (IDI), according to the ITU calculation method: between 2014 and 2017, the IDI index increased from 2.030 to 3.852.

Access to ITC in households

- Possession of a radio set: 47% of households (52% in urban areas, 43% in rural areas, 55% in Douala and 32% in the Adamawa)
- Possession of a TV set: 55% of households (87% in urban areas, 34% in rural areas, 94% in Douala and 12% in the Far-North)
- Possession of a phone set: 89% of households (at

least 7 households out of 10 whatever the region, 98% in urban areas, 84% in rural areas, 99% in Douala and 65% in the East)

- Possession of a computer: 14% of households (29% in urban areas, 5% in rural areas, 34% in Yaounde and 3% in the Far-North)
- Internet access: 16% of households (30% in urban areas, 7% in rural areas, 29% in Yaounde and 4% in the North-West).

ITCs access and use in companies

Telephone

- 6 companies out of 10 use a fixed telephone line in 2017. Large companies (LC) (89.1%) are topping the chart
- Likewise, the availability of companies owning a telephone fleet (28% for all companies and 85.5% for LC) and the possession of a branch exchanger service (16% for all companies and 70.9% for LC).

Internet

- 90% companies use a computer in 2016 (93% for small enterprises (SE))
- 76% companies have an Internet connection in 2017 (73% for SE)

C. Postal sector

- A postal network with a national coverage of 234 post offices;
 - 226 private operators recorded of which 118 mailing systems' operators, 95 money transfer operators and 13 mailing systems and money transfer operators;
 - 13 operators are holders of a temporal authorisation.
- According to UPU, Cameroon ranks 1st in Central Africa for postal services and 77th in the world, ranking 192 countries. This shows the increasing efforts made by the Government of the Republic to modernize CAM-POST.



D. Public Stakeholders

The Posts, Telecommunications and ICT sector encompasses four public Stakeholders that are:

- **The Telecommunications Regulatory Board (TRB).** It is the State regulator for the telecommunication sector. And for this purpose shall:
 - ensure on behalf of the State, the regulation, control and monitoring of the activities of operators and users of the telecommunications and ICT sector;
 - ensure adherence to the principle of equal treatment of users in all electronic communication companies;
 - collaborate with the National Agency for Information and Communication Technologies (NAICT) to regulate activities pertaining to electronic safety.
- **The National Agency for Information and Communication Technologies (NAICT).** It is the Internet and ICT Regulator. And for this purpose shall:
 - Promote and follow up government actions in the ICT and communication sector;
 - ensure the regulation of activities pertaining to electronic security in collaboration with the Telecommunications Regulatory Board;
 - assess applications for accreditation and prepare specifications of certification authorities as well as control compliance with the electronic signatures issued;
- **The Cameroon Telecommunications (CAMTEL):** The State historic operator, CAMTEL is the sole fixed telephone operator in Cameroon. It is also entitled to a mobile telephone licence. CAMTEL was controlling in 2015, a park of about 412,415 tele-

phone lines (fixed and CTPhone).

It ensures the following missions:

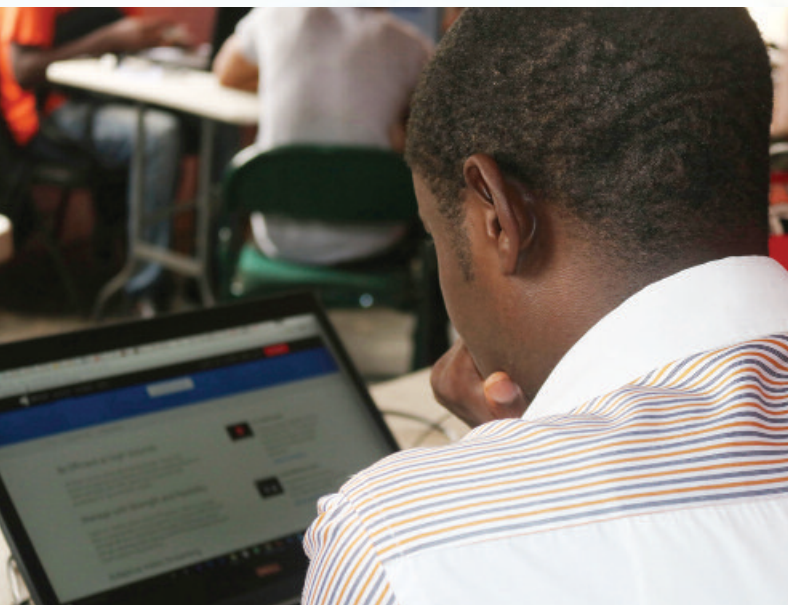
- the development of telecommunications infrastructures;
 - the Technical studies, installation, operations and maintenance of all infrastructures, necessary for the provision of telecommunications services throughout the national territory, as well as the interconnection of both national and foreign networks;
 - The realization of commercial operations.
- **The Cameroon Postal Services (CAMPOST).** It is the State Postal Operator, which is in charge of the universal postal service. It performs the missions of public postal services assigned by the State:
 - developing and operating postal networks and services
 - providing financial postal services
 - promoting national saving
 - providing services related to money transfer
 - ensuring the management of insurance and heritage products.

CAMPOST offers products and services intended to the general public in the areas of mails, financial services and digital services:

- national and international express mail
- Direct mail
- Transportation of parcels
- Current account and saving book
- National and international express money orders
- Business solutions in the ICT sector (hosting, video conferencing, video surveillance, IP telephone, interconnection of sites, offshore call centre)
- Transfers and mobile payments

E. Mobile telephone private operators (under concession agreement)

- **Mobile Telephone Network Cameroon (MTN):** Subsidiary of MTN International based in South-Africa, in 2015, MTN Cameroon counts close to 8 million subscribers.
- **Orange Cameroun:** in 2016, the operator counts close to 7 million subscribers.
- **Viettel Cameroun:** The third mobile telephone operator entered the market in 2012. In 2016, it operated under the NEXTTEL trademark, and counts close to 3 million subscribers;
- **An MVNO (Mobile Virtual Network Operator) Mobile Operator: YOOME.**



F. Internet Service and Access Providers

Over 50 companies provide Internet in Cameroon. Over a million clients subscribed an Internet subscription with the said companies of which the commonly known are: AIRBITS, Matrix, CFAO Technologies ...

G. Start-ups of the digital sector

Cameroon has an important source of digital start-ups with a significant transformation potential in very large companies. Some of these start-ups are genuine "gold nugget" for the economic development of our country.

Over 3,000 digital start-ups are recorded in the sector of application development, virtual and augmented reality, artificial intelligence, robotics and e-commerce.

H. Quelques plateformes et services électroniques

- The SIGIPES application, deployed by the Ministry of Public Service and Administrative Reform (MINFOPRA), manages the careers of civil servants;
- the ASYCUDA application, deployed by the Ministry of Finance (MINFI), handles the processing and management of customs revenue;
- the PROBMIS application, deployed by MINFI, which manages the budget;
- the NEXUS + application deployed by the National Customs for the tracking of cargo by geolocation;
- the e-GUCE application, which allows the management of foreign trade operations;
- the application of the National Social Insurance Fund (NSIF) for teledeclaration;
- the National Virtual University and the Sub-regional Virtual University of Central Africa through the pan-African online services network.

I. Investment in the telecommunication sector

The Government pays an increasing attention to the development of ICT as well as its importance in the various aspects of the economic life.

- From 2010 to 2017, MINPOSTEL's budget increased from CFA 12,641 to 53,388 francs;
- The share of budget allocated to ICT in the national



budget has increased from 0.49% of the budget in 2010 to 1.2% in 2017;

- During this period, the budget allocated to ICTs witnessed a significant increase with an average annual rate of 22.9% (as against 7.9% for the State budget);
- Investment in telecommunication services have doubled from 2011 to 2014, increasing from CFA 103.15 billion francs to CFA 272.85 billion francs.
- Besides, the investments of specialised operators in the ICT, an important investment was noted from other ICT companies.

J. Revenue generated and telecommunications and ICT production in Cameroon

Estimated at CFA 396 billion francs in 2009, the turnovers of telephone operators reached an amount of CFA 566 billion francs in 2015. This turnover is in a steady increase since 2009.

K. Human resources

The sector uses an important number of personnel. The telephone operators remain the greatest providers of employment in this sector.

The number of jobs created by telephone operators has increased from 4,002 in 2011 to 5,485 in 2016.

Other jobs related to ICT are created in companies other than telephone operators.

Generally, 20.2% of companies in Cameroon own a specialist personnel in ICT (computer technician, telecoms personnel, etc.). This proportion is very high in large companies where 73.6% have an ICT specialist.

Today, the global assessment shows that the telecommunication sector has created close to 8,000 jobs.

II. Projects

1. Development of infrastructure

In his inaugural speech at the beginning of its 2011-2018 seven-year mandate, the Head of State announced the implementation of new projects on telecommunication infrastructure and optical fibre links, in order to ease electronic exchanges, but also to bridge isolation and enhance national unity.

In this respect, until 2010, the electronic communication market delayed to take off, because of the low development of broad band infrastructures nationwide.

A. Challenges

Provide electronic communication services to all and throughout the national territory, through:

- The densification of access infrastructure;
- The extension of the optical fibre national backbone;
- The multiplication of international access roads through the deployment of submarine cables.

B. Actions

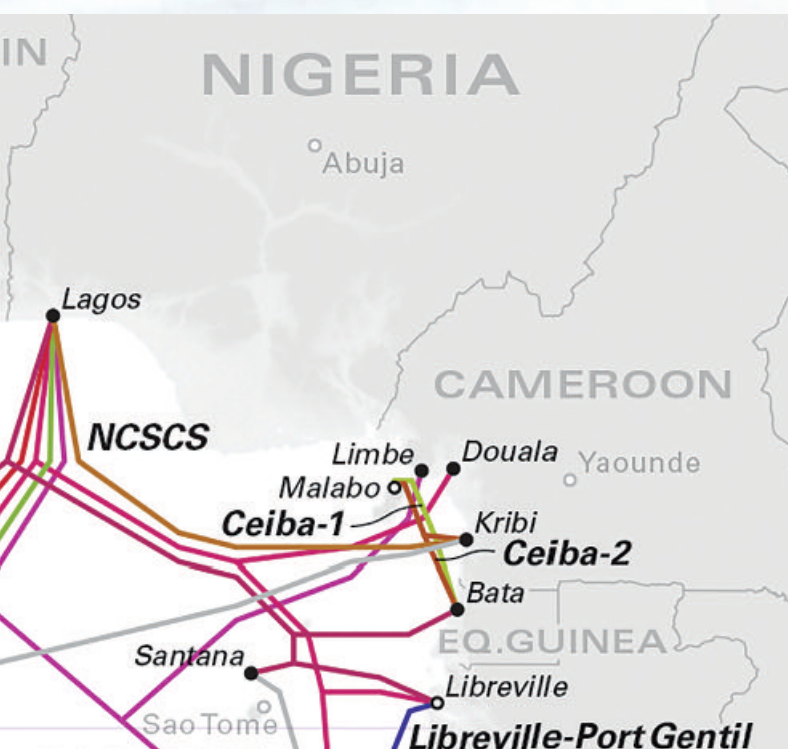
a. Development of the optical fibre national backbone

Between 2011 and 2016, Cameroon has achieved through is optical fibre national backbone:

- a total line of 6000 km with 64 transmission sites, a WDM loop between Yaoundé-Douala-Bafoussam and SDH STM-4 to STM-16 links made up of:
- 1000 km of optical fibre throughout the Chad-Cameroon pipeline;
- 5000 km deployed phases I and II within the framework of the optical fibre national backbone project.

In 2017, the 3rd phase of this project has enabled the construction of additional 4000 kilometres of optical fibre. Hence, increasing the total line to 10,000 km crossing the country from the North to the South and from the East to the West with slips towards neighbouring countries, especially Chad, Gabon, Equatorial Guinea, CAR and Nigeria.

This line is made up of 86 transmission sites, 143 optical transmission equipment in SDH and WDM and 07 loops for securing the traffic of which 01 of 100 Gbps, 4 of 20 Gbps and 02 of 10 Gbps. To that must be added 800 km of optical fibre deployed by ENEO and ceded back to the State.





b. Optical fibre submarine cables

In 2011, Cameroon was connected to a single submarine cable, the SAT-3 with a capacity of 20 Gigabits.

During the year 2014, the State of Cameroon becomes member of the WACS consortium and re-deemed the landing point of this cable on the Cameroonian coast in Limbe, for a total value of CFAF 14 billion.

In 2016, the NCSCS submarine cable (Nigeria to Cameroon Submarine Cable System) is constructed and commissioned with a capacity of 40 Gbps between Kribi and Lagos and of 10 Gbps between Lagos and Portugal. Cost of the investment US \$ 35 million.

In 2018, the SAIL (South Atlantic Inter Link), the Cameroon-Brazil cable will be commissioned in September 2018, with a capacity of 2.8 Tbits expandable to 32 Tbits. Total cost of the investment US \$ 38.3 million.

The Government decision to invest on this infrastructure is guided by the desire to reduce the access cost to Internet and new services of all operators and ensure this reduction is reflected on the tariff applied to consumers.

c. Urban Optical Loops

To provide end clients with high speed Internet access, the Government launched a deployment programme for urban optical loops.

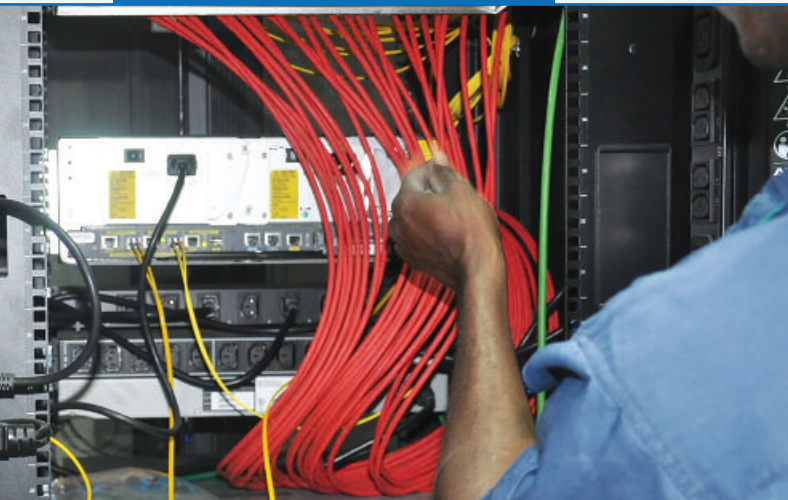
Before 2011, no urban optical loop was established in Cameroon.

Between 2011 and 2016, CFA F ten (10) billion were invested for the construction and commissioning of 5 urban loops: Douala (50.131km), Yaoundé (67.681 Km), Buea (29.186 km), Limbe (35.20 km) and Maroua (39.423 km).

Six other urban optical loops are being finalised, for a global line of 110.1519 km distributed as follows:

- urban optical loop of Bafoussam (15.418 km);
- urban optical loop of Garoua (17.3465 km);
- urban optical loop of Bertoua (13.104 km);
- urban optical loop of Ebolowa (12.35 km);
- urban optical loop of Ngaoundere (24.3584 km);





- urban optical loop of Bamenda (27.575 km);

d. National Broadband Network (NBN) Programme

The NBN programme is a structuring project for the establishment of modern high-speed telecommunication infrastructure and service platforms in Cameroon.

The first phase of this programme has enabled the densification of wired, fixed and wireless access networks. It is within this framework that 42 localities have broadband access (xDSL and FTTx) for a global capacity of 203,000 access ports. The second phase of the expansion of this project that ended in 2018 enabled the increase of the total capacity to 1,000,000 access ports. Total cost of investments of this programme: CFA F one hundred (100) billion

e. The coverage of border and enclave areas, to ensure the sovereignty of the territory and bridge digital divide

This include namely the BAKASSI Peninsula and Lake Chad: Issobo, Jabane 2, Akwa, Bamusso, PC-Rio, Mboro, Darak.

Investments made by the State under this project stand at close to CFA F 4 billion.

f. The Construction of Internet Exchange Points, an Imperative for Lowering Access Cost

Since 2014, two Internet Exchange points were constructed in Douala and Yaoundé. All Internet Access Providers, recipients of an autonomous system address, will benefit from a direct link to these exchange points.

The purpose is to:

- Avoid tromboning that has to do with using the international bandwidth to route local traffic, hence resulting in loss of income for Cameroon.
- Improve the quality of service by reducing the latency time and the service cost and consequently the price paid by the end user.

This project cost the State of Cameroon the sum of CFA F 1,417,000,000.

C. Achievements

a. A broadband infrastructure covering the national territory including:

- An optical fibre broadband national backbone with a line of over 12,000 km servicing all the division of the country;
- Urban optical loops constructed in the cities of Douala, Yaoundé, Maroua, Limbe, Buea for a total line of 330.058 km, and ongoing construc-

tion in the cities of Bafoussam, Ebolowa, Bamenda, Bertoua, Ngaoundéré.

- the interconnection with broadband infrastructure, of all the sites of the administration central services and the gradual interconnection of the sites of external services.
- two (02) Internet Exchange Points (IXP) in Yaoundé and in Douala;
- 3G broadband mobile telephone network since 2014 and 4G since 2015;
- four (04) auto-stable pylons of 75 m each, in the Bakassi area, in order to cover the area with the national electronic communication networks;
- Two data center (CAMPOST) providing data hosting services.

b. A diversified international connectivity with a capacity of close to 3Tbits:

With 04 submarine cable landing points constructed and operational: SAT3 in Douala (40Gbits), WACS in Limbe (40Gbits), NCSCS (Nigeria to Cameroon Submarine Cable System: 10 Gbits) in Kribi, and SAIL (South Atlantic Inter Link), Cameroon-Brazil cable that will be commissioned soon, with a capacity of 2.8 Tbits.

c. A confidence environment for electronic transactions:

- an operational Public Key Infrastructure (PKI);
- an operational computer emergency response team. (CERT)

e. A strong downward trend of telecommunication tariffs since the market was opened to competition.

D. Prospects

In the upcoming years, the focus will be on popularising access to bandwidth for citizens, companies and households, especially the pursuit of the expansion of the national backbone in order to reach a line of 20,000 km to 25,000 km, as well as the construction of urban optical loops in all head-towns of division in Cameroon, in a bid to increase High Speed Internet Penetration Rate in households, improve the quality of services in electronic communications and foster the development of an ICT industry in Cameroon, etc.



2. The quality of service: permanent concern for the Government

Within a context of ever changing and rapid growing digital environment, the telecommunication sector is faced with specific performance requirements, whose major focus is the improvement of the quality of services of electronic communications, in order to foster the development of the digital economy.

Fully aware of this important challenge in Cameroon, public authorities have set as priority, the improvement of the quality of services offered, both in the telecommunication development strategy and the government development strategy for digital economy, that will deal with all issues of the sector.

A. Challenges

Provide a permanent improvement of the quality of service and experience for electronic communication consumers, in order to enhance digital confidence and thus, contribute to catch up with Cameroon's delay in the digital sector.

More specifically, the Government shall focus on providing consumers with 24/7 services throughout the national territory.

B. Actions

Deeply concern by the gradual deterioration of the quality of services in the telecommunication sector, the Head of State instructed the following actions that were effected:

- The conduct of an audit on the quality of services of electronic communication networks of the four (04) operators, holders of concessions operating in the electronic communication market in Cameroon. The purpose of this audit conducted by an international consulting firm was to provide a long-lasting solution to the recurring problem of the quality of service provided by operators to users, based on the requirements of the operators' specifications, and related international standards, in order to make concrete proposals likely to provide a final solution to all related issues. This audit was fully performed and was able to bring to light the shortcomings that are behind the poor quality of services in the networks of all operators.
- The concession agreements of MTN Cameroon and Orange Cameroun operators were reviewed to better reflect the interest of the State and include in their specifications, obligations of quality of services and experience as well as coverage indicators for the 4G network.
- The establishment of a consultation framework in the Prime Minister's Office, to examine the terms and conditions for opening the deployment of the optical fibre to all concession holders. This opening will remedy the shortcomings of the transport operator in this market segment, will significantly contribute to the improvement of services provided by these operators and will increase the penetration rate of high speed Internet in households.



C. Achievements

- The availability of a plan to correct the weaknesses observed in the network of each operator, brought to light by the audit and which is gradually resolved by the operators.
- The reinforcement of obligations of quality of services in the amendments to the MTN and Orange concessions.
- The adoption of the principle of technology neutrality in the frequency resources allocation agreements that will henceforth provide the possibility to operators to freely use the frequencies allocated to them to deploy technologies of their choice. This advancement will have a positive impact on the quality of services provided by these operators through a greater flexibility in the management of frequency resources that are assigned to them.
- Providing the Regulator (TRB) with the much needed normative tools to carry out controls and impose sanctions where appropriate, if the threshold value indicators of the quality of services, coverage and deployment of 4G networks are established by the audit and to effectively include them in the operators' agreements.
- The establishment of an inter-ministerial consultation framework in order to protect sensitive sites during the conduct of major projects.



TRB, with regard to training and equipment, to provide the institution with resources to control the electronic communication market. And also to ensure strict adherence to the audit prescriptions as well as the specifications of operators.

- the conduct of annual audit on the quality of services provided by operators, followed by fines on those that would not implemented the prescribed corrective measures.
- the annual publication of the results of assessment of the quality of services provided by each operator with regard to international quality standards and its competitors.
- the opening of the deployment of optical fibre to operators, in order to enable them construct redundant links to address the shortcomings of the transport operator and thus increase the penetration rate of high speed Internet in households. A new regulatory framework will be adopted in this regard.

D. Prospects

The quality of services in the telecommunication sector remains a constant concern for the Government.

It is further important that operators of the electronic communication sector should build their capacities, to meet quality requirements in order to develop the digital economy that should propel Cameroon at the level of an emerging country by 2035.

Many other actions are in the pipeline to sustainably deal with this issue:

- the adoption of a quality charter for all stakeholders, to ensure the redundancy and resilience of the broadband infrastructure;
- the building of the technical capacities of

3. Facilitator and Regulator State

Nowadays, the private sector is universally recognised as a growth driver, creator of jobs and breeding ground for employments. However, it is a truism that the sector can only fulfil this function with efficiency if proper conditions are established for its fulfilment. It is the duty of the State to ensure and provide a sound business environment.

This secret is no mystery to the highest authorities of this country, who do not less any stone unturned to contribute to the development of the private sector. This is the Vision of the Head of State, H.E. Paul BIYA, that is implemented under the leadership and coordination of the Prime Minister and is materialised through several measures. Considering specifically the development of the digital economy in our country, President Paul BIYA in his Address to the youth on 10 February 2016 said: *"The Government should systematically and effectively continue setting up appropriate infrastructure, but also cleaning up and properly regulating this key sector in the interest of the national economy and the development of youth employment"*.

This clearly means that to boost the development of this sector, the State must play its role of regulator and facilitator in order to foster the harmonious development of the activities of private operators.

A. Challenges

- Establish a strategic, institutional, legal and regulatory guidance framework that fosters the development of digital economy;
- Protect the interest of the State and those of consumers;
- Promote a permanent consultation between public authorities and stakeholders of the sector to address collective challenges.



B. Actions

- In 2010, the review of the legal and regulatory framework, which was focused on the second major reform of the telecommunication /ICT sector, through the enactment of three laws and later the signing of their various implementing instruments:
 - Law No. 2010/012 of 21 December 2010 on Cybersecurity and Cybercrime in Cameroon;
 - law No. 2010/013 of 21 December 2010 to govern electronic communications in Cameroon amended and supplemented by law No.2015/006 of 20 April 2015;
 - law No. 2010/021 of 21 December 2010 to govern Electronic Commerce in Cameroon.

This reform takes into account the technological evolution marked by networks convergence (telecommunications, IT and broadcasting) and services, the rapid development of bandwidth networks for which the transmission of classic voice gives room to data transmission, in a bid to provide new services requiring high and very high speed networks, the development of electronic commerce and the increase of cybercrime.

- **The development of strategic guidance documents must guide Government's action in this sector,** this include:
 - The Telecommunication/ICT development strategy geared at developing optical fibre high and very high speed infrastructures in a bid to provide bandwidth networks as well as a general access to services and the use of ICT throughout the national territory. Established in 2005, this strategy was reviewed in 2014 in a bid to align it to the Growth and Employment Strategy Paper (GESP) and the reform of the sector;
 - In order to effect a concrete reform of the sector while taking into account technological evolution, the Postal development strategy provides new services and the development of electronic commerce;
 - The strategic plan for the development of digital economy is geared at digitally transforming Cameroon in a bid to improve the competitiveness of companies, boost youth employments and growth;



- The national policy for the security of networks and information systems that will build a secure and strong cyberspace in Cameroon, is summarised in the five strategic pillars below:
 - o render effective and enhance national governance on the security of networks and information systems;
 - o protect critical and sensitive information assets;
 - o fight cybercrime, cyberterrorism and manage the security risks of networks and information systems;
 - o develop the national cybersecurity programme;
 - o educate, train, sensitise and carry out research in the domain of cybersecurity and the fight against cybercrime.
- **Improvement of governance in the sector**
 - The reinforcement of the regulator's missions especially those of Internet regulation and cybersecurity activities under the supervision of the Ministry of Posts and Telecommunications.
 - The reorganisation of the Ministry of Posts and Telecommunications assigned among other missions, the development and monitoring of policy on telecommunication, ICT and cybersecurity.
 - The National Advanced School of Posts and Telecommunications (NASPT), created in 1969, was restructured into the National Advanced School of Posts, Telecommunications and Information and Communication Technologies (SUP'PTIC), in order to better anchor training to digital economy requirements.
 - The drafting of a handbook (white paper) in a bid to restructure Cameroon Telecommuni-

cations (CAMTEL) with the support of the World Bank.

- **Mobile Telephone Concession Agreements**

- a third mobile telephone concession was granted to the telephone operator VIETTEL Cameroun, with exclusivity on the provision of third generation (3G) services limited in time. Granted at end of a competitive bidding process, this concession aimed at boosting competition and increase affordable access to services. VIETTEL began exploiting its network throughout the national territory on 12 September 2014.
- The renewal of the concessions of MTN Cameroon and Orange Cameroun operators in 2015, with the extension of their prerogatives, to the offer of third generation (3G) and fourth generation (4G) electronic communication services.

These new concessions contributed in boosting the telecommunications and information and communication technologies markets, in a bid to increase access to innovative services to a greater number of Cameroonians.

- **The signing of the amendments to these MTN and ORANGE concession agreements in 2018**

Negotiations on these amendments were geared at safeguarding the interest of the State on the one hand and integrating in the concession document, the obligation of quality and experience of service as well as coverage indicators for the 4G network. Conducted under the high instructions of the President of the Republic and under the auspice of the Prime Minister, Head of Government, these

negotiations were carried out by an inter-ministerial committee including experts from the Ministry of Posts and Telecommunications, Ministry of Finance, Ministry of the Economy, Planning and Regional Development, Technical Commission for Privatisations and Liquidations, Telecommunications Regulatory Board and National Agency for Information and Communication Technologies.

The Telecommunications Regulatory Board is tasked of ensuring as required by the regulation in force, the compliance by the two operators, with all obligations in their respective specifications.

- **Establishment of a Permanent Public-Private Dialogue between companies and the Civil Society in the Posts and Telecommunications sector.**

This dialogue that began with the organisation of the National Days for Digital Economy (NDDE) was formalised by the establishment of the Permanent Public-Private Consultation Forum of the Posts and Telecommunications Sector (CPPT).

- **Organisation of National Days for Digital Economy.**

The National Days for Digital Economy is an important gathering of intelligences, with the aim of brainstorming and producing concrete proposals that can give a new impetus to digital economy within public policies as well as boost its development for the emergence of Cameroon.

The purpose of the first National Days for Digital Economy was to associate stakeholders of the private sector and the Civil Society to the reflections going on within the Government, and to collect their contribution in a bid to develop a strategy for the development of digital economy in Cameroon.

Specifically, it has to do with:

- o Establishing an inventory and identifying hindrances to the development of Digital Economy in Cameroon;
- o Defining the role of the various actors and stakeholders as well as the interactions;
- o Identifying needs in this domain;
- o Stimulating dynamism by mapping out (short, medium and long term) projects, in order to develop digital economy and transforming our society into a digital society.

Organised on 03 and 04 March 2016 at the Conference Centre of Yaoundé, under the theme:



"The place of digital economy in public policies for the emergence of Cameroon", these first National Days for Digital Economy assembled national actors of the telecommunication and digital sector, businessmen, the Civil society; start-ups, financial organisations, experts and international organisations.

- **Establishment of the Permanent Public-Private Consultation Forum of the Posts and Telecommunications Sector (CPPT)**

The CPPT is a consultation and dialogue platform between the Government, companies of the Posts and Telecommunications sector and the Civil Society, where urging issues relating to the sector are addressed, in a bid to mutually seek appropriate solutions. This platform is under the authority of the Ministry of Posts and Telecommunications and is tasked with the establishment of a partnership between the Government, companies of the posts and telecommunication sector and the Civil society, in order to facilitate the access of all to a quality service at affordable prices. Specifically, it is in charge of:

- Collecting concerns raised by users as well as the expectations of private operators and provide solutions;
- Pointing out the shortcomings of the Posts and Telecommunications sector and making the needed proposals for rectifications;
- Proposing to the Government all measures likely to contribute to the improvement of the quality of service in the Posts and Telecommunications sector.

Between 2016 and 2018, this dialogue platform held three (03) sessions.

C. Achievements

- The availability of a strategic, institutional and legal guidance framework that promotes the development of all sector especially that of the digital economy.
 - o Development of a draft law on the protection of personal data;
 - o Development of a draft project on postal regulation;
- Safeguarding the interest of the State and those of consumers in the negotiation of concessions with mobile telephone operators. Thanks to the renewal of the ORANGE and MTN concessions



and to the entry of VIETTEL in the electronic communication sector, the State was able to make CFA F 170 billion;

- the existence of a permanent consultation forum between public authorities and stakeholders of the sector that addresses collective challenges that meets at a regular basis. The first session examined the recurring issue of the quality of services, the second on the development of digital economy, and the third once again examined the quality of services by stressing the implementation of recommendations from the audit on electronic communication networks.

D. Prospects

- support operators in implementing recommendations from the audit on the quality of services;
- Draft a law on the on-line access to the administrative documents of public institutions;
- Draft a law governing on-line payments;
- Create a national company in charge of infrastructure and transport in the electronic communication domain;
- Develop a special tax scheme for digital innovative companies;
- Establish a formal platform responsible for coordinating public infrastructure works that include different administrations (public works, transport, telecommunication, broadcasting, energy and water, urban development, ...)
- Establish a consultation framework for multi-sectoral regulators to coordinate the sharing of infrastructure and encourage the sharing of infrastructure between different sectors.

4. Bridging the Digital Divide

The digital revolution will only make sense if the entire society (individuals, administrations, companies) adopts ICTs as a way of life. AT a time when information and communication technologies (ICTs) are occupying an increasingly important place in the development of countries, the anchoring of all social components in the design, use, ownership and mastery of these strategic tools is a pressing need.

In this regard, the purpose of bridging the digital divide in Cameroon is to enable everyone access and contribute to information, knowledge as well as benefit from greater development capacities provided by ICTs. This purpose is tagged as a priority in the long term development vision of public authorities. This vision is presented in the speech of the Head of State and it is materialised in the GESP, hence the emphasis laid on the promotion of ICTs.

A. Challenges

Ensure digital inclusion by generalising the use of ICTs by all strata of the society, especially through:

- The promotion of access and use of ICTs by citizens, especially women and youths;
- The capacity building of populations in the ICT sector;
- The development digital competences and uses within government institutions;
- The extension of telecommunications and ICT infrastructure.

B. Actions

- The promotion of digital inclusion in the postal sector by:
 - modernising access to postal services namely the postal electronic services;
 - reinforcing the production tool of CAM-POST;
 - o Establishment of the e-banking platform;
 - o Setting up an Electronic Document Management (EDM) System and hybrid mail.
- Reinforcing high and very high speed telecommunications infrastructure:

- extending the optical fibre national backbone;
 - Densifying wired and wireless access networks through the NBN project;
 - construction of two Internet exchange points in Yaounde and in Douala. The construction of these exchange points have contributed in reducing Internet cost;
 - construction of urban optical loops;
 - construction of auto-stable pylons in the Bakassi area, in order to cover the area with the electronic communication networks.
- using ICTs like a catalyst of digital transformation of the traditional sectors;
 - Interconnecting public administrations via the optical fibre backbone;
 - The dematerialisation of administrative procedures: The "e-GUCE" application was deployed by the One-Stop Shop for Foreign Trade Operation to shorten the time limit of procedures.



- The encouragement and promotion of ICT training, in a bid to bridge the digital divide between major cities and the hinterland as well as from the stand point of gender and therefore, CONTRIBUTE TO DIGITAL INCLUSION. Thanks to:

- the organisation of ICT holiday camps, information and communication technologies (ICTs) popularisation programmes with the rural youth.

The purpose of ICT camps is not only to promote and encourage ICT training but also to promote their responsible use.

The ICT camps are followed by the award of training scholarships in ICTs for the best camps students and gifts of IT equipment to schools.

- The Divisional Reward of Excellence in Digital Economy (MDN) is an operation that provides support to best students in ICT subjects in Cameroon.

The aim of MDN is to reward the best school performances in ICT as well to give prizes to the best performing female students. Thus, through the award of school materials (books, school bags, textbooks in IT), laptops, android phones and scholarships.

The Division Reward of Excellence in Digital Economy and the ICT camps are also support programmes provided to students.

- Bridging of the digital divide with regard to gender.
 - Granting academic excellence award to female students on the occasion of the divisional reward of excellence in Digital economy;
 - Supporting female start-ups;
 - Supporting associations and others female initiatives in the digital sector.

C. Achievements

- Gradual digitalisation of the postal sector thanks to the enhancement of the CAMPOST production system:
 - Purchase of equipment and electronic banking service software;



- Purchase Electronic Document Management (EDM) System and hybrid mail.
- The development of infrastructure:
 - Availability of a optical fibre total line of close to 20,000 km crossing the country from the North to the South and from the East to the West with slips towards neighbouring countries, especially Chad, Gabon, Equatorial Guinea, CAR and Nigeria;
 - Bandwidth line access in 42 localities for a global capacity of close to one million of access ports;
 - Reduction of Internet access cost thanks to two operational Internet exchange points in Yaounde and Douala;
 - Coverage of the Bakassi area with electronic communication networks with the construction of auto-stable pylons of 75 m each;
 - Availability of a capacity of 40 Gbps between Kribi and Lagos and 10 Gbps between Lagos and Portugal;
 - Interconnection of 78 public administration external service sites via the optical fibre backbone;
 - Construction of urban loops in close to 64 localities, enabling the interconnection of divisional head-towns;
 - Identification of 400 priority sites, within the framework of the dematerialisation of foreign trade operation and support some administrations in placing some applications on-line, especially the "e-GUCE" applications, deployed by the One-Stop Shop

for Foreign Trade Operation to shorten the time limit of procedures.

- Organisation of two "ICT camps" for digital inclusion in rural areas, in the Ngoto I and Ngoto II groupings in Ebolowa II and also in the locality of Mvangan and its surrounding villages. The result has been the training of thousands of young people, the award of hundred of training scholarships in ICTs (2035 MIJEF programme) as well as the donation of computers and printers to administrative services and schools of the said localities.
- There was also the organisation of four editions of the Divisional Reward of Excellence in Digital Economy in Ebolowa, Ndop, Eseka, Ngoumou, with the granting of gifts in school materials likes books, school bags, textbooks in IT, and others gifts namely laptops, android phones and scholarship to close to 470 students of secondary schools.
- Supporting several female initiatives in the domain in a bid to bridge the digital divide with respect to gender, especially:
 - Granting academic excellence award to female students on the occasion of the divisional reward of excellence in Digital economy;
 - Supporting female start-ups;
 - Supporting female associations in the digital sector.

D. Prospects

At the digital transformation level of the postal sector

- Implementation of the Ecom@Africa Project. Cameroon has been selected by the Universal Postal Union to host the Ecom@Africa platform, in order to develop electronic commerce on account of ECCAS States.

- Setting up an on-line payment platform.

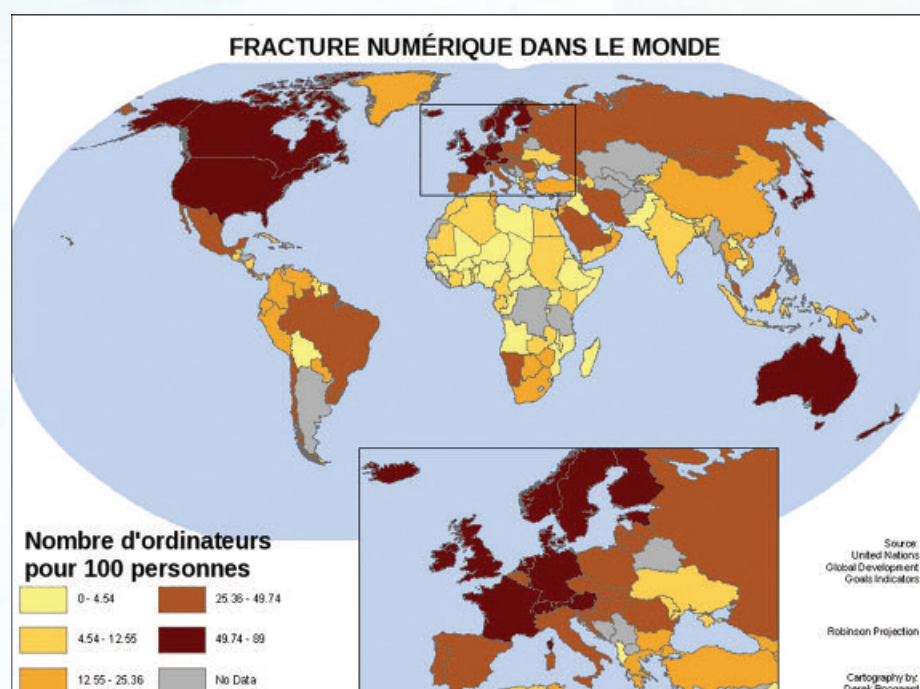
Thanks to a partnership between the INTER-SWITCH company (Nigeria) and CAMPOST, for the establishment of a platform to manage and control on-line payments, and foster electronic transactions with West and East Africa.

- Carrying technical feasibility studies and environmental and social impact studies for the development of electronic communications and postal infrastructure.

At the telecommunications and ICT level

- The deployment of 1,000 km of additional optical fibre within the framework of the cross-border interconnection;
- The kick-off of the implementation of the e-government master plan;
- The development of the digital development master plans for the cities of Edea, Kribi and Bafoussam;
- The optical fibre connections of 434 public administrations external service sites.

Besides, it shall proceed with the implementation of the strategic plan for a Digital Cameroon by 2020, through its strategic area by focusing on the promotion of digital culture via the popularisation of the use of ICTs.



5. Supporting the youth of the ICT sector

The digital technology represents important challenges and holds tremendous promises for the development of Cameroon.

After recalling the important role of digital economy in economy growth and job creation in his address to the nation on 31 December 2015, the Head of State, on 10 February 2016, once again urged the nation to bring their support to the numerous youth initiatives in the digital economy sector, which is an important niche for job creation to the youth.

The youth support programme in the digital sector is the materialisation of these very high instructions of the Head of State.

A. Challenges

- Setting up an ecosystem to foster the detection of talents and provide them support in a bid to create digital companies;
- Promoting digital entrepreneurship, which is a niche for jobs to our youths.

B. Actions

- Organise video conferencing for young project holders in the digital sector, drawn from the different regions of Cameroon;

The relevant projects are recorded in a platform created in this respect, ticforjob.cm

In addition to the detection of talents, the purpose of these sessions is to record the expectations of young ICT project holders in order to conveniently support them in their development activities.

- The digital economy Globe-trotter, which aim is to support young digital start-upers to mature their project in a bid to create digital companies.

Specifically, it has to do with a caravan that will run across the national territory and bring together young project holders and national and international experts in the competent domains, in a bid to improve the maturation level of projects presented and, and to help to find financings, thanks to well developed business plans.

The Globe-trotter also provide them with guidance through the arena of laws, regulations and protection of intellectual property. It also help young start-upers in difficulties to ensure their go down. The Globe-trotter is a response to the needs expressed by youths in the various video conferencing

with respect to support for the maturation of their projects and the search for financings.

- The promotion of Cameroonian Start-ups in a bid to search for partnerships and/or financings through the organisation of trade fairs and exhibitions.
 - The digital village or "Android village" organised alongside the international economic conference: *"Invest in Cameroon, land of attractiveness"*, under the theme *"Digital economy, pole of investment in the evolution of Cameroon toward its emergence"*.

The projects' exhibition and trade fair are places indicated for young companies to present their technological solutions, expose their difficulties and expectations, with the purpose of:

- o Presenting the assets of Cameroon in the digital sector;
- o Promoting the know-how of Cameroonian Start-ups;
- o Enhancing the exchange and consultation framework with young entrepreneurs of this





sector, in order to support emerging talents and encourage innovations.

- the "start-up villages" organised within the framework of digital salons, that held in Yaoundé, alongside the International Forum on Digital Economy in 2017 and, the sub-regional conference on digital economy for Central Africa in 2018.

The purpose was to seize these tremendous opportunities to put in contact young innovative project holders with national and international investors in a bid to give rise to business partnerships and beyond as well as promote their activities.

- Institutional support to start-ups

Cameroon is a tremendous niche of talents and creativity in the digital economy sector. Some of these talents became famous through international competitions. Meanwhile others remain unknown, even though they are holders of golden ideas for that can actually contribute to the development of digital economy.

The Government has the duty to support them in a bid to capitalise and optimise their inventions.

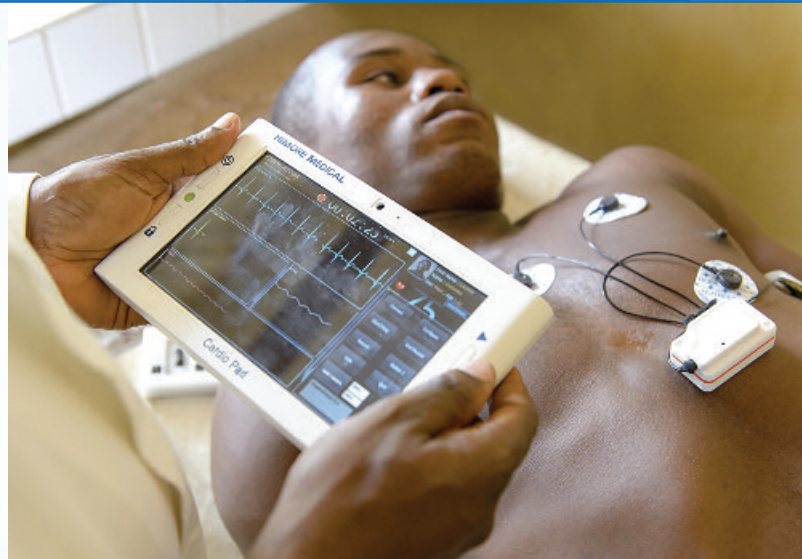
Hence the following actions:

- Supports and counsels, mentoring, tutorial;
 - Creation of a bank for mature and bankable projects;
 - Support to the launching activities of start-ups;
 - Support to private incubators: gifts in equipment and materials.
 - Developing partnerships with the associations of start-ups;
 - The establishment of two incubators of digital technologies or support platforms for start-ups respectively in the National Advanced School of Posts, Telecommunications and ICTs (SUP'PTIC) and the National Advanced School of Engineering of Yaoundé, for the support of youths in entrepreneurship;
 - Awards to young Cameroonian laureates in International competitions;
 - Conduct of a study in a bid to create a cyber park to detect and support initiatives from ICT project holders in Cameroon.
- Support and training through international co-operation
Close to 200 Cameroonian Start-ups drawn from the ten regions of Cameroon were trained in digital entrepreneurship thanks to the Cameroon - Israel Cooperation.
 - Each year, a dozen of young Cameroonians take part in the Huawei Seeds for the Future international programme within the cooperation framework between Cameroon and China. This programme has to do with:
 - nurturing local talent in the area of ICTs;
 - improving the transfer of technologies with regard to ICTs;
 - stimulating the interest of youths to ICTs and telecommunications.
 - Studies to connect the Silicon Mountain to the optical fibre.

C. Achievements

- Several video conferencing were organised to make an inventory of the needs of youths and over 3,000 ICT project holders identified and registered in the ticforjob platform;
- Several globe-trotter of the digital economy were organised, and hundred of project holders received a support in the maturing phase.

- Thousands of young people received guidance in the arena of laws, regulations, obligations, rights, helps, protection of the intellectual property, business plan, in a bid to develop a good company project;
- A database of bankable projects, ready for available financing;
- A hundred of "Business to Business" meetings were organised within the framework of digital Salons between Cameroonian Start-upers and foreign investors in order to discuss on the financing opportunities.
- Establish an exchange partnership framework between the State and start-upers with regard to the development of digital economy;
- A functional ICT incubator in the National Advanced School of Engineering with incubated each year;
- The launching of SUP'PTIC ICT incubator is under way;
- Close to 2,000 youths registered in the UBUNTO de KyrioGames d'Olivier MADIBA mentoring and tutorial platform;
- Studies to connect the Silicon Mountain to the optical fibre are available;
- The technical file for the establishment of a cyber park is available;
- The rise of several Cameroonian start-ups, among which many with international recognition:
 - MBOA Store d'ABEGA MOUSSA, an application store that is 100% African, which is a response to the concerns of digital patriotism;
 - KyrioGames, the first African Video Game developed by a Cameroonian named Olivier MADIBA;
 - Drone Africa, a service of drones made in Cameroon by William ELONG, a young Came-



- roonian of 22;
- NJORKU, a job search engine developed by Churchill MAMBE;
- GIFTEDMOM, an application for the medical follow-up of pregnant women developed by Alain NTEFF;
- WAZAPAY, an on-line payment and electronic wallet platform developed by SHEMBA Samuel NJUKWING;
- HImore Medical (Cardiopad) of Arthur ZANG;
- CAYSTY (initiation of young girls to ICT) of Arielle KITIO.

D. Prospects

- Pursuit of video conferencing and the "Digital Economy Globe-Trotter" Caravan;
- Creation of a cyber park in Yaoundé and its extensions in the head-towns of other regions;
- Establishment of an appropriate financing mechanism for Cameroonian digital start-ups:
 - access to venture capital;
 - development of clubs of business angels;
 - development of crowd funding platforms for digital innovations.
- establishment of a financing heading or a specific financing institution for start-ups.
- Adoption of incentives for digital start-ups;
 - A favourable regulatory environment in public contracts;
 - Specific taxation schemes.
- Adapting legal instruments governing the Special Telecommunication Fund (STF), the Special Fund for Electronic Security Activities (ESF) to facilitate the funding of start-ups.



6. Training

To cope with the rise of unemployment and the unrestrained quest for an appropriate solution to deal with this problem, the Head of State urged his compatriots and stressed on the opportunity that provide ICTs. It is against this backdrop that he proposes a radical change on school syllabuses, to align and adapt schools to the needs of markets. It is in the light that he declared to its young compatriots on 10 February 2015: "For a long time, we believed that it sufficed to make education accessible to the greatest number and continually raise its level, to mechanically resolve the unemployment problem. (...) Our primary, secondary and high schools, universities and professional schools must constantly adapt to the changing world. (...) Technological advancement has changed the way things are done. The "new economy" is computer-dominated. We should focus on training technicians and engineers".

In his address to the youth on 10 February 2016, President Paul BIYA also urged the whole nation to definitely mobilise, to support the numerous youth initiatives in the digital economy sector. Moreover, he prescribed a roadmap that among others, assigns specific missions to training institutions: "Public or private training institutions are called upon to fully play their role. They must identify the new trades and tailor their syllabuses accordingly".

This was no mystery to President of the Republic:

The digital economy needs for its development well trained stakeholders, train in compliance

with international standards and able to address the current and future challenges.

A. Challenges

- Anchoring training offer to the digital economy requirements;
- Ensuring the availability both in terms of quality and quantity, of human competences likely to meet the needs of digital economy.

B. Actions

- The National Advanced School of Posts and Telecommunications was transformed into the National Advanced School of Posts, Telecommunications and Information and Communication Technologies (SUP'PTIC), and provided a special status, a legal personality and a financial autonomy.

The missions of SUP'PTIC are to provide professional higher education, specialised technical training, continuous training and applied research on Posts, Telecommunications and Information and Communication Technologies and the management of companies of the related domains.

In addition to initial training, refreshing, recycling and specialisation missions of the personnel, SUP'PTIC also provides applied research studies, technological watch in a bid to update training courses in the sector as well as providing technical support to administrations and public, parapublic and private organisations, in the postal, electronic communication and ICT domain.

SUP'PTIC is therefore the major partner of the State with regards to professional training in the digital economy sector.

- The renewal of the governing body of SUP'PTIC will contribute in implementing the restructuring programme.

The aim of these appointments was to give a new impetus in the development of human resources in compliance with international stan-



dards and to response to the challenge of digital economy development, through the training of a quality personnel with respect to digital economy.

- Creation of the incubator “SUP’PTIC Business Academy”

In this digital age, this incubator constitute a fundamental forum for the initiation of student to entrepreneurship, it enriches the training offer provided by SUP’PTIC by training student how to create wealth in the ICT sector. The incubator also welcomes project holders from various background.

- The creation of a scientific conference cycle in SUP’PTIC.

This High Level Scientific Conferences of SUP’PTIC, falls within the framework of the innovative learning mechanism implemented by this training school for executive officers of the Posts, Telecommunications and ICT domain, in a bid to better professionalise teachings.

Administered by high level experts recognised for the state of their services and renown for their contribution in the production of knowledge and know-how, these conferences will focus on the most relevant evolutions and the latest researches to drive the information in the minds of in a bid to consolidate the aligning of programmes to the requirements and standards in force.

- Improving SUP’PTIC infrastructure.
 - The development of partnerships with other higher and university training institutions.
 - SUP’PTIC was designated by the Universal Postal Union (UPU) and the Pan-African Postal Union (PAPU) to host the Postal Training Centre on account of French Africa in SUP’PTIC
 - The election of Cameroon through SUP’PTIC by the Administrative Council of the Pan-African Postal Union (PAPU), to host the second Training Centre of the Universal Postal Union for the training of operational officials of the postal sector in francophone countries.
 - Capitalising the Presidential gift of 500,000 computers to Cameroonian students.
- The first high level scientific conference of SUP’PTIC under the theme: “New telecom-



munications environment and challenges of the digital economy”, enable the students to understand the technological opportunities provided by these computers and the use of the Cloud.

- The establishment of the e-Institute project in the Pan-African University.

C. Achievements

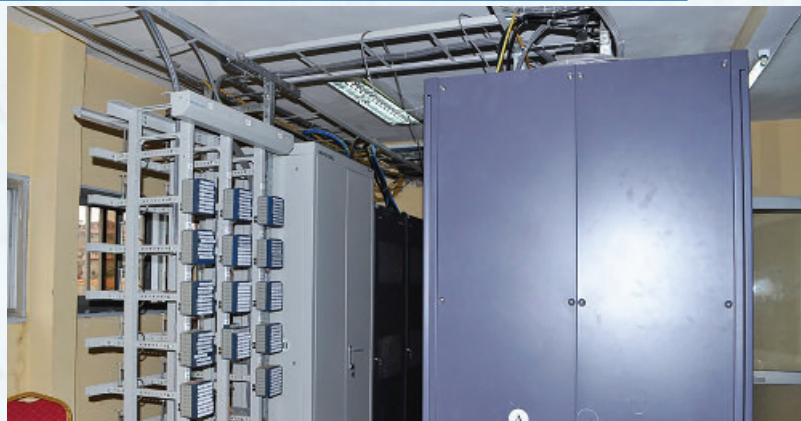
- The State created an academic institution for the training of professional of the postal and electronic communication sector, with a landmark reintroduction of ICTs as a field of specialisation.
- A modern university Campus, with an extension of 8 class rooms and newly constructed laboratories:
 - A constructed and equipped 700 seat amphitheatre.
 - Electronic, radio communication, satellite communication and access networks laboratories;
 - A platform to test mobile radio networks;
 - Equipment to establish a didactic GSM network.
- Initial training: close to 3,000 students were trained through out the seven year mandate
- Continuous training: over 700 personnel of the sector from public administrations and private companies.
- In SUP’PTIC, an incubator is under operationalisation
- A Partnership is established between Polytechvalor (National Advanced School of Engineering), to train personnel of public

administrations to the cybersecurity and cybercrime trade.

- Signing of an agreement between SUP'PTIC and SUPCOM Tunis, with the financial support of the ADB, for:
 - Doctoral training in ICTs of four batches of engineers graduated from SUP'PTIC on the basis on five students per batch;
 - The creation of an exchange platform for teachers (mobility of teachers).
- the creation of a Regional Postal Training Centre in partnership with the Universal Postal Union (UPU) and the Pan-African Postal Union (PAPU)

D. Prospects

- Transforming SUP'PTIC into a centre of excellence with respect to training in digital trade and postal management in the sub-region.
- Reinforce opening to the professional environment and at international level;
 - Transforming SUP'PTIC into a training and landmark research centre for the digital sector in the subregion and Africa, and anchoring it to training international standards.
 - Transforming SUP'PTIC into a Studies and Applied Research Centre in the field of posts, electronic communications and ICTs;
- Setting up a Strategic Watch Observatory in a bid to define a competition referential with respect to training, technological development and innovation in the sector;
- Increasing the hosting infrastructure and renovate the infrastructure of Buea regional



centre.

- Creating two regional training centres by 2021;
- Creating a doctoral school and reinforcing applied research;
- Creating a Centre for the development competences in optical fibre communication techniques and technologies (ADB financing: 1 billion);
- Extending the company incubator and enhancing socio-professional insertion as well as the follow-up of certificates.
- Reinforcing university governance, bilingualism and the citizenship.
- Developing partnerships with private training institution in ICT.

7. Modernisation of the Postal sector

At the postal level, the Government's action focused on modernising the Cameroonian postal sector, which is a fundamental component of the national economy. The objective is to carry out a complete revolution of the sector, by including the present day technological evolutions in order to transform the postal network into the bedrock of the development of digital economy.

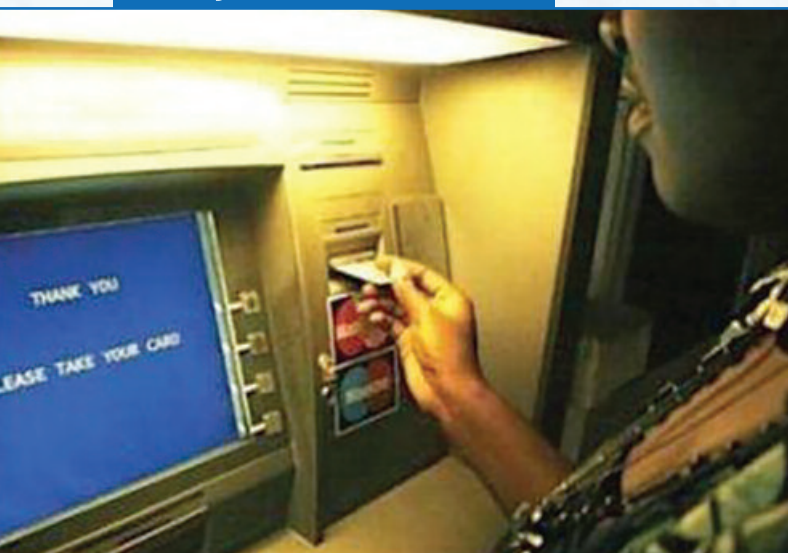
A. Challenges

Developing a postal sector that will be a major stakeholder in digital ecosystem and financial inclusion.

B. Actions

- The establishment of a postal development strategy geared at modernising the sector, which is a fundamental component of national economy.
 - Restructuring the postal sector
 - Improving the working environment and production system;
 - Developing conditions to improve postal governance.
 - Modernising the postal public network
 - Deploying postal digital transformation infrastructure, in a bid to anchor it to the development requirements of digital economy;
 - Setting adequate conditions for the interconnection of networks;
 - Conducting technical feasibility studies and environmental and social impact studies for the development of electronic communications and postal infrastructure.
 - Diversifying the offer of postal financial services and postal electronic services.
 - Signing an agreement with the INTERSWITCH and GIMAC consulting firms with the aim of boosting the financial payment system of CAMPOST, in order to transform it into "a central hub for financial transactions with other banks throughout the national territory and at the international level".
- With the following major actions:
- o The establishment of a world class switching transaction, with regard to a payment processing company, in a bid to boost a sound economy and a digital ecosystem in CAMPOST;
 - o The implementation of the interoperability of different cards and to share all ePayment infrastructure in the same environment, thereby reducing investment made by the different banks;
 - o The transformation of CAMPOST into a financial and economic hub while providing other banks with reliable electronic payment infrastructure;
 - o The connection of CAMPOST to international networks and switches in the CEMAC region and in Africa in order to allow the interoperability of payment cards;
 - o The provision at affordable prices of electronic payment services to banks and to all holders of cards and other processors in Cameroon.
 - The deployment of e-Post infrastructure in order to provide quality postal services and products. These include a data center, a secured network of 234 post offices interconnected by optical fibre (about 410 km) and by satellite (about 110 VSAT stations).
 - The construction of new offices and the renovation of old post offices.
 - The establishment of the management and control platform for on-line payment, ecom@Africa, is an initiative of the Universal Postal Union (UPU) whose role is to federate the governments of African States in an electronic commerce platform through the postal network. Cameroon was chosen to host this platform for ECCAS countries.
 - The development of a postal coding and addressing system that will provide Cameroon with an addressing infrastructure that will not only facilitate the redistribution of postal mail-outs to the addresses registered on the parcels by the postal operators, but will also foster the development of electronic commerce and geolocalisation of persons nationwide.





C. Achievements

• The e-post Infrastructure

Through out the 2011-2018 seven-year mandate, the Government provide CAMPOST with an electronic communication infrastructure that enables her to modernise its operating system and anchor the world of ICTs.

The e-Post infrastructure include a secured network of 234 post office interconnected by optical fibre and by satellite (about 110 VSAT stations), a Data Center and an ultra modern satellite Hub that provide the below digital services:

- Hosting

The CAMPOST Data center provides a fully secured environment devoted to hosting of servers and applications. It is an infrastructure that will enable CAMPOST to position herself in the ICT and digital economy market.

- Video conferencing

The Video conferencing solution is a distance communication tool meant for presentations, conferences with partners, internal business meetings and trainings. This tool is a better alternative to the physical displacement of companies and administrations personnel who run urban, regional and international divisions. The CAMPOST video conferencing service is available in the ten regions of Cameroon.

- The video conferencing

This solution is appropriate for the security of employees, premises, equipment or goods. CAMPOST also provides surveillance camera services, with the offer of distance management of cameras through a dedicate platform.

- The IP telephony

CAMPOST further proposes Internet Telephony Solution, through the VOIP technology based on the implementation of the standardised 3GPP of SIP operating on an IP standard protocol. A turnkey solution with a single operator, maintenance, support and a single lump sum invoice whatever the consumption inside the VOIP network.

- The interconnection of sites

The interconnection solution of client's sites will contribute in bringing together the head office of companies and its divisions, or will simply connect companies to the private telecommunication network of CAMPOST and benefit from all its advantages.

- The Call Center

CAMPOST offers a Call Center equipped with the latest telecommunications technology evolutions.

• Payment services that align with the new digital era. They include amongst others:

- Electronic money transfer throughout the country and the world (MELO, MEI and SMALLWORD);

- On-line payment via the electronic payment platform or via a mobile application;

- CAMPOST is member of the money transfer service set up by UPU known as "POST TRANSFER" that enables member countries of the institution to use the same payment medium.

• The construction of new post offices and the renovation of many existing post offices;

• The establishment of two addressing systems in Ebolowa and Bertoua.

D. Prospects

• Reinforcement of complete and ultimate migration initiatives towards the digital world.

- The electronic banking service (E-banking)

Third parties software and dedicated servers in which banking software will be deployed as well as a mini Cloud to provide accessible and on-line banking services from a simple terminal, even from mobile phone.

- Electronic Document Management (EDM) System Platform to digitalise, store and manage electronic documents. This includes a National Archiving Centre and three interregional digitalisation centres in Yaounde, Douala and Garoua.

- The Hybrid mail

This is a complete platform made up of a set of equipment and software for the production of physical mail or the digitalisation of physical mails. Two production centres located in Yaounde and Garoua.

• The pursuit of the postal coding and addressing system.

• The pursuit of the renovation and construction programme of modern post offices.

• The effective establishment of an electronic commerce platform for Central Africa ecom@Africa.

• The SWISSCOM company, which is responsible for developing and providing digital services related to block chain in Central & West Africa, has implemented the "Block chain Builder" technology.

• Establishing Digital Centers throughout the postal network to deliver digital services to local populations.

8. Major international events and the international cooperation

Cameroon is member of the International Telecommunication Union (ITU) and Commonwealth Telecommunications Organisation (CTO). Cameroon is also member of the Universal Postal Union (UPU) and the Pan-African Postal Union (PAPU). Moreover, it is the headquarters of ITU Africa and Madagascar representations.

With respect to international cooperation, throughout the 2011-2018 seven-year mandate, the diplomacy of presence, participation and international influence of Cameroon allowed the country to earn major victories at the diplomatic level, in the postal, telecommunication and ICT sector and enhance its credibility with international bodies and financial backers.

A. Challenges

- Reinforcement of the diplomacy of presence, participation and influence of Cameroon.
- Reinforcement of regional and subregional co-operation through the Postal, Telecommunication and ICT sector.
- Highlighting the assets of digital economy in Cameroon and trigger international investment.

B- Actions

Within the framework of the implementation of the seven-year mandate programme of the Head of State, some significant progress have been recorded at the postal, telecommunication and ICT sector at the level of the international cooperation, with respect to some major events.

Cameroon organised the below international meetings:

- The Conference of Plenipotentiaries of the Posts and Telecommunications of Central Africa (COPTAC) on 26 April 2014 in Yaoundé.

Gathered within the framework of the meeting of Plenipotentiaries of COPTAC, the plenipotentiaries of the Central African countries responsible for the Central African Posts and Telecommunications, took the commitment to improve the quality of service as well as the security of mails in Africa and promote financial inclusion through the postal networks of member-states of COPTAC.

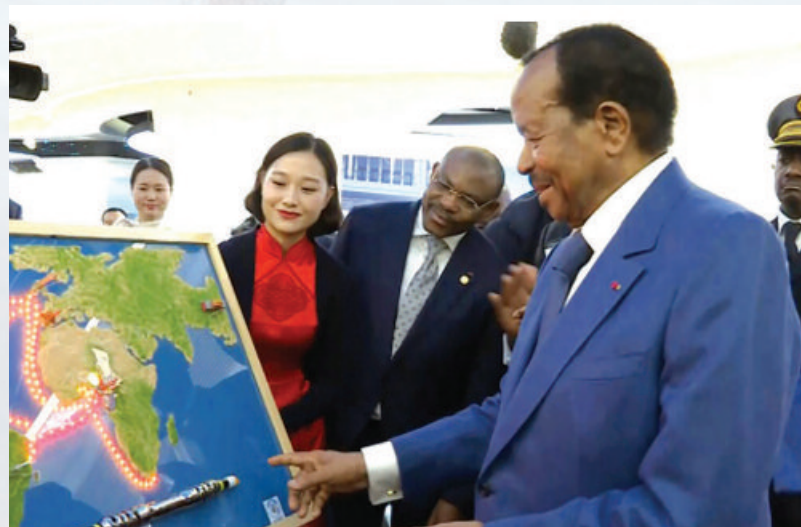
Similarly, they recommended the development of electronic money transfer through postal network in Central Africa, the development of a community

pattern of universal postal service in Africa and the creation of a contact group for the development of cross-border mail in Central Africa.

- The 9th ordinary session of the conference of plenipotentiaries of the Pan-African Postal Union (PAPU) was held from 11 to 25 July 2016 in Yaoundé.

The main purpose of this session, that took place before the UPU Congress scheduled the same year, was to prepare for this important event, in a bid to drive Africa's point through at the time of establishment of the new world strategy.

During this conference, the plenipotentiaries adopted new programmes of activities, a new four-year roadmap that will enable the African postal sector to consolidate its evolution toward emergence. In fact the main objective is the 2016-2020 cycle, the transformation of post offices in Africa into centres of financial inclusion, digital inclusion, activities of entrepreneurship and social inclusion.





- **The Conference of the Posts and Telecommunications of Central Africa (COPTAC) on 26 April 2014 in Yaoundé.**

This meeting was an opportunity for plenipotentiaries in charge of Posts and Telecommunications, to define the cooperation and development pillars in these two domains, in order to improve access to quality products and services in the subregion.

- **The International Forum on Digital Economy, 15 to 17 May 2017 in Yaoundé.**

Organised on the initiative and under the High Patronage of the Head of State, under the theme: "How to successfully carry out digital economy in Cameroon ? ", the International Forum on Digital Economy in Cameroon falls within the continuation of the international economic conference "Invest in Cameroon, land of attractiveness" held in Yaoundé on 17 and 18 May 2016.

In line with this event, the Forum highlighted the assets of Cameroon in this domain, as well as the know-how of young Cameroonian digital innovators, in order to confirm the strong commitment of Cameroonian authorities to develop digital economy, incite investment in this important national

economy sector.

Several objectives were targeted.

First of all, the purpose was to present the assets of digital economy, examine the potential of this domain in Cameroon, take stock of the strategic measures adopted by the State and appreciate the contribution of operators in the speed-up process to digitally transform the country.

This was followed by the establishment of appropriate conditions to successfully carry out Cameroon's transition to digital economy, by drawing inspiration from the successful experiences home and abroad.

Finally, mobilise international financing in a bid to foster innovative projects in the sector.

During this Forum, both public and private project holders were able to meet foreign investors to finance their projects or to create business partnerships.

This international conference witnessed the participation of representatives of public administrations operating the digital sector, national and international experts, public and private companies of the sector, economic operators, development partners, international organisations, the

business and investment community as well as funding institutions, Cameroonian start-ups of the digital economy sector and the Civil society. There were several Cameroonians from the diaspora among the invited experts, whose reputation is well established at the international level.

The organisation of the Forum on Digital Economy highlighted the Political Will of the President of the Republic, to fully engage in the development of Digital Economy and the commitment of the Government to involve in this process.

- The subregional conference on the development of digital economy for Central Africa that took place from 23 to 25 May 2018 in Yaoundé.

Organised by the ITU in partnership with the Cameroonian Government under the theme: "The Digital Economy in Central Africa: Current Situation and Challenges in a Globalised World", this conference was the ever first edition of the series of subregional rotative conferences organised by the International Telecommunication Union (ITU) on the Development of Digital Economy, in the respective four regions of ITU in sub-Saharan Africa.

The purpose for officials in charge of the digital sector in the ECCAS region was to examine key issues relating to the development of digital economy in this region, in a bid to significantly improve ICT growth and performance indicators and their contribution in regional economic integration.

Specifically, the focus of this conference was to:

- Establish the current state of digital economy in each country of the sub-region, examine the best options of a relevant development of the sector in the subregion, including the harmonisation of regulations;
- Examine conditions for a better deployment of ITU support to the subregion and also, to provide incentive to financial organisations in financing of digital economic development projects in the subregion;
- Showcasing the assets of digital economy in the subregion.

The meeting witnessed the participation of ministers in charge of the digital sector, public organisations, national and international organisations, financial backers, private operators and the Civil society of countries of the ECCAS region.

The works of the conference were presided over by the Secretary General of ITU on official visit to Cameroon for this occasion.

The Secretary General thanks the highest Cameroonian authorities for accepting to launch this series of ITU subregional rotative conferences and, lauded their committed efforts for the development of digital economy.

Concerning the representation of Cameroon in international organisations.

- The election of a Cameroon (Mr YOUNOUS DJIBRINE) as the Secretary General of the Pan-African Postal Union (PAPU) for a four (04) year mandate, from 2012 to 2016. Mandate renewed for the 2016-2020 period.
- The election of many other Cameroonians at various offices in Telecommunication and ICT international bodies.
- The election of Cameroon as member of the Administrative Council of PAPU and as president



of the Conference of Plenipotentiaries for the 2016-2020 period. Cameroon is therefore the spokesperson of Africa in the postal domain for the above-mentioned period.

With respect to cooperation projects,

- Cameroon was selected by the Universal Postal Union, through the intervention of the Pan-African Postal Union, to host the **ecom@africa** electronic platform for the Central African sub-region, in order to boost regional integration.
- The National Advanced School of Posts, Telecommunications and ICTs (SUP'PTIC) was selected by UPU to:
 - Host the regional Postal Training Centre of French Speaking countries of Sub-Saharan Africa, in a bid to ensure a permanent and efficient capacity building to professionals of the postal sector in Africa.
 - SUP'PTIC stands as a regional training centre for PAPU/UPU for French Speaking countries, with regards to training in the postal trade.

• CAB project (Central African backbone)

The Central African Backbone Project stems from a joint declaration of Heads of State of ECCAS geared at deploying an Optical fibre high speed telecommunication network in Central Africa. It is made up of a regional component and a country component.

The global objective of the CAB project is to contribute in reducing the high cost of telecommu-

nications/ICT on the subregional business environment, creating jobs of all walks of life and extending the production of goods and services to contribute to poverty reduction. Its implementation is articulated in three operational components and a management component:

- o **Component 1** - Foster sectoral environment (Environmental status layer) ;
- o **Component 2** - Increase connectivity and develop related infrastructures (physical layer).
- o **Component 3** - Promote Good Governance and Transparency through e-government applications and important initiatives in the ICT sector (application layers).
- o **Component 4** : Dedicated to the implementation and management of the project.

The first phase of the project (APL1A), financed by the World Bank, ended on 15 March 2016. While waiting for phase II that is been worked out by the World Bank, the Government of the Republic of Cameroon obtained some funds from the African Development Bank (ADB) and the Global Environment Facility (GEF) to finance the Central African Optical Fibre Backbone (CAB) project.

The Optical Fibre backbone project provides among others:

- 1) With respect to infrastructure, (i) the extension of the optical fibre national backbone on 5 fundamental stretches of roads; (ii) the supply of school, office and IT equipment to many local authorities thanks to an additional financing of the Global Environmental Facility (GEF), (iii)



the creation of an optical fibre competence development centre in the National Advanced School of Posts, Telecommunications and ICTs (SUP'PTIC).

- 2) With regard to the legal and regulatory framework of the ICT sector, CAMTEL, national historic operator, was granted an exclusive concession on interurban trunks among which features the five pillars concerned with this project.
- 3) Provide support to the regulation of meta data market under the authority of the Telecommunications Regulatory Board (TRB), in order to ensure that minimum conditions for competition on access price in favour of end-users in Cameroon.
- 4) A deposit to TRB in order to develop an economic model on the pricing of access cost to national and international connectivity in a bid to clear any obstacle at the entry of the optical fibre segment.
- 5) The implementation of two projects for CAMPOST, that is, the e-Post and e-Banking, so as to enhance financial inclusion in favour of rural populations, especially through the interconnection of post offices throughout the national territory.
- 6) Support the efforts of Cameroonian authorities with regards to rural development by creating a Markets and Weather Information System (SIMC) for the Ministry of Agriculture and Rural Development (MINADER), in a bid to help farmers/breeders have access the price of agricultural products, livestock and weather forecast.

- A project to reform the telecommunication sector with the support of the World Bank.

This project is financed by the World Bank includes among other components:

- The consolidation of the regulatory framework of the sector;
- Support to youth entrepreneurship in the digital sector;
- The technical reinforcement of the Cameroon Telecommunications (CAMTEL).
- **A High-Tech and Innovation seminars project intended for Cameroonian Digital Start-ups and Support to incubators** thanks to the cooperation with Israel



- Organisation of two seminars on:
 - o the creation companies;
 - o the establishment of a business plan;
 - o the search for financings.
- Award of gift to a private incubator in Cameroon (Activ Spaces)
- Training of many young Cameroonian in Israel
- Support to the High-Tech centre of the National Advanced School of Engineering in Yaoundé.

C- Prospects

- Signing of the Framework Agreement between UPU and Cameroon (SUP'PTIC) to transform this higher education institution into a High Level International Centre for the Postal, Telecommunications and ICT sectors
- The kick-off of the establishment of the ecom@africa electronic commerce platform project.
- The pursuit of the deployment of the CAB project (ADB phase and World Bank phase).
- Continuation of the reform programme of the telecommunications/ICT sector.
- Reinforcement of Cameroon's presence in international institutions in a bid to earn a more significant influence.
- Strengthening cooperation with UPU, PAPU, ITU and CTO in order to promote research and development.
- Strengthening cooperation ties with Israel within the framework of the support to youths and to other sectors.

Annex

STRATEGIC PLAN FOR A DIGITAL CAMEROON BY 2020

Executive summary

In his 2015 end of year address to the nation, the Head of State, His Excellency, Paul Biya, makes it clear and I quote “ [...] *we must rapidly bridge the digital economy development gap. This is a genuine growth driver as well as a niche for new jobs for our youth.* [...] ”. His address to the youth on 10 February 2016, further appeals to government initiatives in favour of the development of digital economy. In line with the messages of the Head of State, the Prime Minister, Head of Government, instructed the Minister of Posts and Telecommunications to continue within the framework of the inter-ministerial committee together with the relevant administrations, the reflection already launched within her department concerning the development of a strategic plan to foster Digital Economy.

The strategic plan for the development of digital economic, entitled “*Strategic plan for a Digital Cameroon by 2020*” is anchored, amongst others, on the addresses of the Head of State to the nation on 31st December 2015 and to the youth on 10th February 2016; the 2035 Cameroon Vision; the Growth and Employment Strategy Paper (GESP); the development strategy for the telecommunications and ICT’s sector established in 2005 and revised in 2015.

The “*Strategic Plan for a Digital Cameroon by 2020*” was developed within a participa-

tive approach, the private sector and the civil society were associated to the reflection thanks to the organisation of the First National Day for Digital Economy, on 3rd and 4th March 2016.

This document was presented at the Cabinet Meeting of July 2016 and the Prime Minister, Head of Government, mandated the Minister of Posts and Telecommunications to ensure its implementation.

This plan establishes an inventory of the digital economy in Cameroon This inventory was structured around three major pillars of the Digital Economy, that is:

- The development of infrastructure for broadband electronic communications and for the IT and electronic sectors;
- activities arising from the development of ICT or the new economy;
- the transformation of existing activities of the sectors, through the integration of the use of ICTs.

This inventory provides that the ITC service production sector is dominated by the voice mobile phone services. However, with the advent of the 3G and especially 4G offers, the data service is witnessing a sharp increase and is gradually taking an upper on the voice service. The mobile telephone service has more than nineteen million subscribers for a turno-

ver of over CFA 500 billion francs.

The production sector is almost non-existent in the ICT sector. The result is that Cameroon remains an importer of telecommunications and IT equipment and has not yet started the development of consumer electronic products. A local market for authoring software exists, but it is not sufficiently itemized at the statistical level. The same applies with the IT services.

The utilisation rate of broadband Internet is a prerequisite for the development of digital economy. The broadband Internet access rate still stands at 4% in 2015 in Cameroon, according to ITU. The new economy sector is experiencing a rapid growth with the development of fixed and mobile broadband. There is therefore a few e-commerce platforms. Media and on-line contents proliferate, however, there is still no readability with regard to the statistical data of this sector.

The adoption inventory of ICT's by other sectors of activities shows that electronic governance is gradually been put in place with the interconnection of all central services of administration and the gradual interconnection of external services. However, the number of computers per 100 persons was still estimated to 42 in 2013 in public administrations. The average Internet speed per administration stands at 4Mb/s, that is about 1.55 Kb/s per head, which is well below the target of 2Mb/s recommended by the International Telecommunication Union. The e-banking service is rapidly developing, with the growth of mobile financial services that will help improve the rate of banking services in Cameroon, which actually stands around 12%. Concerning e-health, at least four hospital centres were connected to the e-medicine network. In the education sector, 28 out of the 33 state universities are connected to Internet. There are multimedia resource centres in more than two hundred government high schools, but only 50 are connected to the Internet. There is the ongoing deployment of a platform for the digiti-

sation of tourist and cultural heritage. With regard to electronic security, a rise in cybercrime activities has been observed as access to Internet increases. To counteract this rise in cybercrime, the State has created a certification authority, the National Agency for Information and Communication Technologies (NAICT), and the number of applications certified so far stands at 05. NAICT has also set up a Computer Emergency Response Team (CERT). Notwithstanding, the electronic certification market is still to take-off, thus constituting an obstacle for the development of our cyberspace.

The inventory also shows the position of Cameroon at the international level. Therefore, with a network readiness index value of 3 on a scale of 1 to 7, Cameroon occupies the 126th position worldwide out of 143 countries assessed. The development index of electronic governance is 0.2782 on a scale of 0 to 1 and Cameroon occupies the second position in the Central African Sub-region, behind Gabon. With a cybersecurity index of 0.4118, Cameroon was positioned 5th in Africa and 15th in tie in the world.

The diagnostic analysis of the inventory has helped identify the major problems that hinder the development of digital economy in Cameroon. These problems are ranked in three categories, that is, those that hinder the development of service provision, those that hamper the development of demand and finally those relating to good governance, regulation and training.

The document also presents the challenges and opportunities of the development of digital economy in Cameroon.

At the **human and economic development** level, the main challenge for the evolution of Cameroon toward a digital economy is the creation of an added value aimed at improving the living standard and social welfare of Cameroonians.

Concerning the improvement of companies' productivity, the ability of companies to collect, produce and manage information has become the main driver of economic growth, productivity, competitiveness and innovation. At the level of access to knowledge: ICT's and Internet shall ease communication and access to knowledge and know-how. They enable citizens, beyond the easy and fast access to information, to gain significant time especially thanks to the availability of distant services. For **Research, Development and Innovation**: The challenge is to create a close relationship between researchers of the academic world and companies, to enable a better focus on concrete and innovative projects supported by manufacturers.

With respect to the creation of a local ICT industry: the creation of a local ICT industry remains a major preoccupation for Cameroon with regard to content or infrastructure.

The challenges for administrations lie on the implementation of electronic governance that makes it possible to enhance efficiency and reduce time limit and costs.

The purpose of this strategic plan is to transform Cameroon into **"a Digital Country by 2020"**. To materialise this vision, the strategic choices effected in this document revolves around eight points focused on three major pillars that are: supply, demand and governance.

1- The development of service supply in the digital economy.

This aspect is addressed in the below three areas of the strategic plan:

- **Strategic Area 1: "Developing broadband infrastructure"**, with the strategic purpose of popularising access to broadband for citizens, companies and households. The various actions and initiatives identified here shall help implement a genuine digital planning policy in Cameroon, through quality in-

frastructures, while ensuring a nationwide high speed access to companies and households as well as direct connectivity to countries of the Central African Sub-region.

- **Strategic Area 2: "increasing the production and supply of digital contents"** with the purpose of providing attractive contents developed and hosted at the local level.
- **Strategic Area 6: "developing a local digital industry and promoting research and innovation"**. It is intended to develop at the national level, locally produced digital goods and services. Actions and services proposed here are those that help to develop centres of excellence for digital innovation

2- Increase of the demand

- **Strategic Area 3: "Ensuring the digital transformation of the administration and companies"**, with the aim of speeding up the digital transformation of the administration and companies in order to increase their efficiency, transparency, competitiveness and productivity.
- **Strategic Area 4: "Promoting a digital culture by popularising the use of ICT's in the society"**. The objective is to improve the standard of living of citizen through a better use of digital services. The advent of digital economy in Cameroon will unavoidably pass through the popularisation of the use of ICT's by individuals, administrations and companies.

3- The enhancement of governance and regulation

- **Strategic Area 5: "Enhancing digital confidence"**. Actions proposed here are intended to secure the cyberspace of Cameroon.
- **Strategic Area 7: "ensuring the development of human resources and leadership in**

the digital sector". Digital illiteracy is a major hindrance to the advent of the information society. In this respect, the capacity building of human resources is a priority to transform Cameroon into a digital country by 2020. Finally, the last strategy axis of this pillar,

- **Strategic Area 8: "Improving of governance and institutional support"** with the intention of creating a conducive environment for the development of digital technology for economic development. To this end, the implementation of cross-cutting activities such as the audit of the legal and regulatory framework in order to adapt it to digital economy, the mobilisation of funding necessary for the implementation of all projects iden-

tified through innovative ways of funding, such as venture capital funds, are all critical factors for the emergence of an inclusive information society in Cameroon.

The priority action plan includes several actions grouped into projects.

The document also provides an implementation mechanism and a monitoring and assessment tool involving all stakeholders as well as a performance based device to monitor the implementation of the Strategic plan.

Some projects of the plan are being implemented and measures are being taken with donors to seek funding for full implementation of this strategic plan for a "Digital Cameroon by 2020".

NUMERICAL TARGETS BY 2020

Indicators	2016	2020
ECONOMIC DEVELOPMENT		
Contribution of digital contents to GDP*	5%	10%
Number of jobs created in the area of digital technology	10 000	50 000
Average annual contribution of the sector as taxes and duties	136 M CFAF	300 M CFAF
SOCIAL DEVELOPMENT		
% of households with Internet Access	6%	20%
% of highspeed Internet access in major companies	ND	95%
% population with access to fixed broadband Internet in households (at least 2 Mb)	4%	10%
% population with access to mobile broadband	ND	65%
Rural population serviced via community access points	47 000	10 000
Average monthly cost of Internet (CFAF)	23 000	10 000
INTERNATIONAL RANKING		
E-Government Development Index (EGDI)	0.2782	0.50
Networked Readiness Index "NRI"	3.0	4.50
Global Cybersecurity Index (GCI)	0.4118	0.65

Get to



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