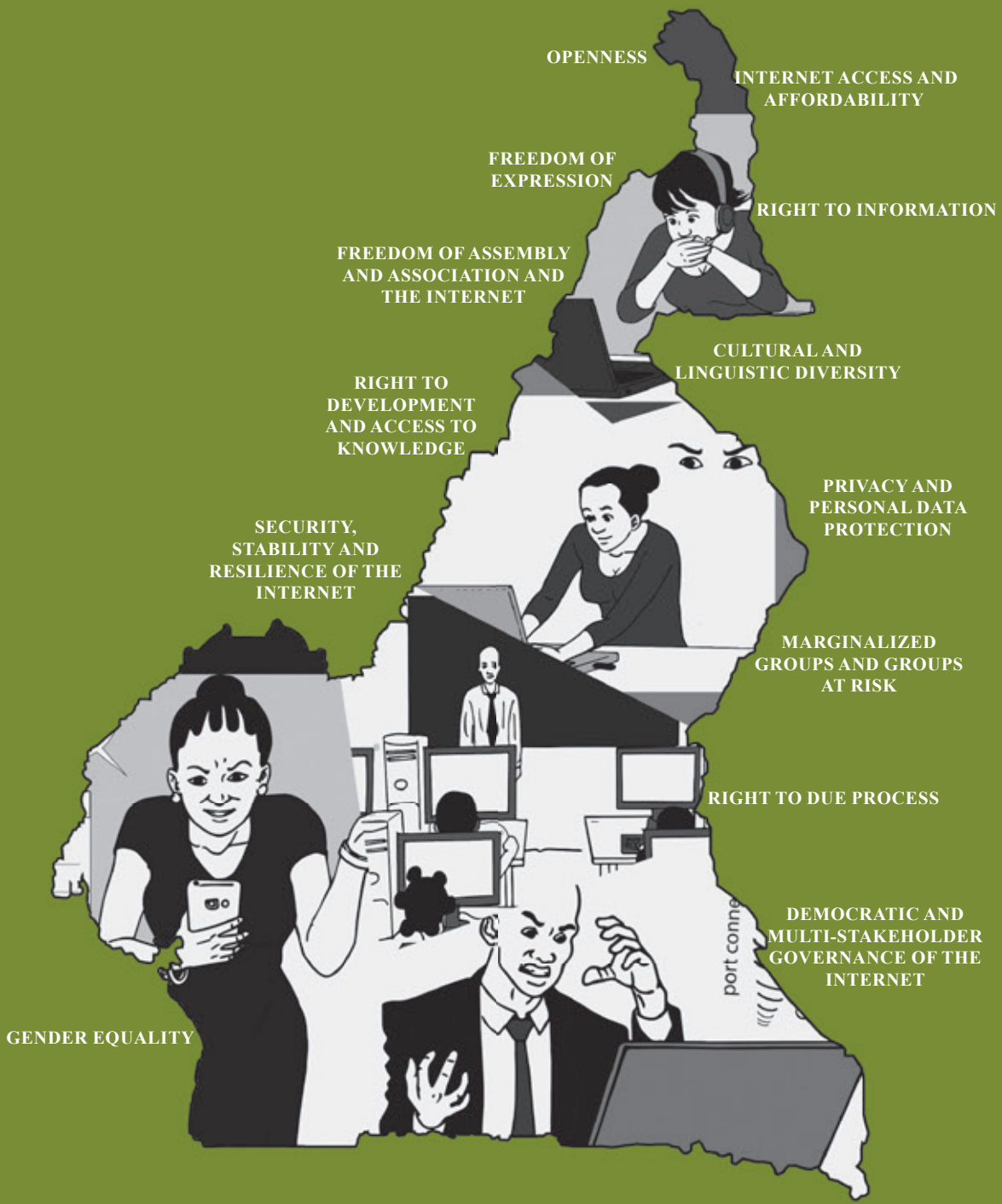
Watching Cameroon through the lenses of the African Declaration on Internet Rights and Freedoms



PROTEGE QV, 2018

Tableau OF CONTENTS

ABBREVIATIONS AND ACRONYMS

BUCREP	Central Bureau of the Census and Population Studies
ADIRF	African Declaration on Internet Rights and Freedoms
ECAM	Cameroon Household Survey
INS	National Institute of Statistics
PROTEGE QV	Promotion of Technologies that Guarantee Environment and a Better Quality of Life
ICTs	Information and Communication Technologies
ITU	International Telecommunications Union
SDG	Sustainable Development Goals
MDG	Millenium Development Goals
MINPOSTEL	Ministry of Posts and Telecommunication
GESP	Growth and Employment Strategy Paper
NAICT	National Agency of Information and Communication Technologies
TSF	Telecommunications Special Fund
TRA	Telecommunications Regulatory Agency
IPA	Investment Promotion Agency
CAB	Central Africa Backbone
CAMTEL	Cameroon Telecommunications
MINEPAT	Ministry of Economy, Planning and Regional Development
NCC	National Communication Council
MCT	Multipurpouse Community Telecenter
NCHR	National Commission for Human Rights and Freedoms
CSO	Civil Society Organisation
WSIS	World Summit for Information Society
IGF	Internet Governance Forum

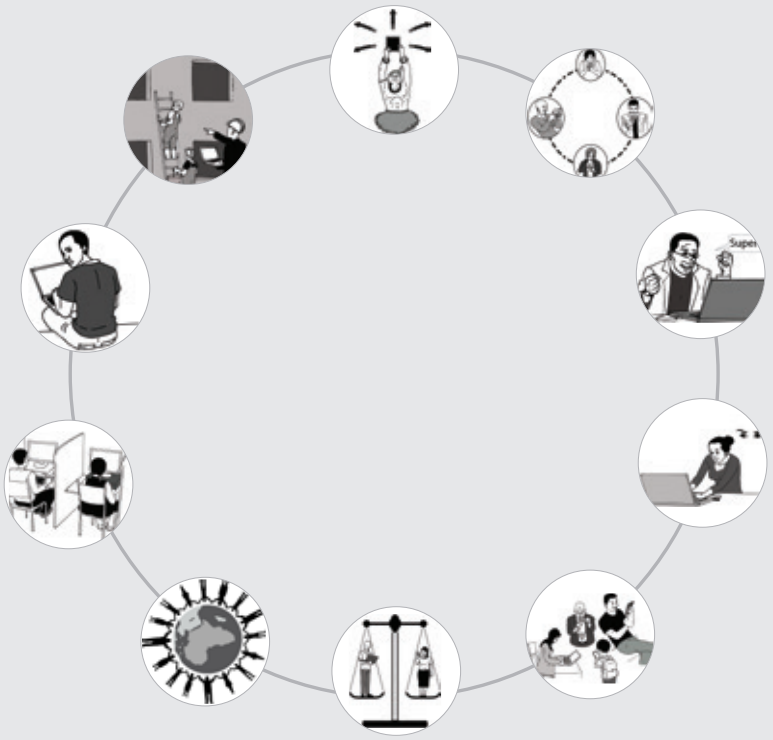
INTRODUCTION

Information and communication technologies have now become not only a main and effective all-out development's vector across the world economies, but also at the same time, a potential source of economic, social and political threat and even, a threat to human rights, notably the free expression in our societies.

The government of Cameroon, a country of 22 million inhabitants located in the central part of Africa puts a special emphasis on ICTs and the Internet to address the country's major issues such as youth unemployment, poor education service quality, low business competitiveness and country's low touristic's attractiveness, etc…
To this effect, quite a number of initiatives have been put in place by the government : the deployment of hundreds of Multipurpose Community Telecentres in rural areas to improve the access of the rural population to the Internet service and to the shared knowledge, the launching of an important programme to promote the digital economy aiming at reducing the youth unemployment, the online tax filling for economic operators and citizens. Besides, an online platform has been set up to enable the follow-up of their career by civil servants, a far reaching project aiming to train one hundred thousand (100.000) on basic computer classes was also launched, etc…
However, considering the risks generated by the use of the Internet (as witnessed during the Arab spring) and the blocking by the Cameroonian government of the Internet in some crisis situations, the question could be raised as to whether the latter is willing to allow the Internet fully express its enormous potential for Cameroon to meet its intended purposes?

In a bid to bring an answer to that question, PROTEGE-QV will analyse the nation's situation with respect to the thirteen (13) key principles of the African Declaration on Internet Rights and Freedoms (ADIRF) adopted by the African Commission on Human and People's Rights (ACHPR) in Banjul (Gambia) the 04th November 2016 through the resolution 362 on the Right to Freedom of Information and Expression on the Internet.

The current study presents the country's picture regarding the implementation of the thirteen key principles as outlined by the ADIRF.
Firstly, through a survey carried-out, the research gathered the understanding of the said key principles and identified areas of concerns.
Secondly, for each of the thirteen key principles, the Cameroon's situation will be presented by papers' authors with particular emphasis on opporunities, trends, threats and violations.
Finally, an analysed and filled out integrated measurement tool (index) of the country's situation regarding the ADIRF thirteen key principles will be proposed.



SURVEY ON CAMEROONIANS' UNDERSTANDING OF THE PRINCIPLES OF THE AFRICAN DECLARATION ON INTERNET RIGHTS AND FREEDOMS

In order to assess the level of knowledge and understanding that Internet users have of the 13 key principles of the ADIRF and to identify the critical aspects, in order to formulate the local perception, a survey was carried out, just for a start, in the city of Yaounde due to financial constraints.

Specifically, it was about:

- check whether Internet users are informed of the existence, objectives and scope of competence of the African Declaration on Internet Rights and Freedoms;
- have a better understanding of Internet users' understanding of the key principles of the African Declaration of Internet Rights and Freedoms;
- identify their perception of the evaluation of Internet service in relation to each of the principles of the African Declaration on Internet Rights and Freedoms;
- collect their expectations of the Internet service.

In order to obtain this information, the above-mentioned survey was conducted among the inhabitants of the city of Yaounde, aged at least 18, and regularly using the Internet. In general, young Cameroonians enroll at the university around the age of 18 and it is said that it is at this moment that adolescents become more and more autonomous, and therefore abler to have their own opinion on certain subjects. Only people living permanently in the city of Yaounde[1] were interviewed.

The sample design favoured the quota method, which is one of the simplest and most widespread nonprobability sampling techniques, with housing rounding, gender, age, and education as quota variables.

1 A person will be considered as permanently living in the city of Yaounde if he has been living there for at least six (06) months, or if he has been living there for less than six months, but intends to reside there for at least another six months.

This document, which presents the results of this survey, will first describe the study population, then it will analyze the level of knowledge of the ADIRF by the study population and their understanding of its key principles. Finally, it will assess how Internet users perceive the Internet service in relation to the ADIRF's key principles and their expectations regarding the Internet service will be presented.

SURVEY POPULATION

The survey was conducted in the city of Yaounde among 301 people using the Internet and aged at least 18. Since the survey was not conducted on the entire population, the 301 people were distributed according to certain variables called "quotas" to ensure the representativeness of the sample in the city of Yaounde. These variables are: age, sex, rounding and level of education. In addition, the occupation variable also made it possible to characterize the study population.

The distribution of the survey population according to the quota variables is representative of the parent population.

Thus, for the 301 people surveyed, the following breakdown is obtained between the seven districts of Yaounde city: Yaounde 1 (15%), Yaounde 2 (13.3%), Yaounde 3 (13.3%), Yaounde 4 (25.2%), Yaounde 5 (14%), Yaounde 6 (14.3%) and Yaounde 7 (5%). Similarly, the gender distribution respects the structure of the mother population. Thus, 48.8% of those interviewed are male and 51.2% are female. The age of the persons surveyed varies from 18 to over 60 years and in the image of the mother population which is mainly young, 81.1% of the persons interviewed are under 40 years of age and only 3.3% are over 60 years of age. Respondents' level of education[2] varies from

2 A person is considered without level in the case he/she has never been to school. He/she is considered having the primary level in the case he/she has attended at least whole school year of one of the first six years of the school curriculum. He/she is considered as having a second year level in the event he/she has attended during at least a year of the school betwenn the 7th and the 14th year of the school curriculum. This is the same whe it comes to the level corresponding to the University.

no level to higher level. Most of the people surveyed have a secondary level (57.8%), to a lesser extent, there are people at primary level (23.9%) and higher (13.0%). Very few are without level (5.3%).

Occupation is a factor that can influence knowledge and understanding of the ADIRF and an individual's appreciation of the Internet service. The sample covered by this study consists mainly of workers (45.2%). They are followed by the unemployed who represent just over a quarter of the sample (22.3%). The least represented occupation status is that of retirees at home (1.7%).

KNOWLEDGE OF THE DECLARATION BY THE POPULATIONS

The survey assessed the proportion of the sample that is aware of the ADIRF, its purpose and principles.

Knowledge of the ADIRF and its objective

The ADIRF was adopted in November 2016 and only 8.3% of the sample (25 people) had heard of it. Of these, 64.0% are male and the district with the most knowledge of ADIRF is Yaounde 2 (28%).

By age, the majority of people who have heard of the ADIRF are in the 25-39 age group (44.0%), 28.0% are in the 18-24 age group and only 4.0% are in the 60 and over age group. According to occupation status, workers who have heard the most about the ADIRF (48.0%) and they are followed by students (28.0%). Retirees at home and pupils heard the least about ADIRF (4.0% each).

Of the 25 people in the sample who have heard about ADIRF, 28.0% (or 7 people) are aware of its main objective and their main idea of it is *to determine Internet access rights and protect Internet users from the dangers of the Internet.*

The main way the sample heard about the ADIRF was through television (48.0%). 20% have heard of it from someone they know and only 12% have heard of it on the radio.

Knowledge of the principles of the ADIRF and its scope of competence

The ADIRF has thirteen key principles and of the 25 people who have heard of the ADIRF, only 12% are aware (3 people) of its principles. The principles that are known to respondents are:

- Access and accessibility to the Internet;
- Freedom of expression ;
- The right to information ;
- Private life and protection of personal data.

The thirteen principles of the ADIRF cover a set of areas that constitute the scope of competence of the declaration. These areas are: (i) human rights and freedoms; (ii) economic, social and human development.

Of the 25 people who have heard of ADIRF, 48% have full knowledge of the areas it covers, 24% have partial knowledge and 28% do not know the areas covered by ADIRF.

Full knowledge of the domains is highest among those at a higher education level (83.3%) who have heard of the ADIRF, while among those at a secondary level, it is lowest (23.1%). Among those at the primary level who have heard of the ADIRF, this proportion is 66.7%.

PEOPLE'S UNDERSTANDING OF THE PRINCIPLES OF ADIRF

The survey also shed light on the public's perception of each of the thirteen ADIRF principles. Indeed, the approach was to state the key principle to the respondent regardless of their knowledge of the ADIRF and then note their understanding of that principle.

An interviewee is considered to have a complete understanding of the principle if he or she associates it with the various major aspects mentioned that define it in the ADIRF. However, if it associates it with at least one but not all aspects, understanding is considered partial. Finally, it is considered null if none of

the aspects are included (no modality was selected in the questionnaire, including the other modality).

Understanding Principle 1: Openness

This principle stipulates that the Internet must be open to all. Specifically, in the ADIRF, it means that:

- *Everyone has the right to open access to content on the Internet, without discrimination, filtering or traffic control;*
- *The architecture of the Internet must be preserved as a free, open, equal and non-discriminatory means of information exchange, communication and culture.*

Overall, 69.8% of respondents have a full understanding of the principle of openness, i.e. have associated this principle with the various aspects mentioned above, 22.3% have a partial understanding and 8.0% do not understand what it means that the Internet should be open to all.

4.7% of respondents have a different understanding of Principle 1. They thought that the Internet should be open to all means among other things that:

- Internet must be open to all except children and traffickers;
- Internet must be open to civilized people;
- Internet must be free.

Understanding Principle 2: Internet access and affordability

In the ADIRF, Principle 2 states that the Internet should be accessible to all means that:

- *Internet access should be available and accessible to all in Africa without discrimination on any grounds;*
- *All Internet users should have access to information and knowledge accessible on the Internet.*

Generally speaking, this principle was rather well understood by respondents since 80.4% have a complete understanding of it and only 2.7% do not understand what Internet accessibility means. 3.0% of respondents have another understanding of this principle. They thought that this principle could also have the following meanings:

- Internet must be free and accessible everywhere;
- Secret information must not be made available to everyone on the Internet;
- Internet access should be denied to minors.

What about Internet users' habits and quality of service?

The telephone appears as the preferred means of connection for Internet users in the city of Yaounde. In fact, more than 97% of respondents connect via the telephone. The second most used means of connection is the modem (23.3%). Cybercafés and other telecentres are used less than other means (22.3%).

Those who connect by telephone do so most often every day or almost every day (60.6%) and very few do so rarely (11.6%). The majority of people who use this means of connection find it satisfactory (47.6%) while 33.6% find it unsatisfactory.

The majority of people who use a modem or Internet key rarely connect (38.6%). A little less connect every day or almost every day (35.7%) and 25.7% connect from time to time. The connection speed is considered satisfactory for most people using the modem (61.4%). One in four people who use this means find the flow unsatisfactory (25.7%) and 12.9% have no appreciation of the flow.

Four in five people who connect via cybercafés or other telecentres rarely do (80.6%) and very few (4.5%) do so every day or almost every day. 14.9% do it from time to time. 41.8% of the people who use this means of connection consider the data rate satisfactory while 38.8% find it unsatisfactory.

Whatever the means of connection used, the vast majority of Internet users consider the cost high or very high.

Tableau 1 *: Assessment of the means of Internet connection by Internet users in the city of Yaounde*

Means of internet connection	Percentage of people using this means	Frequency of use			Debit			Cost			
		Almost every day	From time to time	Rarely	Satisfactory	Non satisfactory	Neutral	High or very high	Average	Weak	Neutral
Telephone	97,0	60,6	27,7	11,6	47,6	33,6	18,8	72,6	20,2	6,8	0,3
Modem/ internet key	23,3	35,7	25,7	38,6	61,4	25,7	12,9	81,4	7,1	8,6	2,9
Internet café or other telecentre	22,3	4,5	14,9	80,6	41,8	38,8	19,4	76,1	14,9	3	6

Source : PROTEGE QV 2017

Moreover, in the city of Yaounde, only 45.0% of pupils, students and workers have the possibility of connecting in their schools attended or in their places of service. Half of these are satisfied with the connection while 28.9% are not. 21.1% have no opinion on the quality of the connection.

Overall, the connection structures most used by Internet users are multimedia centres (16.9%), home/home (15.6%) and the office (8.6%). Those that are less used are theatres (3.7%), classrooms (5.3%) and libraries (6.3%). It should be noted that few schools have an Internet connection, even less quality.

In all these structures, wifi is the most used means of access (see Tableau below). This is the only means used in theatres (100.0%) and it is also very dominant in homes (97.9%) and classrooms (93.8%).

On the other hand, the positive appreciation of throughput is more observed among those who connect in offices (76.9%) and among those who connect in homes (66.0%).

Tableau 2 *: Assessment of Internet connection structures by Internet users in the city of Yaounde*

Structure	Percentage of people using this structure	Means of access to the structure		Debit		
		Wifi	Cable	Satisfactory	Non satisfactory	Neutral
Multimedia centre	16,9	62,0	38,0	50,0	37,5	12,5
Classroom	5,3	93,8	6,3	50,0	37,5	12,5
Library / Documentation	6,3	88,9	11,1	42,1	26,3	31,6
House/home	15,6	97,9	2,1	66,0	19,1	14,9
Amphi theatre	3,7	100,0		63,6	27,3	9,1
Office	8,6	87,5	12,5	76,9	15,4	7,7

Source : PROTEGE QV 2017

Internet access is not limited only to the city of Yaounde since nearly half (49.5%) of the people surveyed say they use the Internet when they go to their village. Those who do not use them explain it by the lack of connection or lack of electricity in their village.

Most people who use the Internet in rural villages find the connection worse than in towns (61.8%). As urban areas are generally open spaces and benefit from technologies similar to those installed in Yaounde, the Internet connection is very often of a quality similar to that of Yaounde. This is also the opinion of 53.3% of respondents who connect in villages located in urban areas.

The principle of access and accessibility of the ADIRF in its application implies that there should be no interruption or slowing down of the Internet for entire populations or segments of the public under any pretext including public order or national security. Unfortunately, this aspect of principle 2 is not yet fully effective since 21.3% of Internet users in the city of Yaounde who have been questioned admit that they have already been victims of disconnection of the Internet or parts of it for reasons of public order or national security.

Understanding Principle 3: Freedom of expression

According to the ADIRF, freedom of expression should be manifested in the following ways:

- *Not to be worried about your opinions on the Internet in full responsibility;*
- *Be able to search the internet wherever you are;*
- *To be able to receive information on the Internet regardless of borders;*
- *To be able to spread information and ideas of all kinds through the Internet in full responsibility.*

Of all the people interviewed, only 30.2% have a complete understanding of this principle, i.e. have associated this principle with the four aspects mentioned above. 68.4% of the population surveyed has a partial understanding of this principle and only 1.3% does not understand what this principle means.

Of the four aspects of this principle mentioned above, respondents associated it mainly with the second and third aspects (96.7% and 90.7%). The first aspect, according to which everyone has the right not to be worried about his or her opinions on the Internet in complete freedom, is favorably received by 55.1% of respondents.

It should be noted that 2.7% of those surveyed have a different opinion of freedom of expression. These have thought that it can also be associated with:

- *Use the Internet without harming or inciting revolt;*
- *Everyone has the right to the Internet;*
- *Use the Internet for good purposes*.

Freedom of expression is considered to be respected by the majority of Internet users surveyed. Indeed, only 5.0% of them say they have ever been held responsible for content they are not the author of and nine in ten (93.4%) admit they have never been attacked for expressing their opinion on the Internet or social networks. For those who said they had been victims of attacks, these were mainly verbal (95.0%).

In addition, a small proportion of the population (14.0%) know someone who has been attacked for expressing their opinions on the internet or social networks. For these people, attacks were mainly verbal (61.9%) and to a lesser extent physical (19.0%) and legal (19.0%).

Moreover, a large majority of Yaounde residents surveyed are free to connect to the site of their choice since only 17.3%

acknowledge that they have been denied access to a website. For these people, the main reasons for refusal are the protection of privacy and the fact that it is not free. On the other hand, access to content on the Internet is much less liberalized since 36.9% of respondents admit that they have already been refused access to content on the Internet and the main reason for this refusal is that the content is not free.

Understanding principle 4: Right to information

The ADIRF makes the right to information a fundamental human right which should imply that:

- *Everyone has the right to access information on the Internet;*
- *All information on social, economic and political news or in any other field in the country or throughout the world must be available on the Internet;*
- *All information produced with the support of public funds must be available and free to all on the Internet.*

Overall, the people interviewed have a good understanding of the principle of the right to information on the Internet since 71.8% of them have a complete understanding, 26.9% have a partial understanding and only 1.3% do not understand this principle.

More specifically, 84.1% of respondents think that all information produced with the support of public funds should be available and free to all on the Internet.

The Three-Year Emergency Plan and the Development Vision for 2035 appear to be the country's most available development documents, with 43.9% and 40.4% of respondents respectively having access to them. At local level, the most available development policy documents are the Urban Development Plan (66.7%) and the Municipal Development Plan (45.8%).

In addition to information on the country's development policy documents, the other information most available according to Internet users surveyed is national and international news on politics (21.6%), national and international news on social affairs (26.9%), competition results (24.3%), job vacancy publications (21.6%) and daily national and international news on economics (19.9%).

Understanding principle 5: Freedom of assembly and association and the Internet

This principle stipulates that everyone is free to meet or associate via the Internet. According to the ADIRF, this implies that:

- *Everyone has the right to create an association on the Internet or social networks in full responsibility;*
- *We have the right to meet via the Internet or social networks in full responsibility;*
- *We have the right to register for discussion forums through Internet platforms.*

Overall, interviewees have a good understanding of this principle since 77.7% associated it with all aspects, 18.9% have a partial understanding and only 3.3% do not understand it.

Respondents attach principle 5 more to the fact that they have the right to meet via the Internet or social networks in full responsibility (89.0%).

The right of assembly and association seems to be effective for the majority of Internet users of the city of Yaounde who were surveyed since 69.1% of them admit to having already been a member of an association or group on the Internet.

On the other hand, a small proportion of respondents have already tried to create a group or association on the Internet (24.3%). Of these, 8.2% faced restrictions. These

restrictions generally concern the limitation of the number of members.

Moreover, online meetings, which are also a characterization of the right of assembly and association, do not yet seem to have been well integrated by the Internet users of the city of Yaounde who were interviewed. Indeed, only 13.0% of respondents have already participated in online meetings. For those who had never attended an online meeting, the main reason was that the opportunity never presented itself (67.6%).

Understanding Principle 6: Cultural and linguistic diversity

ADIRF devotes Principle 6 to the promotion of cultural and linguistic diversity via the Internet. This principle refers on the one hand to the *use of local, national and foreign languages to communicate on the Internet.* On the other hand, *it refers to the use of both official languages to publish official information and to the translation of official documents into local languages.*

This principle is quite well understood overall since no one gave any opinion on his understanding of the principle. Indeed, everyone interviewed has either a complete understanding of this principle (60.8%) or a partial understanding (39.2%).

Respondents mainly think that this principle refers to the fact that one has the right to use both national languages (French and English) to communicate on the Internet (98.7%) and that all official information should be published in these two languages (94.4%). They attribute this principle less to aspects relating to foreign and local languages.

Regarding national languages, French is the main language in which Internet users in the city of Yaounde can search for information (98.0%) and English is the second language (31.2%) although relatively weak. Very few respondents can search for information in the local language (2.7%) or in other languages (3.7%).

Moreover, most Internet users who can search for information online in the language of their choice, except for local languages, are satisfied with the amount of information found (at least 50%).

The promotion of cultural and linguistic diversity also implies the availability on the Internet of language learning tools such as dictionaries and software. As for French, 45.1% of those seeking information in this language say they have access to dictionaries and 31.5% to language learning software. For English, the proportions are higher (66% for access to dictionaries and 55.3% for learning software). These proportions are much lower for local languages (12.5% for access to dictionaries and 12.5% for access to learning software).

Cultural diversity is also promoted through knowledge of cultural information such as the country's history, ethnic history and ethnic cultures. 54.5% of Internet users surveyed recognize that they have access to information on the country's history. 30.2% of respondents acknowledge having access to information on ethnic history and 22.9% admit having access to information on ethnic cultures.

Understanding principle 7: Right to development and access to knowledge

In principle 7, ADIRF promotes development and access to knowledge. According to the ADIRF, this principle covers the following aspects:

- *The right to create or disseminate information on the Internet to participate in the development process;*
- *The possibility of training or self-training in all areas via Internet;*
- *Access to Internet-connected devices in schools and educational centres.*

Overall, interviewees have a good

understanding of this principle since only 0.3% have no idea of its meaning while 82.1% have a full understanding and 17.6 have a partial understanding.

88.0% of respondents believe that this principle is linked to the fact that Internet connection should be available in schools.

Among Yaounde's inhabitants, whether pupils, students or employees, more than two thirds (67.0%) say they do not have any training in the use of the Internet in their school/university or place of service. However, 95.7% of respondents say that the information available on the Internet allows them to strengthen their knowledge and capacities.

Understanding Principle 8: Privacy and personal data protection

The eighth principle of the ADIRF is devoted to the protection of privacy and personal data on the Internet. This principle makes a point of honor on the following aspects:

- *The right to communicate anonymously on the Internet;*
- *The right to use appropriate technology to ensure secure, private and anonymous communication over the Internet;*
- *The right to privacy on the Internet should not be subject to restrictions, except as provided by law.*

Overall, the interviewees' understanding of this principle does not fit with all the aspects addressed in the ADIRF since less than half of the interviewees (49.8%) have a complete understanding of this principle. However, a large majority of respondents have some idea of the meaning of this principle since only 4% do not understand it.

Of the three aspects of this principle mentioned above, the interviewees associate little the meaning of privacy and personal data protection on the Internet with the fact that everyone has the right to communicate anonymously on the Internet (58.5%).

Among the respondents, only 7.0% say they have already been victims of hacking into their personal account on an e-mail site. On the other hand, on social networks, hacking of personal accounts seems more recurrent (14.6%).

Understanding Principle 9: Security, stability and resilience of the internet

A good quality of Internet service requires that it be secure, sTableau and able to withstand computer attacks. The ADIRF in its principle 9 addresses this aspect of the Internet by explaining it as follows:

- *Every individual has the right to a secure connection to the Internet;*
- *Computer attacks against information systems should be prevented;*
- *There should be no illegal monitoring, control or interception of users' online communications by state or non-state actors.*

Overall, 67.4% of respondents have a full understanding of this principle, 31.6% have a partial understanding and 1.6% have no idea what this principle means.

Interviewees mainly attribute the meaning of this principle to the fact that every individual has the right to a secure connection to the Internet (95.3%) and should have no illegal surveillance, control and interception of users' online communications by state or non-state actors (98.3%). Very few (7.1%) associate this principle with the fact that computer attacks against information systems should be prevented.

Understanding Principle 10: Marginalized and at-risk groups

Marginalized and at-risk groups include women, children, the elderly, persons with

disabilities, ethnic minorities, among others. The ADIRF makes a point of honor on the fight against discrimination against these groups in the use of the Internet in its principle 10. This principle is explained by the following aspects:

- *Women and men should enjoy the same rights to access and use the Internet (91.7% in favor);*
- *Internet use and access should not be age dependent (45.5% in favor);*
- *Internet use and access should not depend on ethnicity (90.4% in favor);*
- *Use of and access to the Internet must not depend on the language spoken (88.7% in favor);*
- *Internet use and access should not depend on religion (90.7% in favor);*
- *Internet use and access should not depend on sexual preferences (86.7% in favor);*
- *Everyone has the right to use and access the Internet regardless of where they live (94.4% in favor);*
- *People with disabilities have the same right to use and access the Internet as fully able-bodied people (97.0% in favor).*

As regards age, the majority of those interviewed (54.5%) believe that Internet use and access should be age dependent and that minors should have controlled access to the Internet.

Overall, 37.5% of those interviewed have an understanding of this principle in agreement with the statement, while 62.1% have a partial understanding. The proportion of people who have no idea what this principle means is very marginal (0.3%).

Analysis of this principle according to the characteristics of the respondent reveals that the only person who did not understand the meaning of this principle of marginalized groups and groups at risk with regard to the ADIRF is female, between the ages of 18 and 24, having a primary level of education and living in the Yaounde district 4.

Understanding Principle 11: Right to due process

In principle 11, the ADIRF is concerned with the right to due process in the event of disputes, particularly those relating to the Internet. It therefore links this principle to the fact that:

- *States must respect the right of every individual to equal protection before the law, in particular with regard to a complaint or a law violation relating to the Internet;*
- *The court competent to deal with disputes relating to Internet content should be limited to the States concerned by the content;*
- *Private persons should be able to bring a case before a particular court only if they can establish that they have suffered harm.*

Overall, respondents have a good understanding of this principle with respect to the ADIRF since 66.4% have a full understanding of the principle, 32.6% have a partial understanding and only 1.0% do not understand what the principle means.

96.7% of respondents attribute this principle to the fact that States must respect the right of every individual to equal protection before the law, in particular with regard to a complaint or a violation of the law having very much to do with the Internet. A little less (86.4%) think that this principle means that private persons should be able to bring a case before a given court only if they can establish that they have suffered harm.

Understanding principle 12: Democratic and multi-stakeholder governance of the Internet

The ADIRF in its principle 12 addresses Internet governance and recommends that it be multi-party and democratic, i.e.:

- *Everyone should participate in Internet governance;*
- *The Internet should be governed in such a way that human rights are respected and strengthened as far as possible;*
- *The Internet governance framework must be open, inclusive, accounTableau, transparent and collaborative.*

Of those interviewed, 58.5% have a full understanding of Principle 12 while 40.5% have a partial understanding. 1.0% of respondents could not explain this principle.

Overall, respondents first attach the meaning of this principle to the fact that the Internet should be governed in a way that upholds and reinforces human rights as much as possible (95.0%). The second explanation that interviewees give to this principle is that the Internet governance framework must be open, inclusive, accounTableau, transparent and collaborative (92.0%).

Understanding Principle 13: Gender equality

The ADIRF in its principle 13 advocates equality between men and women on the Internet and links it to the following aspects :

- Men and women should have equal access to learning, defining, using and configuring the Internet;
- Women and girls should have the means to act against gender inequality, reproduced on the Internet;
- The principles underlying the Internet should be mobilized to achieve gender equality online.

Overall, 75.7% of the study population explained this principle by all three aspects mentioned above, 21.3% attached its meaning to at least one (but not all) of these aspects and only 3.0% have no idea of the meaning of this principle.

Respondents mainly explain this principle by the fact that men and women should have equal access to learning, defining, using and configuring the Internet (95.0%) and 80.4% of respondents think that this principle also means that the principles underlying the Internet should be mobilized to achieve gender equality online.

In summary, the following Tableaus and figure present the level of respondents' understanding of the statement.

Tableau 3 *: Distribution of the surveyed population according to the understanding of the thirteen principles of the Declaration*

	Principle 1	Principle 2	Principle 3	Principle 4	Principle 5	Principle 6	Principle 7
Label of the principle	Openess	Accessibility to the Internet	Freedom of expression	Right to information	Freedom of assembly and association of the Internet	Cultural and linguistic diversity	Right to development and access to knowledge
Good understanding (%)	69,8	80,4	30,2	71,8	77,7	60,8	82,1
Partial understanding (%)	22,3	16,9	68,4	26,9	18,9	39,2	17,6
Misunderstanding (%)	8	2,7	1,3	1,3	3,3	0	0,3
Total	100	100	100	100	100	100	100

Source : PROTEGE QV 2017

Tableau4 *: Distribution of the surveyed population according to understanding the thirteen principles of the Declaration (continued)*

	Principle 8	Principle 9	Principle 10	Principle 11	Principle 12	Principle 13
Label of the principle	Privacy and protection of personal data	Internet security, stability and resilience	Marginalized and at-risk groups	Right to due process	Democratic and multi-party governance of the Internet	Equality between men and women
Good understanding (%)	49,8	67,4	37,5	66,4	58,5	75,7
Partial understanding (%)	46,2	31,6	62,1	32,6	40,5	21,3
Misunderstanding (%)	4	1	0,3	1	1	3
Total	100	100	100	100	100	100

Source : PROTEGE QV 2017

Figure 1 *: Distribution of respondents according to understanding of the principles*

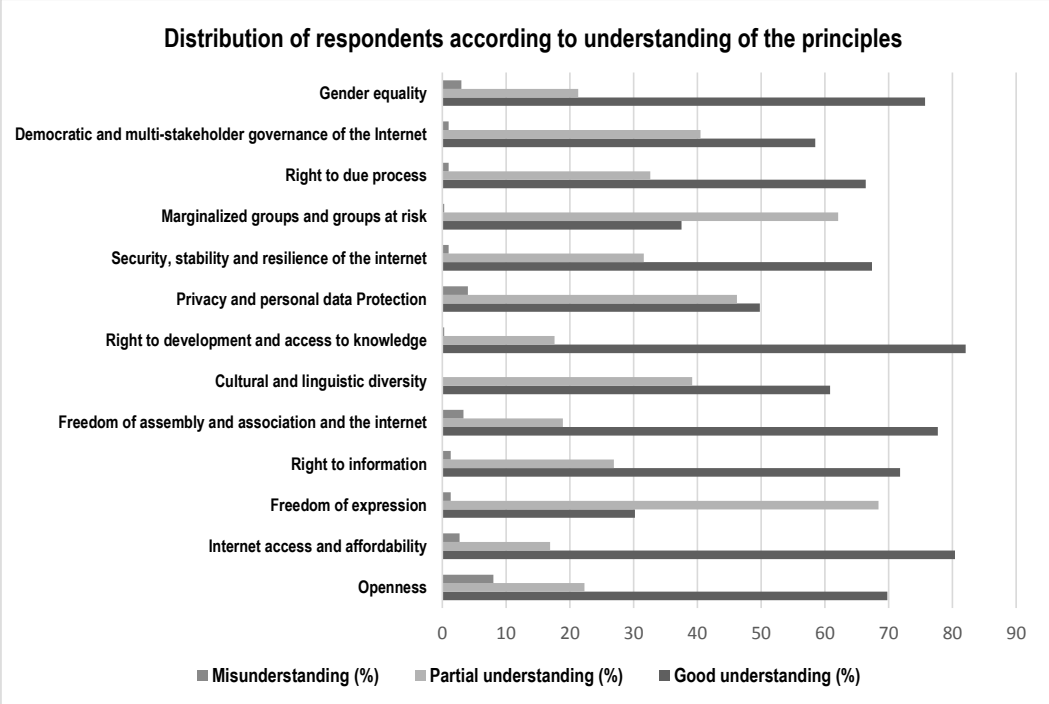


Tableau 5 *: Summary Tableau reflecting respondents' understanding of the African Declaration on Internet Rights and Freedoms*

Key principle	Aspects covered by the ADIRF	Proportion with a good understanding	Observations
Openess	- Everyone has the right to open access to content on the Internet, without discrimination, filtering or traffic control; - The architecture of the Internet must be preserved as a free, open, equal and non-discriminatory means of information exchange, communication and culture.	69,8%	This principle seems to be well understood by respondents.
Internet acces and affordability	- Internet access should be available and accessible to all in Africa without discrimination on any grounds; - All Internet users should have access to information and knowledge accessible on the Internet.	80,4%	This principle seems to be well understood by respondents.
Freedom of expression	- Not to be worried about your opinions on the Internet in full responsibility; - Be able to search the internet wherever you are; - To be able to receive information on the Internet regardless of borders; - To be able to spread information and ideas of all kinds through the Internet in full responsibility.	30,2%	This principle is not well understood by respondents who are more likely to associate it restrictively, respondents associated it mainly with the second (96.7%) and third (90.7%) aspects.
Right to information	- Everyone has the right to access information on the Internet; - All information on social, economic and political news or in any other field in the country or throughout the world must be available on the Internet; - All information produced with the support of public funds must be available and free to all on the Internet.	71,8%	This principle seems to be well understood by respondents.
Freedom of Assembly and Association and the Internet	- Everyone has the right to create an association on the Internet or social networks in full responsibility; - We have the right to meet via the Internet or social networks in full responsibility; - We have the right to register for discussion forums through Internet platforms.	77,7%	This principle seems to be well understood by respondents.
Cultural and linguistic diversity	- The use of local, national and foreign languages to communicate on the Internet; - The use of both official languages to publish official information - Translation of official documents into local languages	60,8%	This principle seems to be well understood by respondents. This is surprising in a country that has more than 200 different ethnic groups. Respondents were reserved about the third aspect.

Key principle	Aspects covered by the ADIRF	Proportion with a good understanding	Observations
Rright to development and access to knowledge	- The right to create or disseminate information on the Internet to participate in the development process; - The possibility of training or self-training in all areas via Internet; - Access to Internet-connected devices in schools and schools.	82,1%	This principle seems to be best understood as a whole by respondents.
Privacy and protection of personal data	- the right to communicate anonymously on the Internet; - the right to use appropriate technology to ensure secure, private and anonymous communication over the Internet; - the right to privacy on the Internet should not be subject to restrictions, except as provided by law.	49,8%	This principle is not taken as a whole by the respondents, who seem to associate it more with the second (83.1%) and third (86.0%) aspects noted. It is surprising that only 58.5% of respondents translate this into the right to communicate anonymously on the internet.
Internet security, stability and resilience	- Every individual has the right to a secure connection to the Internet; - Computer attacks against information systems should be prevented; - There should be no illegal monitoring, control or interception of users' online communications by state or non-state actors.	67,4%	This principle seems to be well understood by respondents.
Marginalized and at-risk groups	- Women and men should enjoy the same rights to access and use the Internet (91.7% in favour); - Internet use and access should not be age dependent (45.5% in favour); - Internet use and access should not depend on ethnicity (90.4% in favour); - Use of and access to the Internet must not depend on the language spoken (88.7% in favour); - Internet use and access should not depend on religion (90.7% in favour); - Internet use and access should not depend on sexual preferences (86.7% in favour); - Everyone has the right to use and access the Internet regardless of where they live (94.4% in favour); People with disabilities have the same right to use and access the internet as fully able-bodied people (97.0% in favour).	37,5%	The low level of understanding of this principle may be due to the evaluation approach that disadvantages multifaceted cases. However, it is noted that of the eight aspects which reflect this principle, seven each have a favourable opinion rate higher than 80% and the majority agree that Internet use and access should be age-appropriate.

Key principle	Aspects covered by the ADIRF	Proportion with a good understanding	Observations
Right to due process	- States must respect the right of every individual to equal protection before the law in particular with regard to a complaint or a law violation relating to the internet ; - The Competent Court to deal with disputes relating to internet content should be limited to the states coucerned by the content ; - Private persons should be able to bring a case before a particular court only if they can establish that they have suffered harm.	66,4%	This principle seems to be well understood by respondents.
Democratic Multistakeholder Internet governance	- Everyone should participate in Internet governance; - The Internet should be governed in such a way that human rights are respected and strengthened as far as possible; - The Internet governance framework must be open, inclusive, accounTableau, transparent and collaborative..	58,5%	This principle is more or less well understood by the respondents, who mainly relate it to the second principle. (95.0%) and third (92.0%) aspects. The particular political environment may explain the fact that the first aspect does not seem to be illustrative of the situation for respondents.
Gender equality	- Men and women should have equal access to learning, defining, using and configuring the Internet; - Women and girls should have the means to act against gender inequality, reproduced on the Internet; - The principles underlying the Internet should be mobilised to achieve gender equality online.	75,7%	This principle seems to be well understood by respondents.

Source : PROTEGE QV 2017

DOES GENDER INFLUENCE UNDERSTANDING OF PRINCIPLES?

Looking at the results, one could say that the understanding of certain principles does not seem to be influenced by the gender of the interviewee. This is the case of the principle of **Internet accessibility** (80.5% in the female population compared to 80.3% in the male population), **that of equality between men and women** (76% in the female population compared to 75.5% in the male population) or the **principle of cultural and linguistic diversity**.

On the other hand, the female respondent population has a better understanding of certain principles than the male population. It is observed for the principle of **openness** (74.0% in the female population compared to 65.3% in the male population), that of **security, stability and resilience of the Internet** (68.8% in the female population compared to 66,0% in the male population) and finally that of **privacy protection and personal data on the Internet** for which the analysis reveals that in the female population, slightly more than half of the people surveyed have a good understanding, while in the male population, this proportion is reduced to less than half.

It was also noted that some principles appear to be better understood by the male respondent population. This is the case of the principle of **freedom of assembly and association on the Internet** (81.0% for men, 74.7% for women), and **the right to development and access to knowledge** (85.0% for men, 79.2% for women), as well as principle 12 on **Internet governance** (59.2% of the male population compared to 57.8% in the female population), and finally the **right to due process** is better understood in the male population (74.8%) than in the female population (58.4%). It should also be noted that all persons who have not been able to give an explanation to the latter principle are female.

The principle of **freedom of expression** is not well understood by either women or men since less than a third of Internet users have a good understanding of this principle whatever the sex (30.6% for men and 29.9% for women).

Whatever the sex, at least 70% of the people interviewed were able to give a good explanation of the principle of the right to information and at least 25% have a partial idea of it.

AGE GROUP AND UNDERSTANDING OF THE PRINCIPLES

The age of the persons surveyed varies from 18 to over 60 years and the survey population is distributed as shown in the following Tableau:

Tableau6 *: Age distribution of the survey population*

Age group	Workforce	Proportion (%)
18 - 24 years	120	39,9
25 - 39 years	124	41,2
40 - 59 years	47	15,6
60 years and above	10	3,3
Total	301	100,0

Source : PROTEGE QV 2017

As mentioned above, like the mother population, which is mainly young, 81.1% of those interviewed are under 40 and only 3.3% are over 60.

The big question is whether respondents' understanding of the principles is influenced by their age.

Analysis of the results reveals that some principles are well or poorly understood, regardless of age, while others are related to them.

Indeed, in the first case, whatever the age group, the principles of **Internet affordability and the right to development and access to knowledge** are understood by at least three quarters of the people surveyed. In all age groups at least 70% of Internet users have a good understanding of the principle of **freedom of assembly and association on the Internet**, and at least 66% of those surveyed have it for the principle of **openness**, although the highest proportion is in the 40-59 age group (76.6%). On the contrary, whatever the age group, the principle of freedom of expression is not well understood by respondents; the proportion of

Internet users who have a good understanding of it does not exceed 36%.

In the second case, it is noted that understanding of the principle of **cultural and linguistic diversity** improves with age. Although the majority of the individuals surveyed have a good understanding of it, we realize that this proportion is lower for people aged 18 to 24 and it reaches the 90% ceiling for people over 60. The situation is the same for the principle of **equality between men and women**, which is well understood by at least two thirds of the population in each age group, although this proportion must be increased to 90.0% for persons aged 60 and over. The latter group has a good understanding of the principle of **marginalized groups and groups at risk**, while in the other age groups it is less than 40%.

The situation is reversed for other principles that seem better understood by younger people. Indeed, the results of the study show that the rate of good understanding of the principle of **Internet governance** is higher among those aged 25-39 (62.1%) and lower among those aged 60 and over (40.0%). We also note that although at least half of Internet users understood the meaning of the principle of **security, stability and resilience of the Internet**, whatever the age group, the proportion who gave a complete meaning to it is higher among people aged 25-39 (69.4%) than among those aged 60 and over (50.0%).

Understanding the principle of **due process** seems to require a certain maturity. The rate of good understanding is highest among the population aged 40 to 59 (72.3%). The proportion of people with a good understanding of the principle of **privacy and protection of personal data** on the Internet varies between 45% and 55%, the lowest proportion being for the 18-24 age group (45.8%) and the highest for the 25-39 age group (54.8%).

LEVEL OF EDUCATION AND UNDERSTANDING OF THE PRINCIPLES

Respondents' level of education varies from no level to higher and is broken down as follows:

Tableau 6' *: Distribution of the surveyed population by level of study*

Level of education	workforce	Proportion (%)
No level	16	5,3
Primary level	72	23,9
Secondary level	174	57,8
Higher level	39	13,0
Total	301	100,0

Source : PROTEGE QV 2017

Does this variable influence the understanding of principles?

The level of education seems to be an important criterion for a good understanding of the principles of **gender equality and the right to development and access to knowledge**, since the higher the level, the higher the percentage of people with a good understanding.

In the same logic, although the majority of Internet users have a good understanding of the principle of **freedom of assembly and association on the Internet** (at least 69%), the proportion of these people reaches the 84.6% ceiling for people at a higher level.

It can also be noted that the proportion of persons with a good understanding of the principle of **due process** is high in the population of persons at a higher level (74.4%) and low among persons at the primary level (63.9%). The only people who did not understand the meaning of this principle were at the primary level (4.2%).

Analysis by level of education shows that regardless of the level of education, at least 59% of respondents have a full understanding of the principle of **openness**. The proportion of the latter being higher among high school students (75.9%).

The principle of Internet accessibility is rather well understood by Internet users regardless of their level of education. The proportion of those who have a full understanding of the principle is over 74% regardless of education level. The situation is the same for **cultural and linguistic diversity**, for which most of the people interviewed have a good understanding. It may also be noted that for the principle of the right to information, more than two thirds of the interviewees were able to give a complete explanation.

On the contrary, whatever the level of education, the percentage of Internet users who have a good understanding of the principle of **freedom of expression** does not exceed 36%.

A surprising finding is made to the analysis of the understanding of the principle of **privacy and personal data** on the Internet according to the level of education. It can be seen that in the populations without a level and at least half of secondary level people have a good understanding (50% and 54%) while this rate falls to less than half for the other groups.

An analysis according to educational level shows that the proportion of people who have a good understanding of this principle of **security, stability and resilience of the Internet** is higher in the population of people at secondary level (70.7%) and lower among those without level (50.0%). The same situation is observed for the principle on **Internet governance**, which seems to be understood more by people at secondary level and less by people at higher level of education.

SURVEY EXPECTATIONS OF THE INTERNET SERVICE

With regard to the current provision of Internet service by mobile telephone operators in Cameroon, the main expectation of Internet users in the city of Yaounde concerns the improvement of speed (64.8%). The second most important expectation for them concerns the reduction of Internet service costs. Indeed, 57.5% of them find these costs high. Internet users also complain about the geographical coverage of the Internet network and more than a third (36.2%) would like to see this coverage improved. Almost a third (32.2%) of these Internet users would also like to see the Internet connection stabilized, with less variation in speed.

CONCLUSION

The general objective of this survey was to assess the level of knowledge and understanding by the inhabitants of large Cameroonian cities of the African Declaration on Internet Rights and Freedoms (ADIRF) adopted by the African Commission on Human and Peoples' Rights in Banjul (Gambia). Data collection, which was limited to Yaounde for budgetary reasons, was based on a nonprobability sampling method, in particular the quota method due to the absence of a complete sampling frame. The quota variables used are: residential district, sex, age, and education level.

Analysis of the results obtained reveals that less than a year after its adoption in November 2016, 8.3% of the inhabitants of the city of Yaounde have already heard of the Declaration. Men seem to be more aware of its existence than women, and young people in the 18-39 age group more than seniors.

Gender, education and age have an influence on understanding the principles.

While the understanding of principles such as gender equality is not influenced by the respondent's gender, it is also clear that men are more aware of the right to due process, while women are more sensitive to the right to privacy and personal data protection on the internet.

The understanding of certain principles seems to change with age. This is the case of cultural and linguistic diversity or that on marginalized groups and groups at risk.

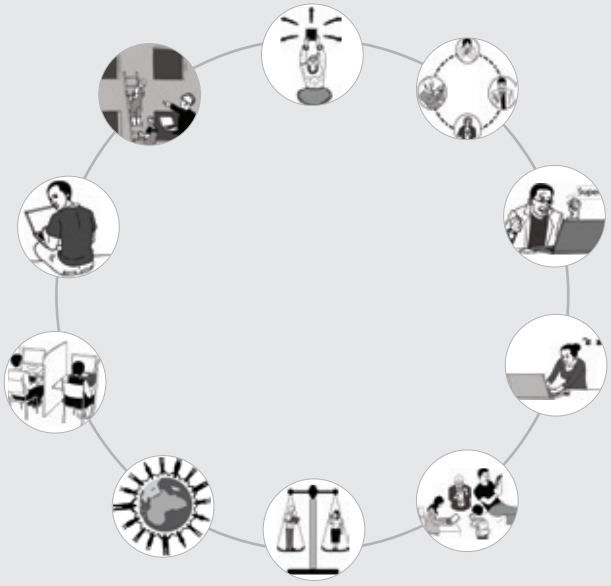
Level of education seems to be an important criterion for a good understanding of principles such as the **right to development and access to knowledge**.

As regards the assessment of Internet service, respondents have only a moderately favorable opinion of the quality of the

service currently offered by operators, and their expectations remain high, particularly concerning improved speed, lower costs and better geographical coverage to enable them to connect wherever they are.

Overall, out of the thirteen key principles of the declaration, only three (23%) have not been thoroughly understood by the marginalised and groups at risk and privacy and personal data protection.

This means that surveyed people have a fairly good understanding of the ADIRF principles and efforts should rather be made towards the dissemination of the declaration.



ARTICLES ON THE AFRICAN DECLARATION ON INTERNET RIGHTS AND FREEDOMS

THE DORMANCY OF MULTIPURPOSE COMMUNITY TELECENTRES WEAKENS INTERNET ACCESS IN RURAL CAMEROON

By ***Jean Vincent TCHIENEHOM***
Journalist
jvtchie@yahoo.fr

Initiated in 2002 by the Cameroonian government, the project to open Multipurpose Community Telecentres (MCTs) in rural areas is a perfect response to one of the principles of the African Declaration of Internet Rights and Freedoms (ADIRF), that relating to Internet access and accessibility. MCTs are "infrastructures designed to offer telecommunications, computer, audiovisual and Internet services from terminals made available to a community, in order to enable it to communicate at an affordable price and without discrimination of any kind"[1].

This project was born from the government's desire to provide rural areas, disadvantaged urban areas and isolated areas with modern means of communication to reduce the digital divide. Between 2002 and 2015, these MCTs, a total of 177 in number, operated more or less as they were opened to the public. Unfortunately, it appears that they have not achieved the hopes placed in them. They are currently at a standstill, awaiting an audit commissioned by the Ministry in charge of telecommunications, which ensures their supervision [Maintenance at the Ministry]. The difficulty, insurmounTableau in the state, will have been the access to Internet at a reasonable cost!

Policy context, legislative and regulatory texts

In its vision of development, Cameroon posits, as an essential prerequisite for development, the availability and dissemination of knowledge and know-how made possible by telecommunications and ICT. That is why the Head of State, H.E. Paul Biya, in his address to the Nation on November 3, 2004, the day after his election for a new seven-year term: "Our country needs generalized access to the Internet. On the eve of the second phase of the World Summit on the Information Society (WSIS), held in Tunis in November 2005, the government is publishing *Cameroon's Sectoral Strategy Paper in the field of Telecommunications and Information and Communication Technology*[2] which aimed to provide 20,000 villages with modern telecommunications by 2015, and to deploy multipurpose community telecentres. An information and communication technology development policy for Cameroon was formulated under the aegis of the National Agency of Information and Communication Technologies (NAICT) in 2007. The Agency's mandate was subsequently amended to focus on cyber security and related legislation.

Published in 2009, the Growth and Employment Strategy Paper (DSCE) also reaffirms the Government's determination to pursue the strategic objectives in the field of Telecommunications/ICTs by 2020, in particular to provide 40,000 villages with modern telecommunications facilities.

Finally, in 2017, the government published its *Digital Cameroon 2020 Plan*[3], that documents its sector strategy. Commitments are made to: provide sufficient quality and

1 Minister of Posts and Telecommunications, Multipurpose Community Telecentres (MCTs), mapping and inventory, November 2015

2 Ministry of Posts and Telecommunications, Sectoral Strategy Paper in the field of Telecommunications and Information and Communication Technologies (ICT) of Cameroon, 2004

3 Ministry of Posts and Telecommunications, Cameroon Digital Strategic Plan 2020, May 2016

quantity of telecommunication/ICT facilities and services to consumers throughout the national territory; reduce the digital divide in rural and peri-urban areas; and develop access to services in low or unprofiTableau areas. The aim is to increase the Internet penetration rate to 50% in 2020 from 11% in 2016 and to bring the cost of access to broadband services to less than 5% of a citizen's average monthly income by 2020. The other objectives are as follows: Connect all departmental headquarters to the national fibre optic backbone by 2018; connect all the district chief towns to the national fibre optic backbone by 2020, ensure broadband connection for all TCPs, increase the population with mobile broadband access to 65%, increase the rural population served by a community access point from 47,000 in 2016 to 10,000 in 2020 and increase the average cost of Mbits/s per month per user (cfaf) from 23,000 to 10,000.

The Cameroonian legislator has undertaken a vast regulatory reform with the aim of promoting a healthy expansion of the telecommunications sector. The legislator's undertaking begun in 1998 with the law governing telecommunications in Cameroon resulted in Act No. 2010/013 of 21 December 2010 governing electronic communications in Cameroon, certain provisions of which were amended and supplemented by Act No. 2015/06 of 20 April 2015. In Art 4, the law establishes the principle of access for all to electronic communications services. Article 28 affirms the universal electronic communications service obligation by providing good quality electronic communications services to all at affordable prices on an uninterrupted basis. Article 32 states that the development of electronic communications consists in particular in serving rural areas not covered by operators' specifications. The ITU proposed universal access and service to the telecommunications sector when telephony was the only communication service. Today the situation has changed drastically and there is now a range of tools enabling the population to communicate. It is only relatively recently that the definition of universal access has included data services. About ten years ago, in most countries, it only applied to wireline infrastructure. For Cameroonian legislation, universal service would be more of a basic telecommunications service in a competitive environment than a genuine public service in its extensive conception[4].

Application/Applicability of the principle and violations, threats, trends and opportunities

The 1998 law created a Special Telecommunications Fund (FST) intended to finance the universal telecommunications service and to contribute to the development of telecommunications throughout the territory. Act No. 2005/013 of 29 December 2005 will transform the FST, which was housed at the ART (Telecommunications Regulatory Agency) and managed by the latter, into a Special Allocation Account now housed at the Ministry of Finance. The new article 34 of Act No. 2015/06 of 20 April 2015 maintains this Fund, whose role is essential in financing universal service. It is indicated that its resources come from the annual contributions of operators and operators of electronic communications services, up to 3% of their turnover, state subsidies, budget surpluses of the Telecommunications Regulatory Agency and the portion of entry fees, renewal fees from the sale and renewal of authorizations. That's a lot of money that has been available for several years! The Fund operates through three distinct windows: universal service, development of electronic communications throughout the national territory and development of information and communication technologies. Except that, as of today, it is quite difficult to know what the TSP has actually earned and what it has funded. The finance law sets the ceiling for the TSF's usable resources each year. It is clear from the Finance Act 2018 that in the State Budget 2018, this sum is renewed up to 14 billion in commitment authorizations and payment

4 KOUAHOU THERESE, La mise en oeuvre de la société de l'information au Cameroun : enjeux et perspectives au regard de l'évolution française et européenne par Yves Léopold, pour obtenir le grade de DOCTEUR DE L'UNIVERSITE MONTPELLIER I, Le 07 décembre 2010

appropriations. It is now clearly established that this Fund has constantly served as a purse for MINPOSTEL to support its small expenses or to finance larger projects that normally come under the State Budget. The Fund has contributed to the financing of the West African submarine cable, made it possible to finance the interconnection of ministerial departments and participated in the financing of the optical fiber interconnection of the ten regional capitals. It has come to the rescue of the postal sector, which is experiencing enormous difficulties. Between 2016-2017, the Cameroonian authorities injected no less than 14 billion CFA francs into securing the country's cyberspace[5]. According to the Ministry of Posts and Telecommunications, this is an envelope from the Special Telecommunications Fund. But the most recent example of the misuse of the Fund's resources is the decision that it must now finance 15% of the budget of the Investment Promotion Agency (IPA). So far, the only real universal service operations are the construction of a number of telecentres and the connection of low-income households to the fiber optic network. The TSP is a fictitious institution since its premises do not exist. This fund should be transformed into a project like the NPDP (National Participatory Development Programme) with clear operating rules and producing annual reports subject to audits by private firms.

Less than a month after his appointment as head of the Ministry of Posts and Telecommunications, the new minister suspended the TCP project in November 2015 and initiated an audit whose conclusions are unavailable. By the end of 2017, the centers are still closed or living, leaving hundreds of employees on the payroll who are claiming several years' salary. The project suffered from several evils, the most obvious of which was the architecture of the network, which proved to be overpriced in the long run. The "consulting engineer" component for the installation, control and maintenance of access infrastructures has been entrusted to Cameroon Telecommunications (CAMTEL) in accordance with partnership agreement No. 000001/MPT of 26 January 2007 between the Ministry of Posts and Telecommunications and the incumbent operator for the connection of TCP by VSAT terminals. After the low speed of the VSAT connection was detected, the ZAMENGOE VSAT SKYEDGE I HUB was upgraded and the migration to SKYEDGE II did not meet the quality of service expectations either. The search for other solutions was considered: the connection by optical fiber of the TCP located along the national backbone, the connection to the Internet by the hybrid solution (GSM up and satellite down) of 75 TCP, the connection of the TCP located not far from the optical fiber network of the operator NEXTTEL, etc... According to an official document, *"the pre-existing network is very complex, one finds there the analogical and digital equipment which cohabit. The transport network is made up of satellites, radio-relay systems and optical fiber"*[6] .

This edifying example of TCP makes it clear that the issue of reliable Internet access at a reasonable cost is paramount in Cameroon. But despite official speeches and other petitions of principle, no one can predict with certainty what reasonable time frame this objective will be achieved. Optical fiber continues to expand: the long-term objective is to build a network of more than 20,000 km according to CAMTEL's forecasts[7]. The landing points of the submarine cables are multiplying on the Cameroonian coasts, the last one announced coming from Brazil. The Central Africa Backbone (CAB) project is coming to an end. It is a telecommunications backbone project in Central Africa which is to ensure that participating countries, including Cameroon, are connected to the rest of the world by their fiber optic network so that they can provide broadband Internet access to as many people as possible at the lowest cost. The icing on the cake is that the Yaounde

5 ATCHA Emmanuel, Le Cameroun a investi 14 milliards pour sécuriser son cyberespace entre 2016-2017, décembre 2017, https://afrique.latribune.fr/afrique-centrale/cameroun/2017-12-17/le-cameroun-a-investi-14-milliards-pour-securiser-son-cyberespace-entre-2016-2017-762017.html

6 Anonyme, Projet de mise en place des télécentres communautaires polyvalents (TCP) au Cameroun, http://telecentres.mfep.gov.dz/fileadmin/user_upload/bibilio_files/Mise__en_place_telecentres__cameroun.pdf

7 http://www.camtel.cm/infrastructures/

and Douala Internet exchange points have been operational since the end of 2017, for an investment of 1.417 billion CFA francs, borne by the Cameroonian State, with the aim of reducing the costs of access to the Internet service in the country, by now avoiding transit through foreign networks. Despite all these initiatives, some more commendable than others, one sad fact remains: Cameroon is a country in which, according to various studies, the cost and quality of Internet service remain uncompetitive compared to those of African countries with the same level of development. This curse seems to stem from the lack of an effective broadband infrastructure development plan. Another major handicap is explained by the monopoly exercised by CAMTEL on telecom transport infrastructures. For the World Bank, it is completely abnormal that CAMTEL, which already enjoys a monopoly on terrestrial infrastructures, is both a service operator. This is a situation that favors the imbalance of the telecom market. The World Bank supports the transformation of CAMTEL into a holding company with two entities. The first, public, which would manage the digital infrastructure and the fixed network; and the second, public-private, for the management and marketing of the mobile network and FTTX (optical fiber at home or at the office)[8].

Conclusion

All in all, the many efforts by public authorities to promote reliable and inexpensive access to the Internet are not producing tangible results. A Vision is missing whose implementation would be led by a clearly identified conductor. The many jurisdictions involved in the sector are ill-equipped and act alone without precise planning. The absence of a strong Directorate-General for Telecommunications, as exists in all countries, is cruelly felt. Above all, however, the incumbent operator's monopoly on optical fiber and submarine cables has a negative impact on sector health. Finally, it is to be hoped that the Special Telecommunications Fund will be reformed to allocate most of its resources to financing universal service. It is by acting on this tryptic that Cameroon can hope to be in tune with the international community which has recognized the importance of digital equality for socio-economic growth by defining a target in the framework of the Sustainable Development Goals: universal and affordable Internet access by 2020.

Recommendations

Cameroon's first National Digital Economy Days (NDEC), held from 3 to 4 March 2016 at the Yaounde Palais des Congrès, provided a range of recommendations on access that could be implemented without delay. We have drawn inspiration from them by making them our own[9] .

To the Government

1/ Review the legal framework to clarify the roles of actors in order to avoid duplication ;

2/ Define a national strategy for the development of universal service and access, broken down into axes, objectives and completed by an action plan ;

3/ Implement a master plan for broadband infrastructure development ;

4/ Make the pooling of telecommunications infrastructures binding.

5/ Create an autonomous company in charge of infrastructure management ;

6/ To remedy the insufficient financing of universal access by promoting transparency in the mobilization and use of the TSF ;

7/ Another option would be to dissolve the Fund and replace it, as in Côte d'Ivoire, by a National Agency for Universal Telecommunications / ICT Service responsible

8 **Banque Mondiale**, *Cameroun Mémorandum économique, Marchés, administration publique et croissance, 2016* http://documents.banque-mondiale.org/curated/fr/384011491285812386/pdf/110907-WP-Cameroun-Memorandum-Economique-PUBLIC-FRENCH.pdf

9 **TIC Mag**, *57 Recommendations pour accélérer l'économie numérique au Cameroun*, Magazine en ligne, édition du 05 mars 2016, https://www.ticmag.net/les-57-Recommendations-pour-accelerer-leconomie-numerique-au-cameroun/

for ensuring the implementation of Universal Service programmes on behalf of the State[10] ;

8/Accelerate the implementation of DTT (Digital Terrestrial Television) to free up frequencies allocated to broadband Internet. This is called the digital dividend ;

9/Strengthen the regulator's means of action (power, lighter supervision) ;

10/ Reopen TCP without delay after having solved the thorny access problem by using broadband via the new generation satellite, deployed in particular by Konnect, a subsidiary of Eutelsat ;

11/ Popularize public access solutions - including subsidized access in schools and local centres, public Wi-Fi connection and community networks - to reach groups that cannot pay for regular Internet use, even when prices are reduced to an affordable level ;

To the civil society

12/ Promote the "1 for 2" affordability target - 1 GB of minimum monthly allowance data for 2% of income, advocated by the A4AI coalition[11] ;

13/ Advocate for the management of telecentres to be entrusted to private micro-operators to whom the State would make concessions in terms of licensing and taxation in order to enable them to establish themselves and occupy the place that the telecentre as a public entity will never occupy in a satisfactory manner for the populations ;

10 https://www.ansut.ci/web/projets/

*11 A4AI est une coalition mondiale travaillant pour rendre la large bande accessible à tous.*http://a4ai.org/affordability/*report/report/2017/#measuring_progress_toward_affordability:_the_affordability_drivers_index*

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FREEDOM OF EXPRESSION IN THE LIGHT OF THE AFRICAN DECLARATION OF INTERNET RIGHTS AND FREEDOMS: THE CASE OF CAMEROON.

*By **Paul-Joël KAMTCHANG**,*
Data Journalist, Data activist
Pauljoelkamtchang@gmail.com

Freedom of expression is the right for everybody to think as they like and be able to their opinions by all means it deems appropriate, and in all fields. Already, Kant, listing "the duties towards other men, considered simply as men", insisted on the necessary respect of others, and, among the vices likely to undermine it, cited the abuses of freedom of expression. Today, it can in principle only be legally exercised if it does not harm the rights and freedoms of one or more specific or determinable persons.

Adapted to Information and Communication Technologies (ICTs), freedom of expression would be, as the African Declaration on Internet Rights and Freedoms States (ADIRF) adopted in November 2016, the right of everyone, regardless of frontiers, to seek, receive and impart information and ideas of all kinds through the Internet and digital technologies.

Although enshrined in the preamble to our Constitution, in view of the above definitions, this fundamental right inherent in every human being can give the illusion of being exercised without limits. Specifically, the Non-Governmental Organization ARTICLE 19 , stakeholder in the drafting of this declaration, indicates that it takes place in a context where "Internet rights and freedoms tend not to be a priority on the rights agenda in Africa".

In Cameroon, for 93 days, this assertion seemed to find fertile ground with the suspension of Internet connection in the English-speaking regions of the country. However, wouldn't perceiving freedom of expression in this country of more than 23 million inhabitants exclusively in the light of this interruption, be it not a bit reductive?

The following lines will allow us to make an overview of this issue in Cameroon with in particular the review of the legislative environment in force in our country and an analysis of opportunities, threats and violations surrounding this concept of freedom of expression as set out in the ADIRF.

Figure 2, Source : www.rts.ch

The political context, the legislative and regulatory texts in force

In Cameroon, ICTs are considered at the highest summit of the State as powerful vectors for the country's development, as witnessed by this statement by the Head of State Paul BIYA during his swearing-in for a second seven-year term at the head of the country on 3 November 2004 in the National Assembly: "Cameroon needs widespread access to the Internet". The legislative, regulatory and institutional environment governing freedom of expression on the Internet is very extensive in Cameroon.

Legislative and regulatory environment

We can quote:

- **Law No. 96-06 of 18 January 1996** revising the Constitution of 2 June 1972, which states in its preamble "*Freedom of communication, freedom of expression... are guaranteed under the conditions ... by law*".
- **Law n°98/013 of 14 July 1998,** which is the very first law regulating telecommunications; it enshrines the liberalisation of the telecommunications sector in Cameroon, but makes no reference to the Internet;
- **Law N°2010 / 012 of 21 December 2010** on cyber security and cybercrime. This law provides the country with a root certification authority, lists and punishes offences committed on the Internet;
- **Law No. 2010/013 of 21 December 2010,** governing electronic communications in Cameroon, which enshrines the issuance of multiservice licenses;
- **Law No. 2010/021 of December 21, 2010,** governing electronic commerce in Cameroon which promotes the emergence of e-commerce;
- **Law N° 2015 / 006 of 20 April 2015** amending and supplementing certain provisions of Law N° 2010 / 013 governing electronic communications in Cameroon.
- **Decree No. 2013/0399/PM of 27 February 2013** laying down the procedures for the protection of consumers of electronic communications services. It guarantees consumers rights relating to privacy, information and the processing of personal data.

In addition, two other texts in Cameroon allow us to appreciate public freedoms, including freedom of expression. These are Law No. 2014/028 of 23 December 2014 on the suppression of acts of terrorism and Law 2010/012 of 21 December 2010 on cyber-security and cybercrime in Cameroon.

The institutional framework

In a non-exhaustive way, we can cite the following actors framing freedom of expression on the Internet:

- **The Ministry of Posts and Telecommunications (MINPOSTEL)** in charge of supervision, regulation, policy development and sector studies;
- **The Telecommunications Regulatory Agency (TRA)** set up by Decree No. 98 / 197 / PR of September 8, 1998, responsible for monitoring and controlling the activities of network operators and providers of electronic communications services;
- **Cameroon Telecommunications (CAMTEL)**, a public company created by Decree No. 98 / 198 / PR of September 8, 1998, is the incumbent telecommunications operator in Cameroon, which holds the monopoly of telecommunications infrastructure management.
- **The National Agency for Information and Communication Technologies (NAICT),** Root Certification Authority, was created by decree N° 2002 / 092 / PR of April 08, 2002. This Agency was set up with the aim of popularizing ICT and making it one of the levers of the country's development. Decree No. 2012 / 180 / PR of April 10, 2012 assigns new missions

to NAICT, including those relating to the regulation of electronic security activities and regulation of the Internet in Cameroon **;**

- **The National Commission for Human Rights and Freedoms in Cameroon** created by Act No. 2004 / 016 of July 22, 2004 amended and supplemented by Act No. 2010 / 004 of April 13, 2010 which is an independent institution for consultation, observation, evaluation, dialogue, consultation, promotion and protection of human rights and freedoms.

- **The National Communication Council (NCC)** created by Law No. 90/052 of December 19, 1990 on the freedom of social communication and organized by Decree No. 2012/038 of January 23, 2012 is the regulator for the audio-visual and written press in Cameroon. Through its missions, it thus ensures respect for the ethics and professional deontology of journalists, without forgetting the freedom and responsibility of the media.

Application/applicability of the principle and violations, threats, trends and opportunities

Violation and threats

Two situations illustrating the violations in Cameroon deserve to be reported here: a quarrel between two operators, Orange Cameroun and CAMTEL and the suspension of Internet access in two regions of Cameroon.

During the first half of October 2017, Orange-Cameroon and CAMTEL engaged in a quarrel that deprived about 5 million Orange subscribers of Internet access for about a week. Indeed, CAMTEL, which holds the monopoly of optical fiber management, suspended Orange Cameroon's access to the said fiber for non-payment of an invoice of 1.6 billion FCFA for "managed capacities" in security, which Orange Cameroon contests[1]. Both companies, according to the Telecommunications Regulatory Agency (ART) violated the provisions of the laws governing their relationship and deprived many Cameroonians of their right of expression on the Internet.

For the second case, citing national security concerns in the situation now called "Anglophone crisis", the Government of Cameroon suspended Internet connection from January 17, 2017 to April 20, 2017 in the southwest and northwest regions of the country. It is worth noting that these regions are populated by 4,649,608 inhabitants, or 20% of the population of Cameroon according to figures from the Central Bureau of Population Census (BUCREP).

The suspension of the Internet in the North-West and South-West regions for 3 months prevented citizens from exercising their freedom of expression and access to information, fundamental rights cited in the Constitution of Cameroon, but also in resolution A/HRC/RES/32/13 of the United Nations Human Rights Council which *"unequivocally condemns measures aimed at voluntarily preventing or disrupting access to or dissemination of information online, in violation of internationally protected human rights, and calls upon all States to curb or cease the use of such practices".*

This suspension is in total contradiction with the principles of the African Declaration on the Rights and Freedoms of the Internet, relating respectively to freedom of expression, the right to information, freedom of assembly and association on the Internet.

This situation was the subject of a letter addressed to the Government of Cameroon on 22 January 2017 by a consortium of civil society organizations, led by Internet Without Borders (IWB)[2]. A few revealing extracts from this correspondence are reported here:

1 http://www.camer.be/63500/11:1/affaire-fibre-optique-de-camtel-la-mise-au-point-de-orange-cameroun-cameroon.html

2 https://internetwithoutborders.org/fr/lettre-ouverte-au-gouvernement-camerounais-sur-la-connectivite-internet-dans-les-regions-anglophones/

"Internet blackouts disrupt the free flow of information and lay a veil that allows repression to unfold without outside scrutiny.

"By cutting or restricting the Internet, the Republic of Cameroon has joined a growing list of governments that order cuts to the network during periods of social protest, a practice that many African Union member states have adopted, including: Burundi, the Republic of Congo, the Democratic Republic of Congo, Chad, Gabon, Egypt, Sudan, the Central African Republic, or recently the Gambia.

As of 1 February 2017, IWB estimated the losses caused by the Internet blackout at just over 723,000 dollars, or 439 million CFA francs. Silicon Mountain, located at the foot of Mount Cameroon in Buea, a privileged place for the expression of young people's creativity on the Internet, which was booming at the time of the cut, had to stop its activities with the consequences of no less than 200 unemployed young people according to the figures contained in the ADISI-Cameroon report during a mission to monitor violations of the rights to information, expression and freedom of the local press[3].

Several young people from the city of Kumba in the South-West, no longer having space to express themselves, have chosen to go to other cities, notably Yaounde, Douala or cities in the West, in order to have access to the Internet in order to regain their freedom of expression.

Trends and Opportunities

For traditional non-governmental organizations (NGOs) defending human rights and freedom of expression, the Internet is an important means of communication. Through the network, they can disseminate information about violations of these rights, and this information will be accessible to everyone. Thus, the network is used to launch campaigns against regimes responsible for such violations.

NGOs such as *Amnesty International*et *Human Rights Watch* regularly publish on their websites information on progress and setbacks in relation to fundamental freedoms, including freedom of expression. They also encourage Internet users to react against regimes that violate these rights

Another phenomenon is the emergence of human rights and freedom of expression organizations that operate solely on the Internet. *Digital Freedom Network*, which promotes new methods of action via the Internet, is one example. It tries to give a voice to those who are repressed, disseminate information about such violations, and encourage Internet users to react by sending emails to authorities who do not respect their obligations in this area.

On 27 September 2017, in a press release[4] signed by the Minister of Posts and Telecommunications (MINPOSTEL), Minette Libom Likeng, the government warned that regions affected by the so-called English-speaking crisis would not suffer a suspension of Internet service. For good reason, she indicated that this is in line with Cameroon's commitments regarding Internet access. This note denied the rumour that the government would interrupt this service over the weekend of October 1 to 2, 2017 for security reasons.

In its 2016 report on integrity perception indices in Cameroon[5], the NGO Global Integrity states in its section reserved

3 http://www.datacameroon.com/wp-content/uploads/2017/02/D%C3%A9claration-sur-les-violations-du-droit-%C3%A0-linformation_anglais.pdf

4 http://www.cameroun24.net/actualite-cameroun-info Cameroun__linternet_ne_sera_pas_coupe_dans_les_de-41947.html

5 http://www.globalintegrity.org/?s=Cameroon+2016

for freedom of expression on the Internet that no one has been arrested or imprisoned. Moreover, Didier Ndengué who is the Vice President of the Cameroon Bloggers Association (ABC) says that neither he nor his members have ever been threatened or retaliated for their opinions in their blog. The same is true of some Internet users on Facebook, Whatsapp, Instagram and other social networks who say they publish their opinions without ever having been worried by the public authorities. At the National Commission on Human Rights and Freedoms (NCHRF), it is reported that to date there have been no complaints from citizens about violations of their freedom of expression on the Internet, a statement that raises questions, especially since there has been a mission to send down this commission in the two regions of north-west and south-west Cameroon.

Cameroon would benefit from encouraging freedom of expression on the Internet. In a globalised world or in an information society, freedom of expression, especially on the Internet, is a strong indicator of public freedoms and one of the key elements on which international observers and investors rely.

As it stands, respect for civil liberties is one of the criteria Cameroon does not meet for membership of the Open Government Partnership (OGP)[6] whose main principles are:

- Transparency of public action, in particular through the opening of public data
- Participation of citizens in the development and evaluation of public policies
- Integrity of public action and public officials
- Using new technologies for openness and accountability

6 OGP is a platform that today brings together 75 countries and hundreds of civil society organizations that act throughout the world for the transparency of public action, for its co-construction with civil society and for democratic innovation. http://www.opengovpartnership.org/sites/default/files/OGP_Booklet_20160911_FR.pdf

In these freedoms, the exercise of free public opinion occupies an important place.

All in all, it is up to citizens to seize this opportunity to raise the government's awareness, which is now aware that freedom of expression on the Internet is a right like so many others. Thus, the opportunity to participate in the management of the city on the Internet can now become part of citizens' daily lives in an environment where public debate is struggling to take hold, propaganda is taking precedence over information, and television and radio platforms have become spaces for social and political positioning.

Conclusion

In the absence of a law on freedom of expression, only the preamble to the Constitution of the State of Cameroon, where freedom of expression is vaguely cited, should be used. This situation does not allow us to master the limits of the concept. Thus, the legislator gives the guarantors of public freedoms and public order the latitude to assess the limits of freedom of expression both in real and virtual terms. In view of this situation, it must be said that the legislator is thus penalizing the exercise of the citizen's right to expression.

Beyond a simple passage, it is important to record it as a detailed provision. Why not as a corollary in a law on citizens' access to information. At the moment, its conditions of exercise can be clearly established, allowing the citizen to measure for himself the extent of this freedom, rather than leaving it to the guarantor of public freedoms, which until now remain the only one to judge the appropriateness of time and space limitations.

It should also be noted that the youth of the African Declaration of Rights and Freedoms on the Internet and its relatively low popularization within States (although it is present on www.africaninternetrights.org and users are even called upon to interact), are not likely to allow citizens to appropriate its content well and claim their rights in the face of the omnipotence of government.

It should also be noted that the depositories of State authority have preferred to make the content of freedom of expression muddy at the national level to better control and crack down when the time came.

Recommendations

In view of the elements brought together in this work, it is important to recommend:

To the legislator

- Adoption of a law on access to information and public data as a guarantee of freedom of expression. One walking with the other;
- A redefinition with the extent in time and space of public freedoms, including freedom of expression on the Internet, knowing that it remains one of the privileged forums of expression for many citizens;
- A redefinition of Internet access as a right;

To the guarantors of civil liberties and public order:

- Awareness raising and training on the African Declaration of Internet Rights and Freedoms;
- An awareness on the Internet space as a virtual public place contributing to the development of our societies;

To the citizens:

- To invest the Internet as a public space for the exercise of their freedom of expression without fear;
- To defend their freedom of expression when it is threatened;

To civil society organisations :

- To train and raise awareness on freedom of expression as a fundamental right;
- Train and raise awareness on Internet access as a human right;

STATUS OF THE IMPLEMENTATION OF THE RIGHT TO INFORMATION IN CAMEROON IN ACCORDANCE WITH THE AFRICAN DECLARATION ON INTERNET RIGHTS AND FREEDOMS (ADIRF)

Marion Aurelien ENDONG AYANGMA
Lawyer
ayangmarion@yahoo.fr

The right to information is the fundamental right of the individual and the community to know and to make known what is happening and what it is in their interest to know[1]. The exercise of this right, in view of the evolution of information transmission methods with the arrival of ICTs, is now more liberal on the Internet. With regard to the African Declaration on Internet Rights and Freedoms, all information, including that resulting from scientific and social research produced with the support of public funds, should be made freely available to all, including on the Internet[2]. Perception is sometimes quite different in Cameroon. The right to information on the Internet is proving to be a kind of favour that populations can benefit from in "timely fashion". However, several texts frame it both nationally and internationally: The preamble of the Constitution, the African Charter on Human and Peoples' Rights (ACHPR), the International Covenant on Civil and Political Rights (ICCPR)

Political, legislative and regulatory context

When he was sworn in in 2004, the President of the Republic of Cameroon stated that "*Our country needs generalized access to the Internet*" to show the place and importance of ICT in Cameroon.

The legislative, institutional and regulatory framework

The legislative framework

The liberalization of the telecommunications sector in Cameroon was marked by the adoption of Act No. 98/014 of 14 July 1998 regulating telecommunications in Cameroon. This law aimed "***to promote the harmonious development of telecommunications networks and services in order to ensure the contribution of this sector to the development of the national economy and to satisfy the multiple needs of users and the population"***[3]. It was repealed by Law No 2010/013 of December 21, 2010 governing electronic communications in Cameroon, which was itself amended and supplemented by Law No 2015/006 of April 20, 2015.

The institutional framework

The institutional framework relates to all the institutions that have been set up by the State to ensure the exercise of ICT in Cameroon.

The institutions specialised in this sector include the Telecommunications Regulation Agency (TRA): http://www.art.cm/ and the National Agency for Information and Communication Technologies (NAICT):

1 https://lexicommon.coredem.info/article96.html
2 African Declaration on Internet Rights and Freedoms page 8
3 Article 1 of Act No. 98/014 of 14 July 1998 regulating telecommunications in Cameroon

https://www.antic.cm/. There are also institutions such as CAMTEL (www.camtel.cm/). These institutions operate under the supervision of the Ministry of Posts and Telecommunications (MINPOSTEL)[4].

The right to information, which is part of human rights, is also regulated by institutions such as the National Commission on Human Rights and Freedoms (NCHRF). The National Communication Council (NCC), which in relation to the right to information, ensures that the information conveyed by the written and audiovisual press is accurate, and is not likely to disturb public order.

- The TRA was established by Decree No. 98/197 of 8 September 1998 on the organization and functioning of TRA. Its mission is to regulate, control and monitor the activities of operators and operators in the telecommunications sector. The decree which sets up there provides that while *"guaranteeing healthy and fair competition in the telecommunications sector", the Agency must "ensure that access to networks open to the public is carried out under objective, transparent and non-discriminatory conditions"*[5].
- The NAITC was created by decree N°2002/092 of 08 April 2002 to promote and popularize ICTs, in order to make them a real lever for the development and fulfilment of citizens . With Decree No2011/180/PR of 10 April 2012, NAITC has been given new powers, including the regulation of online content.
- CAMTEL was created by Decree No. 98/198 of 8 September 1998 with the mission of managing the telecommunications network through the provision of data services and facilitating broadband access through ADSL and radio technologies.
- The NCC(http://cnc.gov.cm/) was created by Decree No. 91 /287 of June 21, 1991 on the organization and functioning of the NCC, with several missions, including the promotion of the ideals of peace, democracy and human rights.
- The NCHRF was created by Act No. 2004/016 of July 22, 2004, with the mission of acting as a link between the State, the public authorities and civil society in the management of human rights and more particularly in the promotion and protection of these rights.[6]

4 https://www.minpostel.gov.cm/index.php/fr/

5 Réforme des télécommunications : cas du Cameroun. Sylvie SIYAM, Serge KUATE, Serge DAHO. Association for Progressive Communication (APC) Septembre 2009 p6

*6 https://www.memoireonline.com/01/09/1901/m_Lemergence-dune--culture-des--droits-de-lhomme-au--Cameroun10.htm*l

Figure 3 : The members of the NCHRF during its nineteenth ordinary session[1]

The regulatory framework

The decrees governing ICT, in particular the right to information in Cameroon are:

- Decree No 2012/203 of 0 April 212 on the organisation and functioning of TRA;
- Decree No2012/180/PR of 10 April 20012 on the organisation and functioning of NAITC;
- Decree N°2012/1640PM of 14 June 2012 fixing the conditions of interconnections for access to the electronic communication network, open to the public and infrastructure sharing among others.

7 https://www.google.cm/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjLw7vq_NzXAhWEPhQKHfnJDY8QjhwIBQ&url=https%3A%2F%2Fwww.yaoundeinfo.com%2Fcameroun-droits-de-lhomme-un-budget-de-1-milliard-256-millions-de-fcfa-pour-la-commission-nationale-en-2016%2F&psig=AOvVaw032o9jLfvcITA5fC8Ss-6gL&ust=1511810950650774

Inclusion of the right to information in national or sectoral strategies (ICT and Telecommunications sectors)

With the arrival of the Internet, a new opportunity is given to governments to communicate with populations, through the use of open data. This is what Cameroon seems to want to operationalize. First, through the sectoral strategy adopted in October 2005. This document quotes the President of the Republic in the following terms: *"Our country needs widespread access to the Internet"*. Then with the Cameroon 2020 Digital Strategic Plan. Through these two documents, Cameroon intends to carry out several axes of national/sectoral strategies for the development of its digital space. Thus, a few strategic areas have been identified, in particular; the promotion of digital culture through the widespread use of

ICTs in society, and the assurance of improved governance and institutional support[8].

Consistency of the right to information with the Sustainable Development Goals (SDGs)

The SDGs are a set of objectives carried by the United Nations with the aim of international development. They replace and complement the Millennium Development Goals, which ended in 2015. According to the MDGs, "Broad public participation and access to information as well as to judicial and administrative bodies are essential for the promotion of sustainable development"[9]. Therefore, the SDGs recognize that sustainable development includes "public access to information and fundamental freedoms". this is also justified in objective 16, which aims to: "*Promote peaceful and inclusive societies for sustainable development, ensure access to justice for all and establish effective, accounTableau and inclusive institutions at all levels*"[10].

Figure 4 : Access to information in rural areas[11]

Application/Applicability of the right to information (violations threats trends and opportunities)

Impact of the right to information in the social and political economic sectors

The right to information concerns all aspects of economic, social and political life. In particular, it could not stop at the doors of ministries and companies.

This right is a right to publicity which implies the lifting of secrets and obstacles that deprive citizens of information of public interest (whether from governmental, administrative or economic sources), and consequently, free access to all sources of information and the right to freely investigate all facts that condition public life.

It should therefore be specified that the use of ICTs, including the practice of the right to information, would be a lever for promoting development. In his end-of-year message to the Cameroonian people in 2015, the President of the Republic, Paul Biya, will have placed particular emphasis on the ICT sector. For him, ICT appears as one of the essential levers for the industrialization of Cameroon. According to the Cameroonian president, the telecommunications sector in full expansion in Cameroon and more generally the Digital Economy abounds in considerable opportunities which it is absolutely necessary to exploit in terms of job creation and growth vector: The Digital Economy *"is a real growth accelerator, in addition to being a real niche of new jobs for our youth. We must be able to take full advantage of it. The Government, in its organisation will give this sector all the attention it deserves".*[12]

Implementation/ applicability of the right to information by different levels of government (National, local)

The right to information applies to different levels of government both nationally and locally. There are information transmission sites such as cameroon-info. net *(http://www.cameroon-info.net/), camer.be(http://www.camer.be/index.php),cam-*

8 Cameroon Digital Strategic Plan 2020. p25
9https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000030625449
10 http://fr.unesco.org/sdgs/ci
11 https://www.google.cm/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwj5k9Xl_dzXAhUGPhQKHdajCP8QjhwIBQ&url=https%3A%2F%2Ffr.unesco.org%2Fsdgs%2Fci&psig=AOvVaw2ZuJo6VwmBEJ7T3Jbwn-3g&ust=1511811201769258

12 https://www.ticmag.net/cameroun-paul-biya-prescrit-le-developpement-des-tic-en-2016/

erounlink.com(http://www.camerounlink.com/), and many other sites that transmit information for the entire national territory on the Internet.

At the local level, the right to information is a measure introduced by Act No. 2004/017 of July 22, 2004, guiding decentralization in order to enable citizens not only to participate directly in the management of local development but also to be able to audit the accounts, budgets and minutes relating to the management of these local authorities[13]. With regard to information on the Internet, it is worth mentioning the presence of certain municipalities that have websites for communication, in particular the Bangangté municipality *(www.communebagangte.net)*, the Douala Urban Community *(www.Doualacity.org*), the Bafoussam urban community *(www.Cubafsam.org*), the Dibombari town hall (*www.MairieDibombari.org*), the Kumbo town hall (*www.Kumbocouncil.org*), to name but a few.

Practical examples on opportunities, trends, violations, threats related to the right to information in Cameroon

The right to information, when it is effective in a State, creates opportunities in different aspects of socio-political and economic life. Less dramatically, but more frequently, the use of the Internet enables SMEs to maintain convenient, fast and inexpensive day-to-day relationships with their suppliers, local and/or foreign customers and service providers.[14] The information system is also the driving force behind the evolution of new product-market pairs, on new strategic management methods in an increasingly turbulent competitive environment. Through ICT, the manager of a company masters information. This enables it to control its productive, commercial, financial, human and information management systems. SMEs are a strong argument in favour of promotion and incentive policies designed to maximise their contribution to job creation, economic growth and, consequently, the fight against poverty and social inequality. The right to information also contributes to the modernisation of the public service. Today, ICTs are apprehended by the States, in a double role of lever of modernization of the administration and planning of the territory, with a system of office ***automation technology***[15].

The information transmitted on the Internet was made during the presidential elections of February and March 2000 in Senegal, the use of mobile phones by journalists (whose presence was systematic in polling stations) allowed the results to be broadcast in real time on radio stations and also on the Internet (where the electoral register was available online) and forced the outgoing candidate **Abdou Diouf** to acknowledge his defeat within particularly short deadlines. This avoided confrontations that were feared because of the tension that prevailed.[16]

However, despite the existence of a legal arsenal set up with the aim of harmonising citizens' freedom on the Internet, including the right to information, the right of access to information is constantly infringed in Cameroon. For example, the suspension of the Twitter account MTN from 08 to 18 March 2011 justifies a violation of this right[17].

13 Article 13(2) of the law of 2004/017 guiding decentralization in Cameroon

14https://www.cairn.info/revue-des-sciences-de-gestion-2006-2-page-111.htm

15 Office technologies include: digitization (the process by which information is codified for use in processing); electronic communications (exchange of information using telecommunications media between computer processing devices), social networks and automatic exchanges (physical and local interconnection).See Léon Bertrand NGOUO : La reforme administrative dans les services publics en Afrique (2005) Harmattan Cameroun p149.

16 Théophile E. VITTIN : Nouvelles tendances et nouveaux enjeux de l'information et de la communication en Afrique P190

17 https://rsf.org/fr/actualites/bloque-depuis-plus-de-dix-jours-le-service-twitter-sms-est-il-en-passe-detre-retabli

In November 2016, the African Commission on Human and Peoples' Rights (ACHPR) affirmed the Declaration of Principles on Freedom of Expression in Africa that "everyone has the opportunity to exercise the right to freedom of expression and access to information without discrimination. By adopting the Resolution on the right to freedom of information and expression on the Internet in Africa, in which it also noted its concern "at the emerging practice of States Parties to interrupt or limit access to telecommunication services such as the Internet, media and messaging services, increasingly during elections".

However, between November 2016 and January 2017, the regions of North-West and South-West Cameroon experienced a socio-political crisis now described as an "Anglophone problem", a situation that had an impact on the citizen, who suffered inherent consequences, and this once again sufficiently demonstrated a violation of the right to information by the Cameroonian public authorities.

Figure 5 : ***Demonstrators during the crisis in the English-speaking regions of Cameroon*** [18]

Moreover, in recent years, the violation of public and individual freedoms by sub-prefects has caused a real rush by Cameroonians towards social networks, which remain the only place where they truly exercise their freedom of opinion, expression and information[19]...

A real incongruity which hides badly the vow to muzzle the citizens and the press, while depriving them in the meantime, of the exercise of their opinions on the march of their city whereas Cameroon is a decentralized State[20].

Conclusion

In the light of the above, the right to information in Cameroon, governed by an arsenal of texts, with institutions set up for its control, could be a facilitating element

18 https://www.google.cm/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwik0dfv_9zXAhVFtRQKHUU4CoYQjhwIBQ&url=http%3A%2F%2Fwww.camernews.com%2Fcameroun-crise-anglophone-les-vertus-du-dialogue%2F&psig=AOvVaw0fJEKC3c68EU09vl2QoPOl&ust=1511811701222444

19 http://www.camer.be/57501/6:1/declaration-de-ladisi-cameroun-sur-les-violations-du-droit-a-linformation-des-citoyens-et-de-la-liberte-de-presse-par-le-gouvernement-camerounais-cameroon.html

20 Ibid. Statement by ADISI-Cameroon on violations of the right to information

for the management of State affairs with opportunities that it opens up. But, it meets many obstacles in practice, first with a rather limited opening of the data to the public, and then with certain violations in its exercise, the most recent of which would be the interruption of the Internet during the management of the *"Anglophone crisis"* Nevertheless, the right to information is a principle aimed at promoting and guaranteeing human rights and freedoms, and when applied and respected, it could strengthen the trust that must exist between those who govern and those who are governed, and provide clarity in the management of public affairs for the promotion of efficient and effective development.

Recommendations

In order to promote the practice of the right to information in Cameroon, the following recommendations could be proposed to the various actors:

The government

The Cameroonian government should facilitate access to information for citizens by creating websites and portals in all state structures and regularly updating information. Relaxing the extreme confidentiality of information in government management, using all necessary means of communication in order to inform all citizens wherever they may be in the national territory.

The civil society

Civil society should train, educate, mentor and strengthen the skills of communities and populations. Citizens should actively participate in political life by demanding transparency in the management of public affairs, by working with journalists to report information of which they are aware.

Mobile telephone operators

Mobile telephone operators should extend network coverage throughout the national territory and improve the quality and cost of Internet connection, which would be major assets aimed at facilitating Internet access for the exercise of the right to information by all Cameroonian citizens.

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CONCEPTION AND CONCEPTUALIZATION OF FREEDOM OF ASSEMBLY AND ASSOCIATION AND THE INTERNET IN CAMEROON

By ***Lionel AMAHATA KIABEGA***
Associate Researcher at the Centre de Recherche d'Etudes Politiques et Stratégiques (CREPS) - University of Yaounde II-Soa
lionel_akl@yahoo.fr

"Balance ton porc" in France, "Nous sommes tous des Khaled Saïd" in Egypt, or "Balai citoyen" in Burkina Faso, are all movements created on the Internet for social mobilization purposes. The existence of such associative movements makes it possible to highlight the apprehension of the right to freedom of assembly and association on the Internet. Freedom of assembly means the fundamental right of every individual to assemble with others in the same place (physical or intangible). Freedom of association is the right of any natural or legal person throughout the national territory to establish an association[1], to join or not to join. Online freedom of assembly and association guarantees the right to meet online and exchange views, to share opinions, but also to protest collectively against anything that may seem undesirable[2]. On the Internet, anyone can associate with others, and can do so by visiting sites or using electronic networks to meet people, whatever the objective pursued as long as it respects the law[3]. In the light of all these considerations, the question arises as to what are the contours of freedom of assembly and association on the Internet in Cameroon? To answer this question, a contextual analysis of the political and regulatory framework (I) must precede that of the conceptualization of freedom of assembly and association on the Internet in Cameroon (II).

Contextual analysis of the political and regulatory framework of freedom of assembly and association on the Internet in Cameroon

Cameroon, like most third world countries, belongs to the third wave of democratization. The establishment of democracy has emerged as a legitimately accepted reality. The principles of this political system integrate an openness and participation of the people in the management of the respublica. Freedom of expression is illustrated as one of the principles of democracy. In Cameroon, freedom of assembly and association benefits from a legal-institutional framework (A) and is integrated into national public policies (B), resolutely oriented towards achieving the Sustainable Development Goals (C).

Legal and institutional framework for freedom of assembly and association

The legal framework of this principle is generally based on its enshrinement in the preamble to the Cameroonian Constitution of 18 January 1996. There are also texts governing freedom of assembly and association. In this vein, at the national, regional and international levels, this principle, which draws its essence from freedom of expression, benefits from a certain legislative framework.

1 Convention by which persons pool their knowledge or activities for purposes other than profit sharing.
2 Wolfgang BENEDEK, Matthias C. KETTEMANN, Liberté d'expression et internet. Strasbourg, Editions du Conseil de l'Europe, 2014. p.38
3 Idem.

At the national level[4], Cameroon adopted Law 90-053 of December 19, 1990, on Freedom of Association in Cameroon; Law 90/055 of December 19, 1990, establishing the regime for public meetings and demonstrations; Law 99/011 of July 20, 1999, amending and supplementing certain provisions of Law 90/053 of December 19, 1990; and, to a lesser extent, Law 99/014 of December 22, 1999, governing Non-Governmental Organizations.

The legal framework on the issue of freedom of assembly and association is supplemented by all the texts ratified by Cameroon at both regional and international levels. At the regional level, reference can be made to the African Charter on Human and Peoples' Rights of 1979 (Article 10) and the African Charter on the Rights and Welfare of the Child of 1990 (Article 8). At the international level, we can cite the 1948 Universal Declaration of Human Rights (Article 20); the International Convention on the Elimination of All Forms of Racial Discrimination of 1965 (Article 5 (ix)) the International Covenant on Civil and Political Rights of 1966 (Article 22) the International Covenant on Economic, Social and Cultural Rights of 1966 (Article 8) the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms of the United Nations of 1999 (article 5); the 2003 Convention on the Rights of the Child (article 15); the 2006 Convention on the Rights of Persons with Disabilities (article 29).

These texts adopted and ratified by Cameroon take shape at the institutional level in the creation of a structure in charge of the protection of individual rights and freedoms. This is the National Commission on Human Rights and Freedoms, created by Act No. 2004/016 of 22 July 2004. The NCHRF is an institution with legal personality and financial autonomy that denounces all violations of fundamental rights and public freedoms throughout the country. Its approach is based on consultation, observation, investigation, evaluation, dialogue, consultation and warning actions in the promotion and protection of human rights[5]. In this sense, it is the pioneering structure in Cameroon in terms of guarantees of rights and freedoms of assembly and association, whatever the space (air, land, sea, cybernetics). This function of the NCHRF is carried out through Sub-Commission No. 1, responsible for Civil and Political Law issues, and to a lesser extent, Sub-Commission No. 2, responsible for Economic, Social and Cultural Rights, dealing, among other things, with issues of freedom of association, assembly and demonstration and the right to participate in cultural life. In addition to this structure, since 1998 there has been a Technical Committee responsible for monitoring international instruments relating to human rights and freedoms. It facilitates and prepares the signature of the said instruments and ensures the implementation of the treaty obligations arising therefrom.

Inclusion of freedom of assembly and association on the Internet in national public policies

Public associations, meetings and demonstrations are part of the enjoyment of the fundamental rights and freedoms accorded to citizens in a democratic system. On this question, in Cameroon there is a relative lethargy on the part of the State in the inclusion of freedom of assembly and association in public policies. The NCHRF also reveals that the exercise of freedom of association is marked in Cameroon by a strong administrative tolerance towards associative activities conducted in

4 Apart from these texts, this section may include Act No. 90-056 of December 19, 1990 on Political Parties; Act No. 68/LF/19 of November 18, 1968 on professional associations or unions of civil servants. But also the Decrees n°93/574/PM of July 15, 1993 fixing the form of the professional trade unions admitted to the registration procedure, and n°93/576/PM of July 15, 1993 fixing the form of the certificate of registration of a trade union.

5 http://www.cndhl.cm, « What is the NCHRF", consulted on 30/12/17

disregard of the required administrative procedures[6]. However, this inertia on the part of the administration in the framework of the freedom of assembly and association contrasts with the zeal of the administrative authorities to obstruct the free exercise of the freedoms of demonstration and public meetings. We will return later to these threats to the emancipation of these rights[7].

Notwithstanding this obsolescence of the inclusion of freedom of assembly and association on the Internet in the political agenda, we can still note that the "Digital Cameroon 2020" Strategic Plan has among other objectives, to promote local content fairs / forums (Strategic Axis 2), and organize annual ICT fairs and forums (Strategic Axis 6).

Synergy between freedom of assembly and association and the MDGs

This principle is in line with the concerns of the MDGs. The Sixteenth pillar[8] rightly recommends promoting the rule of law and providing equal access to justice for all; ensuring that decision-making is dynamic, open, participatory and representative at all levels; and, above all, guaranteeing public access to information and protecting fundamental freedoms, in accordance with national and international law. The existence of freedom of assembly and association makes it possible to achieve this objective. Since the Internet represents a new opportunity to assess the emancipation of fundamental freedoms, it can increase the opportunities and capacities of citizens and Internet users to form associations, improve the management and organization of these associations and increase their membership and scope[9]. This irrefutably demonstrates the synchronous alignment between the MDGs and freedom of assembly and association both online and in physical spaces.

In the light of all the above, it is important to analyse this principle in terms of its implementation in the Cameroonian landscape.

Endoscopy of the interweaving of freedom of assembly and association and the Internet in Cameroon

Freedom of assembly and association is fully recognized in Cameroon as a right for the benefit of citizens. On the Internet, this freedom is also a reality. This has an impact on the socio-political life of the country (A). It also seems important to identify the applicability of this principle on the Internet (B) and the threats related to its exercise (C).

Impact of the application of freedom of assembly and association online

To understand the impact of freedom of online assembly and association on socio-political life in Cameroon, we must start from the premise that the Internet, social networks and mobile phones improve human freedoms in the sense that they inform and reflect on social, political and economic issues, build associations and networks, and come together online to advocate and defend human rights[10]. Indeed, the freedom of online assembly and association offers the possibility of grouping together in order to exchange information and opinions in a dematerialized space.

6 Commission Nationale des Droits de l'Homme et des Libertés, Rapport sur l'état des droits de l'homme au Cameroun en 2016, p.34

7 Idem.

8 "Promoting peaceful and inclusive societies for sustainable development, ensuring access to justice for all and building effective, accounTableau and inclusive institutions at all levels".

9 Alex COMNINOS, « Le droit de réunion pacifique, la liberté d'association et l'internet ». APC, Thèmes émergents, 2012. p.2

10 Ibid. p.1

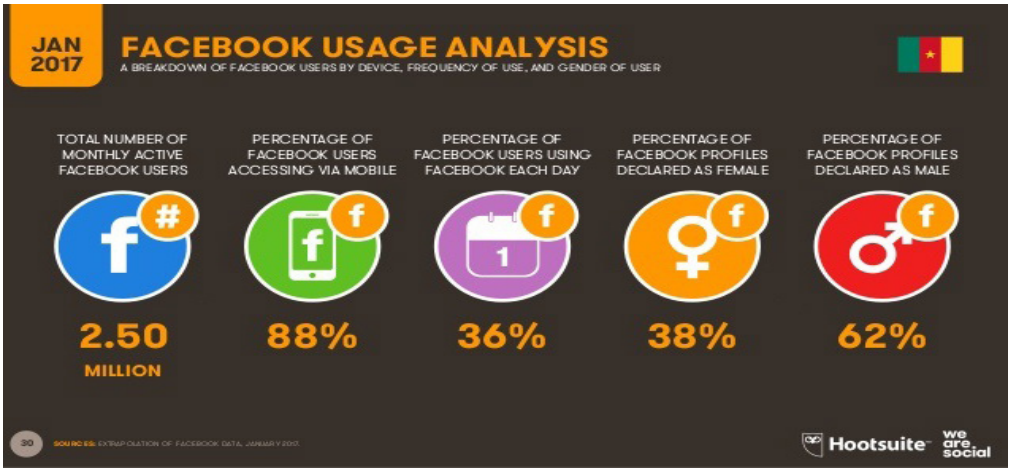

Figure 6 : Percentage of Facebook users in Cameroon

Source :2017 Digital Yearbook

These groupings can be of the order of leisure and entertainment. But the freedom of online assembly and association also increases citizens' political participation in *respublica*. In this vein, it is possible to understand the role played by cyberactivism and popular mobilizations against a particular policy or the state in general. Today, social media are extremely present on the socio-political scene of countries and it is now difficult to imagine that social mobilization can take place without them. They can both give impetus to political and social reforms and function fully in times of crisis as instruments of mobilisation and information banks[11].

Exchanges of opinions through associations or online meetings make it possible to awaken citizens' awareness in the logic where the flow of data aims to inform the mass. These citizen and activist uses of the Internet can play a new role in the construction of a functional public space, indispensable for the construction of a democratic society[12].

11 David M. FARIS, « La révolte en réseau : le « printemps arabe » et les médias sociaux », in *Politique étrangère*,2012/1, p.108

12 Romain LECOMTE, « Révolution tunisienne et Internet : le rôle des médias sociaux », in *L'Année du Maghreb [En ligne], VII | 2011, mis en ligne le 01 janvier 2013, consulté le 05 janvier 2018. URL : http://journals.openedition.org/anneemaghreb/1288 ; DOI : 10.4000/anneemaghreb.1288*

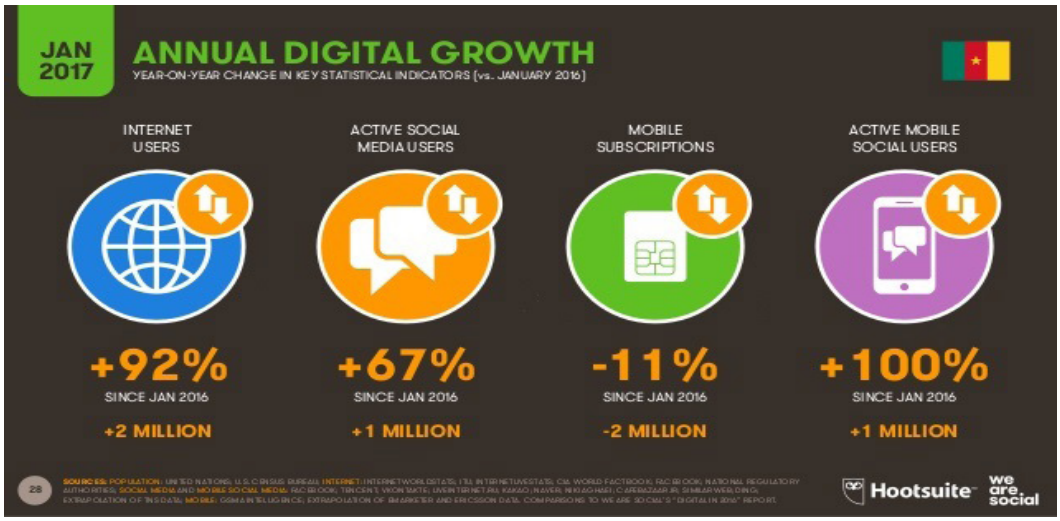

Figure 7 : Increase in the number of social network users from 2016-2017

Source :2017 Digital Yearbook

It is in this sense that there is a plethora of groups of people formed via social networks Facebook, Whatsapp or around bloggers. As illustrated in the previous figure, the number of Internet and social network users is constantly increasing in Cameroon.

However, online meetings and associations can also be harmful. While it is agreed that they contribute to the socio-political awareness of individuals, it is important to bear in mind that these meeting places are also spaces for misinformation and unfounded rumours. Thus, on the day of the Eseka railway accident on 21 October 2016, which claimed several dozen victims, the first false information circulated on social networks in the morning reporting the derailment of the CAMRAIL train, a national railway company. However, the effectiveness of the freedom of online assembly and association increases the number of Internet users at the same time as it increases their connection time.

One last non-negligible element must be mentioned. Freedom of online assembly and association presents opportunities for education through distance learning. The Internet offers the possibility of organising exchange forums between teachers and pupils with a view to an online course. Indeed, according to the pedagogy of distance learning, foras and chats are as many meeting spaces between learners and the teacher and made available to the latter as part of his teaching.

The applicability of freedom of assembly and association online

If associations and meetings in public places need permission to exist, online the process is quite different. Online meetings and associations are not subject to any declaration and do not require any administrative consent. On the Internet, this right is not subject to any conditionality[13] and therefore no procedural rules. In this sense, the question of its applicability rests solely on the availability of the Internet. Deconcentrated authorities (Governor, Prefect and Deputy Prefect) can only prohibit the holding of a meeting or the constitution of an online association by suspending the Internet connection within their territory. The application of the freedom of online assembly

13 Apart from the respect of laws and the Constitution

and association is the responsibility of the devolved authorities, the Ministry of Posts and Telecommunications, the NCHRF and CSOs. However, the administrative authorities may reserve the right to define and assess concepts such as "general interest" and "public policy" according to the meaning they give them[14]. They may therefore suspend Internet access for the purposes of maintaining public order if online associations and meetings are likely to undermine the peace and integrity of the territory and national institutions. It is a question of striking a balance between respect for freedom of expression and hence freedom of assembly and association, and the maintenance of public order.

Threats related to the implementation of freedom of assembly and association online

According to the Charter of Internet Rights of the Association for the Progress of Communications[15], freedom of expression must be protected from interference by authorities and other actors. The Internet is a means of public and private cross-border exchange of opinions and information and everyone must be able to express their opinions and ideas and exchange information freely. It must be protected from any attempt to silence criticism and censor debate or social and political content. This means that organisations, groups and individuals must be free to use the Internet to organise and participate in events. Notwithstanding these principles, there are cases of violations of these rights. Indeed, the Internet increases opportunities for monitoring associations and meetings. Online communications can easily be intercepted by third parties, including governments, private companies and non-state actors (this is a breach of privacy and security of personal data on the Internet). This is justified by the fact that the digital activity of Internet users leaves indelible traces which are so many digital brands abandoned by various computer actions (cookies, invoicing of a service, registration in a database) which can be used by cyber pirates or even by the authorities[16]. In this way it is possible for the state, companies and even cyber offenders to use and analyze data on associations and meetings with algorithms in order to draw conclusions about associative affiliations. To another extent, online censorship, filtering and blocking access to online content and specific services and protocols pose threats to freedom of association and assembly[17]. Online associations and meetings also face geographical censorship. Most web platforms have a functionality that retains content on websites according to geographical location[18]. Such violations may also include blocking access to the Internet, mobile telephone networks or specific services and protocols to restrict people's ability to assemble peacefully. This was the case during the suspension of the Internet in the English-speaking regions of Northwest and Southwest Cameroon, from January 17 to April 19, 2017.

Conclusion

Freedom of assembly and association is a human right, regardless of space (online or in a physical environment). In Cameroon, this right benefits from a legal framework (texts at the national, regional and international levels) and institutional framework (creation of the NCHRF and the Technical Committee). Freedom of assembly and association online is part of the government's concerns and it is in this sense that it is in line with the MDGs that the country wants to achieve. While the guarantee of this right offers many opportunities, without guidance it can also have an adverse effect. This last point thus highlights the dilemma between maintaining

14 Kamel TOUATI, « Les technologies de l'information et de la communication (TIC) : une chance pour ledéveloppement du monde arabe », in Géographie, économie, société, Vol. 10, n°2, 2008, p.277

15 https://www.apc.org/sites/default/files/APC_charter_FR_0.pdf

16 Michel RIGUIDEL, *« Une approche systémique de la sécurité. La sécurité des* infosphères », in *Les Cahiers du numérique,* Vol. 4, n°3, 2003. p.44

17 Alex COMNINOS, op. cit. p.5

18 Idem.

public order and freedom of expression, assembly and association. However, in proportion, it should be stated that freedom of assembly and association online is a right which should be guaranteed and respected by the State. It should be protected against connection disconnection, government intrusion and hackers. Hence the urgent need to strike the right balance between human rights and the maintenance of State authority.

Recommendations

To state actors

- Ensure Internet accessibility as it facilitates freedom of assembly and association;
- Define more precisely the legal conditions for blocking and filtering websites by the State and private sector actors.

To decentralised authorities

- Guarantee the availability of internet connection in the areas of competence;
- Ensure respect for freedom of assembly and association on the Internet or elsewhere.

To civil society organisations

- Promote Internet rights and freedoms;
- Promote respect for freedom of assembly and association on the Internet and denounce related violations ;
- **To technical experts**
- Implement measures limiting the use of cookies and digital traces.

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CULTURAL AND LINGUISTIC DIVERSITY ON THE INTERNET IN CAMEROON

*By **Alexis DEMERS***
Political Science student at University of Montreal

Culture in its broadest sense can be seen as the set of distinctive spiritual, material, intellectual, emotional and even linguistic traits that characterize a society or social group (UNESCO 1982).

Thus, culture defines the identity of the individual and thus of a social group; hence an interest for all peoples to preserve and promote their cultural and linguistic values.

To this end, ADIRF recommends the use of the Internet for the promotion and preservation of the cultural and linguistic heritage of African peoples.

What about Cameroon, a country located in the heart of Central Africa and rich in about three hundred (300) different languages and ethnic groups (Leclerc 2017) and within which the growth of the Internet is spectacular; with 25% of its population having access to the network of networks, which corresponds to an increase of 20% since 2011 (World Bank 2016)?

This article will allow us to learn more about the different policies our country is implementing to highlight its impressive cultural and linguistic diversity on the web.

The political context and the legislative and regulatory texts in force

On the political level, ICT and Internet in particular, are considered as essential levers of the socio-economic and cultural development of Cameroon, as stated by the Head of State Mr. Paul BIYA during his swearing-in ceremony on November 3, 2004 before the national representation for a new seven-year term.

At the legislative level:

- The Constitution of Cameroon of 18 January 1996, revised and amended on 14 April 2008 in its Article 1 stipulates: The Republic of Cameroon adopts English and French as its official languages of equal value. It guarantees the promotion of bilingualism throughout the territory. It works to protect and promote national languages.
- Law N°2013 / 003 of 18 April 2013 governing cultural heritage in Cameroon. Article 1 of this Act has as one of its missions to promote knowledge, conservation, protection and enhancement of cultural heritage with a view to sustainable development.

At the institutional level:

- It is thanks to the government reorganization of December 09, 2011, that Cameroon has for the first time a ministry dedicated to culture, with which the arts are associated. The Ministry's mission includes the

development, implementation and evaluation of national policy for the promotion and development of culture.

- Decree No. 2017/PR/013 of 23 January 2017 establishing the National Commission for the Promotion of Bilingualism and Multiculturalism in Cameroon (CNPBM).

At the regulatory level :

- Circular No. 001/CAB/PM of 16 August 1991 on the practice of bilingualism in the public and parapublic administration. The main objective here was to strengthen and enhance the image of a bilingual Cameroon through its public and parapublic services.

At the international level, Cameroon has ratified the 1972 UNESCO World Heritage Convention for the Protection of Cultural and Natural Properties since 1982. States Parties to this Convention undertake not only to ensure the proper conservation of World Heritage sites on their territory, but also to protect their national heritage.

Cameroon adopted an ICT sector development strategy in October 2005. Since 2015, this plan has been revised and is known as "Digital Cameroon in 2020". This document does not give pride of place to the promotion and enhancement of content in local languages, at most it is limited, in its strategic axis 2, to advocating "increasing the production and supply of digital content...".

Consistency of the principle with sustainable development objectives

According to Ms Irina Bokova, Director-General of UNESCO on 21 May 2017, International Day for Cultural Diversity, the achievement of the Sustainable Development Goals (SDOs) requires the protection of cultural diversity.

Indeed, regarding Goal 4 on quality education, *"a culturally diverse classroom is not only more inclusive, it also encourages student learning and achievement"* (op. cit). In the same perspective, Goal 8 of the MDGs refers to decent work and economic growth. The benefits of cultural diversity are also quite rightly visible in the world of work. Indeed, *"a multicultural working environment is not only more innovative, but also more productive and economically more profiTableau"*, as stressed by the Head of UNESCO.

Thus, cultural diversity introduces new ideas and perspectives that enrich our lives in countless ways.

After this analysis of the political, legislative and regulatory contexts, the second part of this article will study the applicability of the principle in Cameroon. Finally, a few recommendations will be proposed to improve the application of the 6th point of the ADIRF.

Application/Applicability of the principle and violations, threats, trends and opportunities

States have a considerable role to play in the adoption of appropriate language policies on the Internet

First, the digital revolution is a unique opportunity to showcase cultural and linguistic diversity and to promote its learning among the Cameroonian and global population (VoldLexander 2010, 90). The Internet is also a privileged means for developing initiatives aimed at the learning of ancestral languages by young people (Nkenlifack et al 2012, 3).

Therefore, through the Internet, Africa must look to other continents to receive and give the best it has. Félix HOUPHOUET-BOIGNY thinks that "like all the other continents, she has to bring her own values: a certain sense of community, an African humanism, a wisdom, these are values that the world would lack and that it needs.

However, an analysis of the current global context shows that the development of ICT has above all increased English's domination on the international scene (VoldLexander 2010, 90). Indeed, it is reported that nearly 50% of the content found on the Internet is in English, although English speakers represent only 35% of web users (Pimienta2005, 28). Several authors see this as a significant reason for concern about a possible loss of global cultural diversity (Nkenlifack et al 2012, Pimienta 2005). Moreover, only one web page in 100 000 comes from the African continent and a small part of the 2000 languages present on the continent are represented there (Daoudi 2011, 27)

It therefore seems essential that countries with impressive cultural diversity such as the Republic of Cameroon put forward innovative strategies to increase the presence of the country's different languages and cultures on the web. It goes without saying that political will is paramount in establishing such a program that would protect diversity.

Within this framework, the country has developed the "Cameroon Digital Strategic Plan 2020" (Ministry of Posts and Telecommunications 2016, 2). The strategic plan also takes into consideration the importance of a greater presence of Cameroon's cultural and linguistic diversity through the second axis of the digital strategy: increasing the production and supply of digital content (Ministry of Posts and Telecommunications 2016, 29). Indeed, the State's objectives are to "Digitize and disseminate the national tourist and cultural heritage" as well as to "Produce content in national languages, particularly in the education sector" (Ministry of Posts and Telecommunications 2016, 29). Moreover, to achieve these objectives, the State will invest 50 million CFA francs by 2018 to digitize and disseminate the country's cultural heritage on the web (Ministry of Posts and Telecommunications 2016, 48). In short, these are very interesting initiatives for the presence of a greater cultural and linguistic diversity on the web.

In addition, it is important to mention that Cameroon has established a "National Commission for the Promotion of Bilingualism and Multiculturalism" (CNPBM2017). This commission is responsible for working to promote the country's two national languages, but also to advance multiculturalism, that is, to aim for the peaceful coexistence of the various Cameroonian cultures and to consolidate national unity (CNPBM 1, 2017). The advent of this commission, whose concrete mandate includes submitting reports and proposing measures to promote bilingualism and multiculturalism, provides an interesting avenue for ICT to be included in future measures (CNPBM 1-2, 2017). Thus, although the decree establishing the "National Commission for the Promotion of Bilingualism and Multiculturalism" makes no formal mention of the use of the Internet as a possible platform for such promotion, it should be noted that this is a considerable step towards the creation of a legal framework that can improve cultural and linguistic diversity on the Internet in Cameroon (CNPBM 2017)

Moreover, it is not only the central government that is responsible for the promotion and preservation of national languages and cultures. Indeed, the law 2004/018 fixing the rules applicable to the Communes within the framework of decentralization transfers several competences to the territorial authorities (Republic of Cameroon 2004). Under article 22 of this law, the Cameroonian municipalities are entrusted with several responsibilities relating to the promotion of national culture and languages (Republic of Cameroon 2004, 8). Legally, they therefore have specific powers to support the organisation of cultural events and regional programmes to promote national languages.

The rapid dissemination of African cultural values on a global scale must be done through the use of the Internet. This tool gives us a second chance. It is a favourable network for the popularization of African culture, a real hold for Africa to show and present its true culture to the world. The Internet, even if it has some grey areas, remains a tool for promoting culture. For us Africans, it is an opportunity (with good rational use) to use this tool to join other cultures on the dialogue Tableau for self-criticism.

First, some progress has been made by the central government to promote cultural and linguistic diversity, particularly among the country's youth. For example, the Cameroonian State has created a pilot programme for teaching in national languages in five public schools, namely Leclerc High School in Yaounde, Akwa High School in Douala, Bafang High School, Njinikom High School in the North West and Garoua Classical High School in 2008 (Nkenlifack et al 2012, 6). Since then, the programme has been expanded during the 2016-2017 school year, but a cruel lack of teachers to teach national languages (1 teacher for 450 pupils) undermines the efforts invested in this programme to promote cultural and linguistic diversity in Cameroon (Tchouakak 2016). Despite this lack of teachers, these efforts demonstrate a certain willingness on the part of the Cameroonian government to commit itself to this protection of diversity. It seems that these new education policies in Cameroon could be well served by the establishment of an electronic platform that could help fill the teacher gap.

The State is also placing great emphasis on ICT learning by Cameroonian youth through several initiatives such as an "ICT summer camp" and the integration of information and communication technologies as a learning tool for young schoolchildren (invest in Cameroon 2017, MINEDUB and UNESCO 2008). On the other hand, the teaching guide which aims to prepare teachers to use ICT in the classroom makes no mention of the possibility of promoting cultural and linguistic diversity through new technologies (MINEDUB and UNESCO 2008). This teaching guide prepared by the Ministry of Basic Education in partnership with UNESCO is a good example of where cultural and linguistic diversity could have been included in ICT education.

Moreover, a report from the Pan-African Research Agenda on the Pedagogical Integration of ICT indicates that there is no real sensitivity for the creation of mother-tongue ICT tools (Fonkoua et al 2009, 136). The report adds that this lack of inclusion of cultural diversity in ICT in schools complicates the learning process of students and does not serve local communities in their desire to see the school as an integral part of their community (Fonkoua et al 2009, 136). It therefore seems that the majority languages in ICT learning in schools remain French and English.

Therefore, real efforts to promote this principle would be beneficial at the social level, particularly in the field of education. As mentioned earlier in this text, the Cameroonian government is serious in its approach for the country's youth to learn ICTs, but forgets that this is an incredible opportunity for younger generations to reclaim their culture and languages that have been abused by the colonization process (Fonkoua et al 2009). This reappropriation by ICTs would allow young people not only to connect directly with their ancestral roots, but also to open up a range of creative and exchange possibilities through the Internet (Nkenlifack et al 2012, 3).

Teachers could quite easily combine cultural and linguistic diversity with more traditional ICT learning. Indeed, he could suggest to the students to teach them how to make a web site where a PowerPoint presentation and they would realize the task

by having as subject the theme of the cultural diversity of the country (Amrous 2006, 4). The impact of this type of project would therefore be multiple. On the one hand, students would develop technical knowledge on the use of ICT. On the other hand, they would contribute to the creation of digital materials in a language or culture underrepresented on the web, while improving their own cultural knowledge. Also, they will be able to demonstrate creativity, which is often an undervalued skill in the process of individual development that can contribute to the emergence of the country.

Moreover, the argument is that this process makes it possible to enhance point 6 of the Declaration of the Rights and Freedom of the Internet by using the computer resources already available on the spot. Therefore, we do not necessarily have to increase budgets significantly to begin a positive change on this issue. Again, it seems that the lack of valuing diversity on the Internet is not just a question of money, but rather of not acknowledging all the possibilities that the digital revolution offers (Amrous 2006,5).

In fact, it turns out that it is civil society and intellectuals in this country who are most committed to the development of diversity on the web. One example is Marcellin Nkenlifack and his colleagues at Dschang University who have developed a platform called TICELaCuN (ICT for the teaching of national languages and cultures) which aims to use "ICTs for the acquisition or transmission of knowledge through mastery of local languages and cultures" (Nkenlifack et al 2102, 6). These authors correctly explain the importance of their process: "Mastery of our languages will avoid uprooting and acculturation of young people and give them greater pride in their cultural heritage and mutual appreciation through knowledge of their common heritage, which will accelerate national and African integration" (Nkenlifack et al 2012, 3). These Cameroonian intellectuals express here one of the positive impacts that the introduction of national linguistic diversity on the Internet could bring to Cameroonian society.

There are also several websites and mobile applications set up by civil society organisations that promote the diversity we are looking for on the web. The Resulam (Resurrection of Minority Languages) website is particularly relevant for learning minority languages (Resulam 2016). The languages that are possible to learn on this site are multiple: Bulu, Basaa, Ewondo, Douala, Medumba and several others. This site also includes downloadable tools such as an online keyboard to write with letters unique to some African languages as well as dictionaries of these languages (Resulam 2016). At the cultural level, there are also several sites available to Internet users that promote Cameroonian cultures and traditions. For example, there is the website of the association NUFI Cameroon which promotes the language and culture of West Cameroon Bamiléké (NUFI Cameroon 2016). The Bassaa culture is also represented on the web through the Adina-Bassaa website, which promotes the history and customs of this people from the central and coastal regions (Adina-Bassaa 2013).

Conclusion

The purpose of this article was to apprehend the cultural and linguistic diversity in Cameroon under the prism of the ADIRF.

Paragraph 53, page 18, of the Tunis Agenda, which laid the foundations for the global information society, urges States to"...make a firm commitment to work towards multilingualism on the Internet..." and advocates the use of local languages for content development. Our country, as a stakeholder in this initiative, has put in place measures to comply with these requirements (the creation of the CNPBM, the existence of a legislative and regulatory framework, even if it must be acknowledged that it is still basic,

the existence of local cultural content and content in local languages on the Internet...).

However, it must be acknowledged that much remains to be done, particularly in the production of quality content in national languages in the education sector. We are also thinking of enriching the legislative, regulatory and institutional framework, and of including the linguistic and cultural diversity component on the web in students' ICT learning.

Ultimately, and according to UNESCO, access to a multilingual Internet should be guaranteed for all. From nations to individuals to diverse communities, all those who will not have access to the resources offered by the Internet will undoubtedly find themselves left out because of their limited access to information and knowledge, two key elements in the perspective of sustainable development.

So that the Internet in Cameroon and Africa is not a space where the productions of the most powerful countries and the interest of the richest dominate, we formulate the following recommendations:

Recommendations

To the governement

- Include the promotion of cultural and linguistic diversity in the curriculum for student ICT learning ;
- Increase funding for the teaching of the country's national languages ;
- Give more recognition to civil society organisations that create tools for learning national languages;
- Include the subject of cultural and linguistic diversity on the Internet within the *National Commission for the Promotion of Bilingualism and Multiculturalism* ;
- Fostering the digitisation of the national cultural heritage.

To the civil society

- Make a national campaign to promote cultural and linguistic diversity on the Internet by awarding scholarships to people creating the best web pages promoting this diversity ;
- Support the creation of content in local languages at the local community level.

To non-governmental organizations

- To support financially and materially the implementation of local languages contents.

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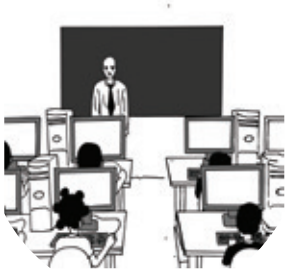
INTERNET IN THE EXERCISE OF THE RIGHT TO DEVELOPMENT AND ACCESS TO KNOWLEDGE: MIXED IMPACT IN CAMEROON



Par ***Laurent Aristide EYINGA EYINGA***
High school teacher and project management consultant
Email : laurent.aristide@gmail.com

The right to development and access to knowledge are fundamental human rights, and the Internet is a privileged tool for achieving this ideal. Thus, in a broad sense, all literacy measures are required so that no one is outside these fundamental rights. From a narrow perspective, computer literacy is the key. In practical terms, it concerns, among other things, learners' access to Internet-connected devices, girls' access to quality education and ICT, the reduction of inequalities in terms of education and the Internet, etc.

This principle is crucial for the development of a developing country and the Head of State of Cameroon, H.E. Paul Biya is aware of this because it states: "Our country needs widespread access to the Internet".

Applying this principle contributes to human development and empowerment. Adequate measures should be taken by public and private actors to ensure their effectiveness. What about Cameroon?

To question oneself in this way leads to an analysis of the context around this principle, its application, and possibly to recommendations.

Context

According to the African Declaration on Internet Rights and Freedoms (ADIRF), the key principle "right to development and access to knowledge" is "an essential tool for participating in development processes". Its implementation should materialise through the role of the various actors involved, but also through its presence in the regulatory standards in force. Our analysis visits the political, institutional and regulatory context.

Figure 8 : Young girls learning ICT
Source :http://edupronet.com/education-en-afrique-pour-une-integration-des-tic-efficace-et-profiTableau/

A strong political will

In the main policy option of today included in the "Vision 2035", the country "will need to strengthen human resources education and training" in several sectors, including ICT. Also, "Regarding telecommunications, the objective is to improve digital access through appropriate strategies in terms of network development, ICT ownership and outreach".

To implement this vision between

2010-2020, the Growth and Jobs Strategy Paper advocates the intensive use of ICT.

The Head of State, in his address to the nation on December 31, 2015, said: "I instructed the Government to accelerate the establishment of the preconditions for the industrialization of our country. These indispensable conditions are: [...]

The development of communication and telecommunications infrastructures. The Government, in its organization, will give this sector all the attention it deserves."

It is worth noting that the political will has the merit of being clearly established in favour of ICT and Internet development.

A rich institutional landscape

It highlights public and civil society actors in charge of telecommunications, education, the media, etc,

Actors of the telecommunications sector :

- MINPOSTEL is "responsible for the implementation of the Government's information and communication technology (...) policy. As such, it ensures among other tasks "the development of ICT" and "the promotion of investments in the sector".
- According to Law 2010/013 of December 21, 2013 governing electronic communications in Cameroon, amended by Law No. 2015/006 of April 20, 2015, the Telecommunications Regulatory Agency has as one of its missions, to ensure that access to networks open to the public is carried out under objective, transparent and non-discriminatory conditions. This is consistent with the right to development, which is a human right that must remain free from all forms of discrimination.
- The National Agency for Information and Communication Technologies has as one of its missions the promotion and monitoring of public action in the field of ICT. As such, it "identifies the common needs of public services in terms of computer equipment and software". This role is important because public services develop areas that facilitate people's access to ICTs.
- The National Communication ensures, according to its missions on its website, equal access to the media, although the emphasis is placed on electoral periods. This is consistent with the key principle in its human rights aspect, since everyone has the right to development and to access knowledge through the media.

Actors of the education sector

The Ministry of Basic Education has as its mission the "fight against illiteracy ". Indeed, it seems essential to be literate at the minimum in order to claim the right to development and access knowledge in a broader sense.

Three other actors of the education panorama in Cameroon are the Ministry of Secondary Education, the Ministry of Higher Education and the Ministry of Employment and Vocational Training. These actors are important through the education and training centres that underpin their action and offer learners the opportunity to access knowledge. We also find here public, private, secular and confessional educational institutions at all levels offering the same opportunities.

Actors of the civil society

Beside traditional and state actors, there are actors of civil society such as PROTEGE QV , based in Yaounde, which promotes access to knowledge through the annual celebration of Free Software Day and various other initiatives and training for students, teachers and women. Let us also note the case of the Women's

Centre for the Promotion of Development which has been organizing since 2016 the Award of Excellence for Women and Girls in ICT in Cameroon.

Legal environment

The country has a substantial legal arsenal for the framework of the key principle.

In the preamble to the Constitution of 18 January 1996, the State guarantees access to knowledge to all citizens. It states: "The State shall ensure the right of the child to education. Primary education is compulsory. The organization and control of education at all levels is an imperative duty of the State".

The Education Orientation Act No. 98/004 of 14 April 1998 states in article 25: "Education in schools should take into account the evolution of science and technology and also that the education system must train Cameroonians rooted in their cultures and open to the world".

Laws in force in the telecommunications sector

These are:

- Law No. 98/014 of 14 July 1998 governing telecommunications in Cameroon: which recognizes in Article 18(1) the universal service obligation defined as the "provision of basic telecommunications services".
- Article 28(1) of Law No. 2010/013 governing electronic communications in Cameroon specifies the universal electronic communications service obligation as "the provision to all of good quality electronic communications services at affordable rates and without interruption".
- Law 2015/006 of 20 April 2015 amends and supplements the previous law in its new article 34, which stipulates that the resources of the Special Telecommunications Fund are intended to finance the development of electronic communications throughout the territory and the development of Information and Communication Technologies, in line with the principle of access to knowledge.

Consideration of the principle in sectoral strategies

In the Education Sector Plan 2013-2020 , the Government is considering:

- *Conducting a programme to equip specialised rooms (computers, laboratory) and to mobilise practical training (office automation, scientific experiments)* ;
- *Generalize the use of ICT in the education and training system;*
- *Modernize the education and training system at all levels through the integration and appropriation of ICTs through an adequate supply of digital infrastructures and a solid training of all actors;*
- *Increase girls' access to science and technology;*
- *Anticipate the needs generated by the expected development of ICT in primary schools. To this end, it is considering solar electrification of schools in certain new buildings in rural areas.*

These measures are interesting because they would boost access to knowledge through the consequent strengthening of equipment in schools. This is a pledge to allow non-discriminatory access. The emphasis on young girls is also crucial in this sense.

Cameroon Digital Strategic Plan 2020 ICTs and the Internet facilitate communication and access to knowledge and learning."

Strategic axis 4 aims mainly at promoting digital literacy through the widespread use of ICTs in society.

Consistency of the key principle with the Sustainable Development Objectives

The key principle of the right to development and access to knowledge is found quite precisely in 4 of the 17 objectives of sustainable development. These include the following:

- Objective 4, which is access to quality education. The use of the Internet makes it possible to reach all the data available online;
- Objective 5: Gender equality in the sense that the principle aims at girls' access to science and engineering;
- Objective 9: innovation and infrastructure
- Objective 10: reduction of inequalities at several levels: urban/rural, male/female; and even inequalities between States.

A Mixed application of the principle

Although understanding of the principle seems to have been largely achieved, it could be argued that the debate is mainly at the level of its application.

Many potential perspectives

Indeed, the Cameroon 2020 Digital Strategic Plan reveals points revealing the acquired understanding:

- *"Telecommunications constitute one of the most important sectors of Cameroon's economy" (nearly 5% to GDP in 2014).*
- *"Les TIC et l'Internet facilitent la communication et l'accès à la connaissance et au savoir.*
- *"The creation of a local ICT industry remains an important challenge for Cameroon. Its implementation constitutes an important source of growth and jobs".*

The President of the Republic Paul Biya in his message to the nation on December 31, 2015 confirms it:"... we must catch up as quickly as possible in the development of the Digital Economy. This is a real growth accelerator, in addition to **being a real niche of new jobs for our youth**".

Figure 9 : Mindourou Multipurpose Community Telecentre
Source :http://www.camtel.cm

If it were necessary to raise the price, it would be necessary to recognize the relationship between access to knowledge, the right to development and social development at both the individual and collective levels. Indeed, accessing knowledge via the Internet provides access to many opportunities in terms of training, economic springboard and partnerships.

Several positive measures

The State through its dismemberments works to implement this principle. To his credit is the integration of ICT in education.

In 2001, the Head of State inaugurated the Multimedia Resource Centres (MRC) in two secondary schools in Yaounde: Lycée Général Leclerc and Lycée Bilingue d'Essos. The objective of these centres was to combat the digital divide and increase access to knowledge.

Decree No. 3745/D/63/ MINEDUC/ CAB of 17/06/2003 introduced information technology into the training programmes for lower and upper general secondary education and ENIEG (general education teachers' teacher training college) as of the 2003/2004 school year. In teacher training, computer and ICT courses are emerging.

In addition, several higher education institutions train young people in ICT: state and even private universities, engineering schools, university institutes of technology, teacher training colleges for secondary school teachers. It is useful to note the creation of the Yaounde sub-regional virtual university.

The Government of Cameroon is committed to improving people's access to Internet services in rural areas to reduce the urban/rural digital divide with the launch of the programme for the creation of multipurpose community telecentres (MCT)[1]. According to Cameroon statistics on www.info.net, in 2015, Cameroon had 112 MCTs[2].

Under the patronage of the Ministry of Women and Empowerment and Family (MINPROFF), the African Institute of Informatics (AII) launched in 2002 a programme to train 100,000 women by 2012. This operation, with the aim of linking Cameroonian women to ICTs, targeted women of all ages and from all social strata.

The AII Resident Representative, Armand Claude Abanda in an interview with the special magazine "Yaounde C'komment" announced on 23 October 2012, 103,350 women trained throughout the country.

Some special measures support the implementation of the key principle. These include the programme to distribute 500,000 computers to all Cameroonian students for the academic year 2016-2017, which started with a first wave of 80,000 in December 2017. The stated aim of this initiative is to enable students to have better access to the knowledge society.

Other initiatives aim to reward young girls who invest in scientific fields. Thus, the Youth Innovation and Science project, launched on 16 January 2015 by Madeleine Tchuenté, Minister of Scientific Research and Innovation, aims to get young girls interested in scientific careers as envisaged by the key principle concerning girls' access to scientific fields.

At the local level, under Act No. 2004/017 of 22 July 2004 on decentralization guidelines, certain powers in basic education were transferred to the municipalities. These include literacy - the implementation of plans to eradicate illiteracy, in conjunction with the regional administration. This does not specifically concern the Internet, but if we consider that literacy brings us closer to knowledge and that to access the Internet, we need a minimum of literacy, this role of communes becomes important.

At the private level, it should be noted that Internet access via cybercafés has long been the most widely used means, but the main weapon used by private operators is undoubtedly the boom in Internet access via smartphones. Indeed, according to statistics, the Internet access rate reached 25.6% in 2015 with the advent of 3G and 4G thanks to Orange Cameroon, MTN Cameroon and NEXTEL operators.

Mixed impact of the principle

Despite this proliferation of initiatives, the real impact on society seems mixed. Apart from the MINPROFF initiative led by AII, which has achieved its objectives, the other measures show limitations. Another operation led by the AII is launched in the wake of MIJEF 2035

1 During an interview in 2008, the Minister of Posts and Telecommunications (MINPOSTEL) announced the ambitious objective of installing 2,000 telecentres by 2015.

2 http://www.cameroon-info.net/article/cameroun-lheure-du-bilan-dix-ans-apres-la-creation-des-telecentres-communautaires-194040.html

(project one million young people, children and women trained in computers by 2035).

The CRM creation program so far has not covered the entire territory. According to press data[3] 11 years after the launch of the program, only seven high schools had CRM with many problems of maintenance and availability of electrical energy....DJEUMENI (2010)[4] says: «the computer course is not free, in the public as in the private. Even if only 8% of schools are actually equipped with computers, the justification for charging students here is the need to equip schools with computers, digital resources and electrical and Internet connections. Computer education for most of these schoolchildren is a luxury they cannot afford».

The paradoxical result is that we are increasing the digital divide that we were supposed to reduce.

For the TCP program, according to the conclusions of the study conducted by PROTEGE QV[5] "it is disappointing to see how the scope of the program has remained limited to date." Indeed, if we remember that the objective of this program was to provide the country with 2000 MCTs by 2015, we must really note that the results are far from flattering. Added to this are the many difficulties regarding equipment maintenance, employee remuneration, the availability of electrical energy and management methods, and there would be some cause for concern.

Moreover, special measures are essentially one-off measures. One wonders about the durability of their effectiveness. This is the case of computer donations to students that will not affect future generations. Why not set up an assembly plant with the funds committed here?

The various special prizes for young girls interested in scientific fields are unprecedented. Why not a real approach to generalize these questions?

Local authorities as well as the State face recurrent problems of access to energy, maintenance and lack of resources. As a result, the State requires private operators and even civil society to provide this public service in order to equip establishments.

All these measures are scattered. As a result, the urban/rural digital divide is bound to increase.

Conclusion

Several salient points emerge from this analysis.

The State's will to promote the right to development and access to knowledge is truly affirmed and implemented. This is evident in the range of measures and policies undertaken. In view of the hopes raised by the latter, these measures are to be congratulated. Nevertheless and unfortunately, their impact seems mixed.

This is due, first of all, to constraints that undermine this will, particularly access and the cost of equipment, maintenance, the glaring lack in terms of electricity supply...

In some ways, the monitoring of the policies in question seems weak to stick to the results. For projects that promote the key principle, such as MCT or CRM, we can say that fruit does not keep the promise of flowers. Moreover, the general impression of the government's measures is similar to a sprinkling that does not bode well for the future.

Since the right to development and access to knowledge are considered human rights, it should be noted that this right is poorly protected. Many sections of the population are excluded in Cameroon, especially in rural areas, for people who do

3 http://www.cameroon-info.net/article/formation-que-sont-devenus-les-centres-multimedias-de-paul-biya-165258.html

4 Marcelline DjeumeniTchamabé, L'enseignement de l'informatique au Cameroun : la loi du plus riche *https://www.epi.asso.fr/revue/articles/a1309h.htm*

5 PROTEGE QV (2012), La Contribution de cinq "Télécentres Communautaires Polyvalents (TCPs)" à l'éducation secondaire en milieu rural au Cameroun in IDRC(2015) public adress ICT across cultures, MIT press, Cambridge

not use smartphones, because of connection costs, illiteracy... If the intentions are there, they deserve better supervision.

Recommendations

In order to highlight the importance of taking into account the key principle of the right to development and access to knowledge in Cameroon, the following recommendations are made:

To the government through its concerned dismemberments:

- Develop a holistic approach to ICT training for all levels of society;
- Ensure the supply of electricity to all schools and training centres;
- To ensure that every learner in all levels of education follows compulsory and free computer and Internet literacy in a practical way;
- Promote and develop TCP capacities for wide public access.
- Financing computer and internet literacy through the special telecommunications fund.

Decentralised local authorities:

- Develop partnerships for the equipment, maintenance and upkeep of Multimedia Resource Centres in primary schools
- Ensure that the operation and maintenance of CRM is free for all learners

Private operators in the sector through public-private partnerships:

- Invest in ICT and Internet education for the population.

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PERSONAL DATA: PRIVATIZATION OR OVEREXPLOITATION IN CAMEROON?

*Par **Youssouf NCHETKOU NDAM***
By Nchetkou Ndam Youssouf
nchetkouyoussouf@gmail.com

The problem of the protection of personal data and privacy has become one of the major problems of the information society. It has become widely established with the development of social networks and traces left on the Net by Internet users, voluntarily or not. Internet users or not, every citizen can now be identified by the data they leave, or that others leave on them, through a number of devices: smart cards, e-mails, search engines, telephony, etc. These traces stored by the networks constitute a scientific object at the same time as a strategic stake for the States as for the companies. As in other parts of the world, many African countries are beginning to adopt policies, regulations and legislation to regulate and, in some cases, control the Internet. This is why, at the initiative of a group of African civil society organizations, the elaboration of the African Declaration on Internet Rights and Freedoms[1] (ADIRF), aims to promote respect for fundamental human rights in the formulation and implementation of Internet policies on the continent. The purpose of this article is to take stock of the application in Cameroon of the key principle on privacy and the protection of personal data within the meaning of the ADIRF.

What is personal data [2] ?

This is any information that concerns an identified natural person. It can be the name of a person, a photograph, a telephone number (even professional), a code etc. The concept is not limited to information relating to the private life of individuals, but extends to information relating to professional or public life. Information relating to legal persons (civil or commercial society or a non-profit-making association) is not concerned.

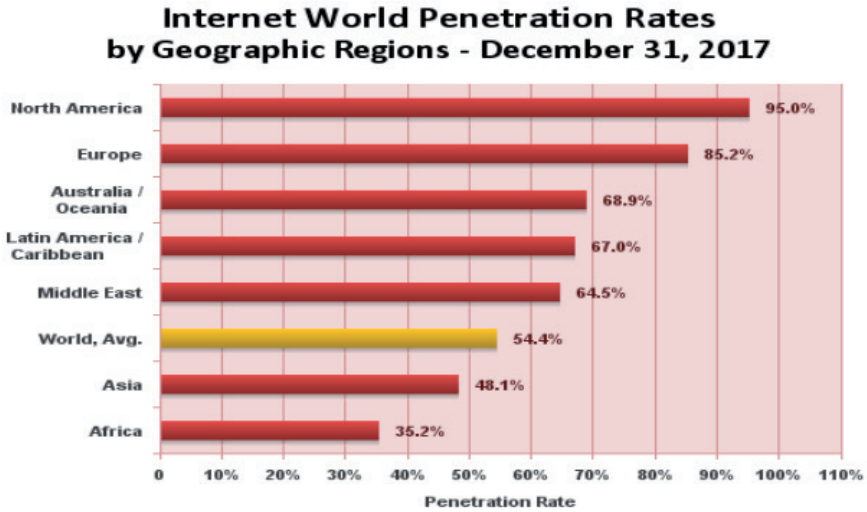
What is private life?

There is no universally understood definition of privacy. In the modern world, privacy has two dimensions - first, questions about an individual's identity and second, how personal information is handled. Until recently, an individual's private life was limited to what he did in privacy, the walls of his home being, so to speak, the border with his public life.

The right to privacy and its protection are an integral part of a state's actions towards its citizens. Statistics showing the increase in global ICT penetration revealed a relevant increase in digital penetration in Africa in 2016[3](see the diagram below). Public authorities are beginning to become aware of the risks to which individuals, companies and States are exposed with the acceleration of the connection to information systems and networks. To ensure better management of technological, informational and legal risks, efforts are being made in Africa and specifically in Cameroon to implement legislative measures.[4]

1 africaninternetrights.org
2 This definition is based on the African Declaration of Internet Rights and Freedom (ADIRF).

3 See the figure above
4 http://www.camcybersec.cm/2013/02/15/textes-relatifs-a-la-cyberse-curite-au-cameroun/consulted on December 1, 2017



Source: Internet World Stats - www.internetworldstats.com/stats.htm
Penetration Rates are based on a world population of 7,634,758,428 and 4,156,932,140 estimated Internet users in December 31, 2017.

Political context, legislative and regulatory texts in force:

Legal, regulatory and institutional environment governing the key principle:
Cameroon in its crusade against **cybercriminals**[5] has developed a substantial legal and institutional arsenal for dealing with the various incidents related to Cyberspace [6] and the integrity of personal data.
Several texts regulate respect for the right to privacy and the protection of personal data. Among others, we can cite:

- **Law N°2010/012[7] of 21/12/2010 on Cyber security and Cybercrime in Cameroon** which governs the security framework of electronic communications networks and information systems, defines and punishes offences related to the use of information and communication technologies in Cameroon;
- **Law N°2010/13[8] of 21/12/2010 Governing Electronic Communications In Cameroon** which aims to promote the harmonious and balanced development of electronic communications networks and services. It also lays down the procedures for establishing and operating networks and providing electronic communications services in compliance with the requirements of national defence and public security.
- **Law N°2010/021[9] of 21/12/2010 governing electronic commerce in Cameroon,** which prohibits any vulgarization of users' data for commercial purposes and without their consent, unsolicited advertising, and obliges professional associations and organizations to develop codes of conduct to specify the information that can be provided for advertising purposes.
- **Decree N°2012/1318/PM[10] of 22/05/2012 and Decree N° 2012/309[11] of 26/06/2012 laying down the conditions and procedures for granting authorisation to exercise the activity of electronic security**

It should be noted that offences committed on the Internet are also listed and punished by the Criminal Code.
At the regional level, the African

5 Cybercriminality : all offences occurring through cyberspace by means other than those usually implemented, and in a complementary manner to conventional crime
6
7 http://www.camcybersec.com/wp-content/uploads/2013/02/Loi_2010-012_cybersecurite_cybercriminalite.pdf
8 http://www.camcybersec.com/wp-content/uploads/2013/02/Loi_2013-013_communications_electroniques.pdf
9 http://www.camcybersec.com/wp-content/uploads/2013/02/Loi-commerce-electronique-N-2010-021-du-21-12-2010.pdf
10 http://www.camcybersec.com/wp-content/uploads/2013/02/Decret-Certification-Electronique.pdf
11 http://www.camcybersec.com/wp-content/uploads/2013/02/Modalites_de-gestion_FSE-26-06-2012.pdf

Telecommunications Union (ATU) (now called the African Telecommunications Union) was created in 1977 as a specialized agency of the Organization of African Unity. ATU provides an appropriate framework for African ICT states to formulate effective policies and strategies to improve access to information infrastructure and services.

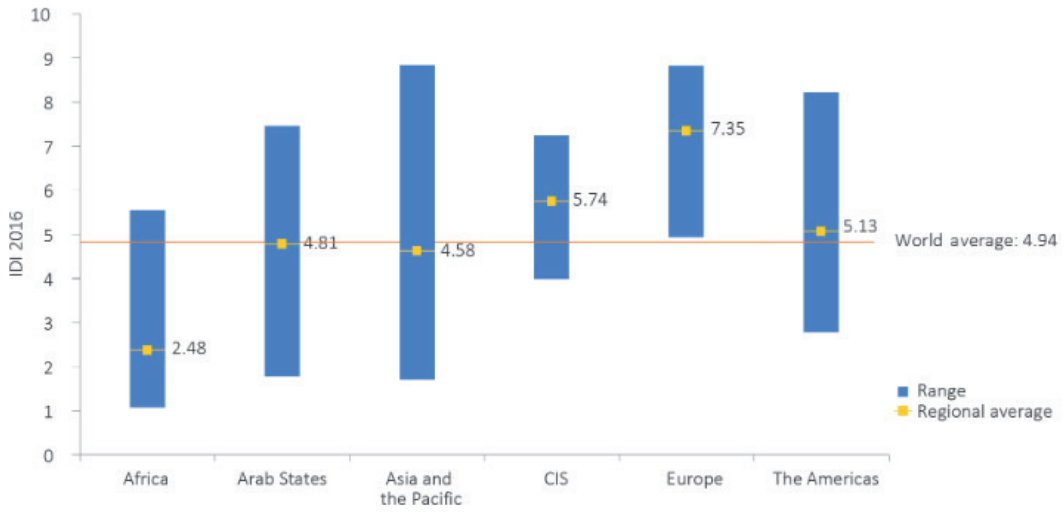
At national level, two major actors are involved in the protection of personal data:

- The Telecommunications Regulatory Agency (TRA) - created on ***5 January 1997***, one year before the opening of the market to competition - which is a public administrative establishment with legal personality and which, on behalf of the State, regulates, controls and monitors the activities of operators and operators in the Telecommunications and ICT sector;
- The National Agency of Information and Communication Technologies (NAITC) - ***Decree N°2002/092 of 08 April 2002 on the creation, organization and functioning of the National ICT Agency*** -, which is the governmental body in charge of the coordination and implementation of the ICT Security Strategy in Cameroon. Within NAITC, the Computer Incident Response Team (CSIRT/ANTIC) is the executive body in charge of managing computer security incidents throughout the national territory.

It also seems appropriate to mention the National Commission on Human Rights and Freedoms (NCHRF) created by ***Law No. 2004/016 of 22 July 2004***, which pays particular attention to the security of privacy and respect for personal data. It should also be noted that most of the Central African countries are members of the international ***Interpol*** agency[12], which provides a monitoring and security role for personal data.

12 International Criminal Police Organization (ICPO)

Chart 2.1: IDI by region compared with global average, 2016



Source: ITU.

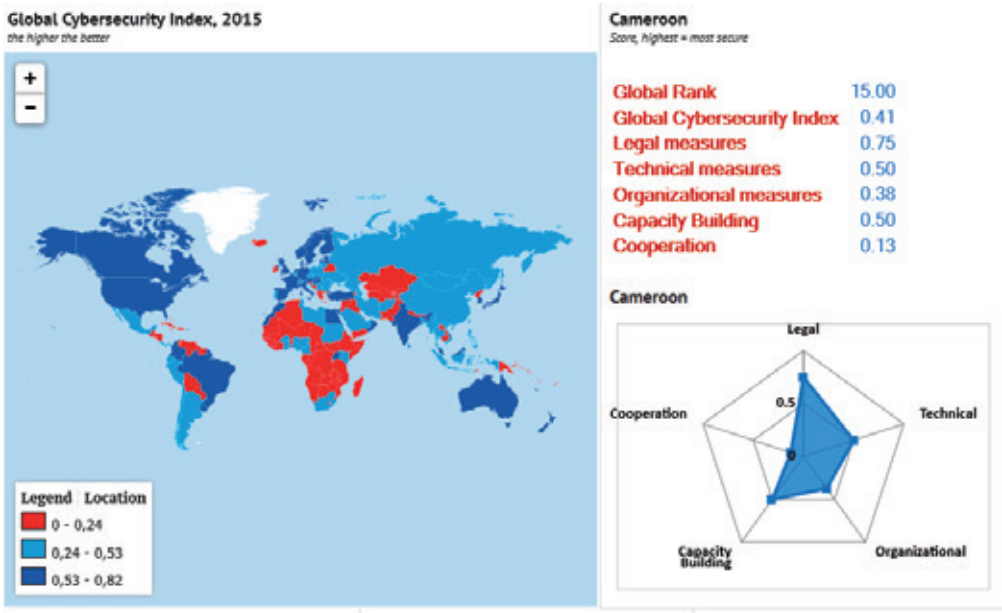
Inclusion/reflection of the principle in national or sectoral strategies, particularly those relating to ICT and telecommunications;

The diagnostic analysis of the current situation and the diagnostic analysis carried out in the development strategy document of the telecommunications sector revised in 2015 has made it possible to identify a number of problems, which hinder the development of the digital economy in Cameroon. These problems are classified into three categories, namely those that hinder the supply of services, those that prevent boosting demand and finally those relating to good governance, regulation and training. We have identified some of them, including:

- Very low rate of broadband Internet access by households
- Low rate of very high speed internet access by businesses
- A weak ICT literacy
- Still high retail prices
- A weak dematerialisation of public services
- Low availability of online services
- Weak regulation to support the development of the digital economy
- Low coverage of 3G and 4G mobile networks

The actions to boost the digital economy are carried out in the following areas: ensuring the digital transformation of the administration and businesses, promoting digital culture through the widespread use of ICTs in society.

In addition, increase the production and supply of digital content, developing a local digital industry and encouraging research and innovation are part of the strategy for developing the supply of services in the digital economy.



Source https://knoema.com/infographics/tpllztd/global-cybersecurity-index-2015?country=Cameroon

Consistency of the key principle with the Sustainable Development Objectives:

The Sustainable Development Goals (SDGs) are the commonly used name for the seventeen (17) goals set by the UN Member States and which are brought together in Agenda 2030, which include the ***eradication of poverty*** as the first goal, ***the fight against hunger*** and ending in seventeenth position with the ***goal of partnerships to achieve the goals***. The Internet and Personal Data Protection find their place in many of these objectives, but much more in Goal 16: **Justice and Peace**. Indeed, the efficient use of information and communication technologies in all areas is a priority to ensure sustainable economic growth and territorial stability in Cameroon. For the citizen, knowing the rules and procedures for serenely protecting his private life on the Internet is one of the foundations of legitimacy. By preserving what must be protected and punishing the derivatives related to actions and abuses on the Internet, the State ensures to guarantee a more fulfilled socio-cultural environment.

Moreover, the third point of the ODD, which is access to health, is closely linked to the notion of privacy and personal data. It should be noted that the health field is the one that must guarantee a better preservation of personal information. Hospitals and other health facilities must deliver care to the general public, collect data on infection and/or cure rates, but above all must preserve the identity of their patients. If medical data are found to be used to find strategies to eradicate an epidemic, action would be all the better. However, it is imperative not to leave the safety and individual identity of patients to be compromised. Indeed, it is customary for us to come across speeches such as "this information is protected by medical confidentiality". For a better achievement of the SDGs, this point is not the least.

Although the list is not exhaustive, we can affirm that the achievement of the SDGs is in close collaboration with the processes of protection of privacy on the Internet and personal data.

Application/applicability of the principle and violations, threats, trends and opportunities:

Effects/impact that the application of this principle could have in the economic, social and political sectors:

Personal data are at the center of citizen management and decision-making. And the ability of enterprises to collect, produce and manage information has become the key driver of economic growth, productivity, competitiveness and innovation; In order to be able to provide figures on the population, the State, through its specialized services, carries out analyses on citizens' personal data such as name, age, gender, nationality, profession, etc., in order to identify the population of each country. In this context it cannot therefore be a question of violation since the treatment which is made is in conformity with the legislation. Thus organizations such as the National Institute of Statistics (NIS), The Telecommunication Regulatory Board (ART), Elections Cameroon (ELECAM)[13], The United Nations Educational, Scientific and Cultural Organization (UNESCO) and many others can afford to provide periodic reports on broadband Internet usage rates, Internet penetration rates, or national numbers of children immunized against measles to name just a few. Therefore, the processing of personal data is a real asset as long as it complies with the legislation.

In the economic context, companies place vital importance on data related to the products and services they make available to their customers. If a company does not use this data, it will encounter enormous difficulties in its management. This is mainly due to the fact that some companies collect data on their users and then market them or better still target advertising. Let's take the example of digital giants like Google, Facebook, Amazon etc. who offer free services in return for exploiting users' data and information related to their private life. However, Edward Snowdon's[14] revelations in June 2013 on the widespread espionage of the NSA, have damaged the image of these companies. Apple, Google, Microsoft and Facebook have made the choice to personally

13 Organ in charge of the organisation of elections in Cameroon
14 http://www.huffingtonpost.fr/2016/03/22/apple-google-facebook-fbi-nsa-donnees-personnelles_n_9515096.html

notify the user if his personal information is transmitted to the U.S. government.
Similarly, the health sector is explicitly concerned with the processing of personal and privacy-related data. If, for example, a patient needs an immediate ***transplant***, there is a need to exploit private data; of course professional secrecy guarantees the integrity and confidentiality of his medical data. This improves access to quality health services, diagnostics and medical decision-making. It is therefore very important that the handling of personal data does not harm the integrity of individuals.

On the other hand, political parties, congregations, trade unions or other bodies can of course record and use data on their members. However, they may not disclose such data to third parties without the consent of the persons concerned. Data relating to suspicions, prosecutions and convictions may be processed by a public authority if this is necessary for the exercise of its missions, by a lawyer for the defence of its clients, by anyone for the management of its own litigation, or if it is necessary for the achievement of purposes set by law.

Application/applicability of the key principle by different levels of government, administrations, or other public or private actors:

Telecommunications constitute one of the most important sectors of the economy of Cameroon, with a contribution to GDP of nearly 5%, or a turnover of more than 538 billion FCFA in the year 2014[15] by operators holding a public service concession only[16]. The ability of enterprises to collect, produce and manage information has become the key driver of economic growth, productivity, competitiveness and innovation. The implementation of electronic governance (e-government) through simplified and automated information processing will enable the public sector to achieve significant efficiency and effectiveness gains.

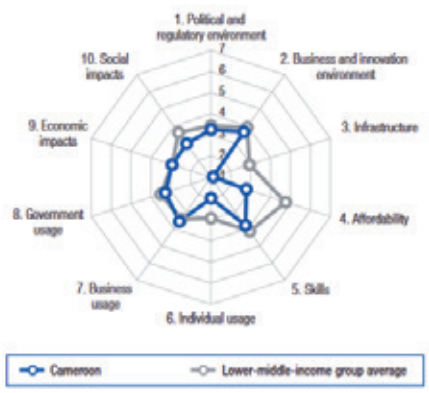
At the level of the banks and finances that operate in collaboration with the State services, a security policy is put in place to guarantee the integrity of financial data and transactions. This is the case of BICEC, which through its mobile application ensures the integrity of transactions and the security of its partners' accounts.

ICT and the Internet facilitate communication and access to knowledge. They enable citizens, in addition to easy and rapid access to information, to save considerable time thanks in particular to the availability of remote services.

15 Source: Plan strategique Cameroun 2020- (Mai 2016)
16 Camtel, Orange, MTN, Nexttel

Cameroon

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	**124**	**3.0**
Networked Readiness Index 2015 (out of 143)	126	3.0
Networked Readiness Index 2014 (out of 148)	131	2.9
Networked Readiness Index 2013 (out of 144)	124	2.9
A. Environment subindex	**114**	**3.5**
1st pillar: Political and regulatory environment	105	3.3
2nd pillar: Business and innovation environment	114	3.7
B. Readiness subindex	**131**	**2.6**
3rd pillar: Infrastructure	138	1.1
4th pillar: Affordability	126	2.8
5th pillar: Skills	107	3.8
C. Usage subindex	**114**	**2.9**
6th pillar: Individual usage	125	2.0
7th pillar: Business usage	74	3.6
8th pillar: Government usage	107	3.3
D. Impact subindex	**115**	**3.0**
9th pillar: Economic impacts	89	2.9
10th pillar: Social impacts	124	3.0



Source : WEF, Global Information Technology Report 2015

Compared to public and private actors, almost all companies collect, use and store personally identifiable information (PII). Most have information about their staff, and some, depending on their field of activity, relate to a wider range of clients, patients, residents and students. In Cameroon, companies such as CWC (Cameroon Water Company), ENEO (electricity supplier in Cameroon), MINFOPRA (Ministry of Public Service and Administrative Reform) to name but a few, must manage this confidential data in accordance with the regulations in force, and they must take all necessary precautions to protect them against loss, theft and unauthorized access. No matter how the loss occurs, the financial impact can be immense at all levels.

Description des violations, menaces et tendances entourant le principe clé:

Privacy and personal data protection threats and trends are multiple. Data can be either poorly protected or hacked. In the social context, we see uncensored and sometimes unauthorized broadcasts of obscene videos that reveal the nudity or privacy of certain people by malicious individuals. This type of act has very serious and irreversible consequences for the integrity and confidentiality of the persons and personalities who are "victims" of it.

Moreover, according to an estimation, "cybercriminality[17]" costs the world economy ***US$500 billion***, more than South Africa's Gross Domestic Product (US$350.6 billion) and slightly less than Nigeria's (US$521.8 billion), the continent's largest economy[18].

On the other hand, ***"chief cybercriminals"*** use more complex software, which they acquire cheaply in the depths of the Internet: the ***Dark Web***. There, they source most of their supplies from Russian ***hackers***, according to the latest Interpol and Trend Micro study. Their offensives require more time and skill. In particular, they use specific software such as ***key loggers*** (keyboard spying), ***RATS*** (Remote Access Tools), but also more sophisticated tools for automatic e-mail sending, and now other more sophisticated ***phishing*** techniques. This arsenal of computer piracy is usually installed on victims' computers, without their knowledge, through viruses, malware and Trojan horses hidden in spam e-mails.

All these abuses contribute to a deterioration of living conditions on the Internet, but they also represent a major scourge for the well-being of individuals, the security and integrity of personal data, and the smooth running of national development strategies.

Conclusion :

At the end of this study, one of the most acute questions in terms of personal data protection is that of the fate reserved for the data collected, particularly in the Internet world where certain companies are created only in the concern of constituting a personal file of visitors to the site or Internet customers, the reality of their commercial activity being, very often, the opening of a site and the collection of personal data to be resold. For IT managers, it's about finding the right balance between effectively controlling and protecting personal data on the one hand, and meeting the needs of government requirements about development and emergence on the other. In order to guarantee this coherence in the economic, social and political sectors, it is important to take a close look at these three aspects: confidentiality, integrity and availability of personal data.

Recommendations

There are a number of steps that must be taken before effective privacy and personal data protection can be achieved. The extent of these varies according to business area, type of data, locality, company risk attitude, company resources, and other factors.

Government :

The government must ensure the security of the Internet, the freedom of its citizens and ensure that the texts and laws provided for in the event of violation of the said principle are respected wherever necessary. It must

17 Cybercrime here means any criminal action linked to the Internet and intended for the wrong purposes

18 https://www.scidev.net/afrique-sub-saharienne/

scrupulously apply the sanctions provided for by the law in the event of threats or violations. Added to this, digital re-education must be provided to government agents so that they can better understand the threats and violations that exist in the new digital world, but more particularly to the young population that represents the privileged target.

Operators :

Operators must take appropriate measures to ensure the protection, integrity and confidentiality of the data they hold or handle. In addition, the information they hold on the location of customers subscribing to their respective networks.

Users :

Users must control the information they choose to put online, but also be informed about the texts of use of public or parapublic services; this requires systematic reading of use policies, user licenses and respect for copyright. They must also store their personal data in secure locations (generally web platforms that use secure communication protocols such as Https) that guarantee reliability, integrity and security.

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INTERNET AND THE ANDROID GENERATION IN CAMEROON: HOW TO APPREHEND SECURITY, STABILITY AND RESILIENCE OF THE INTERNET

by ***Lionel AMAHATA KIABEGA***
Associate Researcher at the Centre de Recherche d'Etudes Politiques et Stratégiques (CREPS) - University of Yaounde II-Soa
lionel_akl@yahoo.fr

Understood as the state of reliability of a telecommunications network free of any cyber threats and any variations in connection speed, the security, stability and resilience of the Internet is a principle of the African Declaration of Internet Rights and Freedoms (ADIRF). At a time of new information and communication technologies (ICT), the Internet is a tool for development and economic growth. Resolutely entered into the process of globalization, Cameroon, in its march towards development, cannot ignore the emancipation of NICTs. However the use of the internet is far from being an activity whose protection is guaranteed from end to end by the States. It is following this observation that the subject of this article is structured around the question of knowing how to conceive security, stability and resilience of the internet and its use in Cameroon? This work will analyse the mechanisms for securing the Internet in the Cameroonian context (I) and the applicability of the principle of security, stability and resilience (II).

Legal, political and institutional context of Internet security in Cameroon

Cyberspace cannot be a lawless zone, without rules known and respected by all[1]. In order to avoid illicit behaviours[2], the State of Cameroon in its sovereignty, has put in place a legal and institutional mechanism to regulate and secure cyberspace. This is how regulatory (A) and institutional (B) provisions have been adopted.

Regulatory provisions for securing and stabilizing the Internet

There is a real legal framework for the Internet at national and regional level.

At the national level, the measures taken by the Cameroonian State are designed to strengthen its cyber security mechanism. The legal aspect is an integral part of cyber security mechanisms in a State and it is in this sense that Cameroon has adopted a set of texts:

- law n°98/014 of 14 July 1998 regulating telecommunications in Cameroon;
- law n°2010/012 of 21 December 2010 on cyber security and cybercrime in Cameroon;
- law No. 2010/13 of 21 December 2010 regulating electronic

1 Isabelle FALQUE-PIERROTIN, « Internet, sécurité et libertés », in Annales des Mines - Réalités industrielles, n°2, 2009, p.79
2 Emmanuel MONKAM, Sinsai NGUELEWOU, « L'encadrement juridique et institutionnel du cybersespace au Cameroun » in Edouard YOGO (Coord.S), La cybersécurité et la cyberdéfense au Cameroun, Yaounde, Afrédit, 2015, p.39

communications in Cameroon and repealing that of 14 July 1998;

- law No. 2010/021 of 21 December 2010 governing electronic commerce in Cameroon;
- law No. 2015/006 of 20 April 2015 amending and supplementing certain provisions of law No. 2010/013 of 21 December 2010 governing electronic communications in Cameroon.

These specific texts are accompanied by a plethora of decrees on telecommunications. In addition, the Cameroonian legislator has made provisions governing behavior through telecommunications means. To this effect, the Penal Code No. 67/LF/1 of 12 June 1967 condemns acts committed through electronic communication or through an information system.

At the sub-regional level, the jurisdictions of certain community organizations have become aware of the challenges posed by cybercrime in the life of businesses[3] by putting in place legal instruments. Thus, in the CEMAC and ECCAS areas, certain legal instruments address certain issues related to cybercrime. Among which, at CEMAC level:

- Regulation n°02/03-CEMAC-CM of 04 April 2003 on payment systems, means and incidents incriminating breaches of payment systems;
- Directive n°06/08/-UEAC-133-CM-18 of 19 December 2008 establishing universal service in the telecommunications sector in the CEMAC Member States;
- Directive n°07/08-UEAC-133-CM-18 of 19 December 2008 establishing the legal framework for the protection of the rights of users of electronic communications networks and services within the CEMAC;
- Directive n°08/08-UEAC-133-CM-18 of 19 December 2008 on interconnection and access to electronic communications networks and services in CEMAC member countries;
- Directive n°09/08-UEAC-133-CM-18 of 19 December 2008 harmonizing the legal regimes for electronic communications activities in CEMAC member States;

At ECCAS level, it should be noted that there is the Draft model law on the fight against cybercrime in ECCAS/ECMAC member States of February 2013.

All these texts at the national and regional levels are not only adopted to prevent and avoid frauds that are symptomatic of the digital age[3] but also to regulate its use.

Apart from these legal instruments, Cameroon has equipped itself with institutional mechanisms to regulate the use of the internet, and telecommunications in general.

Institutional mechanisms for regulating the Internet

Conscious of the responsibility to maintain order and security in the digital domain, Cameroon has set up two structures: National Agency for Information and Communication Technology (NAICT)

3 Alvin TOFFLER quoted by Etienne DE SEREVILLE,"Are standardisation and standardisation factors of efficiency in information system security? «, in Revue internationale d'intelligence économique, Vol.1, n°2, 2009, p.271

and the Telecommunications Regulatory Agency (TRA) created respectively by Decrees n°2012/180 of 10 April 2012 and n°2012/203 of 20 April 2012. These two structures strengthen the Network and Information Systems Security Directorate (NISSD), housed within the Ministry of Posts and Telecommunications. NAICT is the body that guarantees the safety of Cameroonian Internet users[4]. Its mission is to promote and monitor government action in the field of information and communication technologies; it is responsible for regulating electronic security activities, in collaboration with TRA. It has a Computer Incident Response Team (CSIRT), which manages computer security incidents throughout the national territory.

As for TRA, on behalf of the State, it regulates, controls and monitors the activities of operators and operators in the Telecommunications and Information and Communication Technologies sector. It also ensures that the principle of equal treatment of users is respected in all electronic communications companies and works with NAICT to regulate electronic security activities. The Cyber Security, Cyber Defense, and Digital Forensics (CSCDDF), hosted by the University of Buea, which is involved in education, research and innovation in cybernetics, was created in 2015. It should nevertheless be noted that very little is known about the activities.

Access to a secure and sTableau Internet being a right for citizens more than a gift from the State, the National Commission on Human Rights and Freedoms[5] has a general jurisdiction to rule on human rights violations in any setting, through the Subcommittee on Civil and Political Rights. It is another body that helps to protect citizens against all forms of violations such as viruses, intrusions, breakdowns, which are ordinary dangers in a world where communication, the circulation of information, the constitution and the sharing of knowledge appear to be facilitated and threatened[6].

The triptych security-stability-resilience of the Internet is a fairly relevant issue. It is being taken into account by the Cameroonian government with regard to the adoption of a sector strategy in the field of telecommunications and ICT in October 2005. One of the priorities of this strategy was to have a platform for securing transactions on the government network and to extend the security of transactions to the network of local authorities. However, as Cameroon remains "digitally isolated", this strategy has been revised to give birth to the "Digital Cameroon 2020" Strategic Plan, which appears to be the latest ICT strategy. This shows that this principle is taken into account in national strategies.

The triptych security-stability-resilience of the Internet is also illustrated as a requirement of the ODDs. Indeed, the ninth ODD (Industry, Innovation and Infrastructure) aims to build a resilient infrastructure, promote sustainable industrialization that benefits all and encourage innovation. The implementation of Internet security-stability-resilience in Cameroon is therefore in line with the recommendation to increase access to information and communication technologies and ensure that all inhabitants of LDCs have access to the Internet at an affordable cost by 2020.

4 Jean Claude ANGO ANGO, Donye AMAHILA, « Les mécanismes de cybersécurité et de cyberdéfense au Cameroun » in YOGO Edouard E. (Coord.S), La cybersécurité et la cyberdéfense au Cameroun, Yaounde, Afrédit, 2015. p.60

5 Created by law loi n° 2004/016 of 22 July 2004

6 Jérôme DENIS, « L›informatique et sa sécurité. Le souci de la fragilité technique », in Réseaux, Vol.1, n° 171, 2012, p.163

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	**124**	**3.0**
Networked Readiness Index 2015 (out of 143)	126	3.0
Networked Readiness Index 2014 (out of 148)	131	2.9
Networked Readiness Index 2013 (out of 144)	124	2.9
A. Environment subindex	**114**	**3.5**
1st pillar: Political and regulatory environment	105	3.3
2nd pillar: Business and innovation environment	114	3.7
B. Readiness subindex	**131**	**2.6**
3rd pillar: Infrastructure	138	1.1
4th pillar: Affordability	128	2.8
5th pillar: Skills	107	3.8
C. Usage subindex	**114**	**2.9**
6th pillar: Individual usage	125	2.0
7th pillar: Business usage	74	3.6
8th pillar: Government usage	107	3.3
D. Impact subindex	**115**	**3.0**
9th pillar: Economic impacts	89	2.9
10th pillar: Social impacts	124	3.0

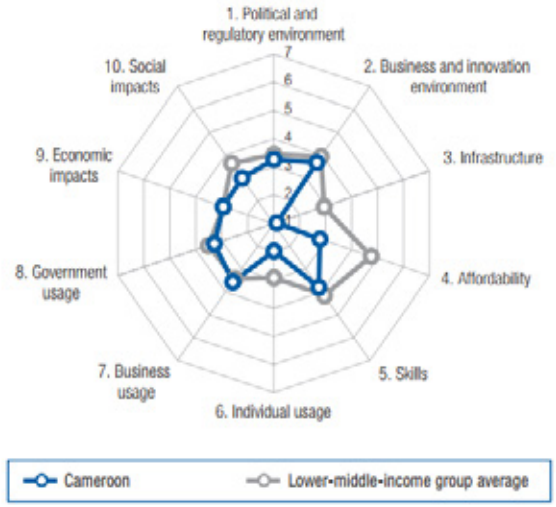

Figure 10 : Network Readiness Index

Source :WEF, Global information Technology Report 2016

Circumspection of the triptych security-stability-resilience of the Internet in Cameroon

The establishment of free and secure access to the Internet is a necessity for States. Each State has the duty to guarantee an Internet free from any intrusion and any interruption to its users. Beyond this postulate, the triptych security-stability-resilience of the Internet proves to be a principle whose application in Cameroon (A) could bring many opportunities (B).

The triptych security-stability-resilience of the Internet in Cameroon

According to a classical conception of the sovereign powers of the State, there is the duty of security which is also an indicator of safety/vulnerability. However, in the digital age, it becomes difficult to guarantee this duty, all the more so as intelligence is located at the end of the network mesh and not in the network itself[7]. The ADIRF has prescribed the principle of security, stability and resilience of the Internet to compensate for this defect. On analysis, the implementation of this principle seems half-figure, half-reason in the Cameroonian context.

Several mechanisms are in place to make the Internet sTableau and secure (with reference to the texts and structures mentioned above), but enormous progress remains to be made. To ensure the application of this triptych, several policies are implemented. One example is Decision No. 010/MINCOM/CAB of 15 April 2003, by which the Minister of Communication made it compulsory to encrypt audiovisual communication signals made available to the public. However, it is not for the State alone to put in place mechanisms to achieve this triptych. It is a concerted action of several actors insofar as public policies linked to the Internet are multisectoral. It is in this sense that NAICT organizes since 2013, the National Forum on Internet Governance, bringing together administrative actors, companies, telecommunications sector agencies, civil society organizations and the

7 Bernard BENHAMOU, « Les enjeux politiques de l'architecture et de la régulation de l'internet », in Les Cahiers du numérique, Vol. 3, n°2, 2002, p.200

Altered photograph showing the Head of State at the Army Headquarter

Source : https://www.237online.com

public. Deconcentrated and decentralized authorities are also concerned by this problem in the sense that in their administrative districts, they guarantee the availability of the Internet.

Notwithstanding these efforts, it cannot be said that the security-stability-resilience of the Internet in Cameroon is certainly self-evident. There have been numerous cases of hacking into Yahoo, Facebook accounts or sites such as the hacking of the official website of the Presidency of the Republic in March 2015, showing the President of the Republic at a Ceremony at Headquarters, while the latter was abroad. This incident had created a heated controversy among national opinion and had illustrated the inability of the State to contain intrusions and other cyber-attacks linked to technical progress accompanied by an increase in computer attacks or a greater likelihood thereof[8].

It cannot be said that there is stability of the Internet in Cameroon with regard to the many interruptions regardless of the network and whose duration varies according to the case in minutes, hours, days or months. This was for example the case during the suspension of the Internet in the North-West and South-West regions from January 17 to April 19, 2017 with the Anglophone crisis, or the disruption of the Orange Cameroon operator's network during the month of October 2017. These drawbacks also include variations in connection speed among all Internet service providers. Anything that makes us say that in Cameroon, there are no measures ensuring the permanence of the stability of the Internet which is nevertheless a right, in the sense of the ADIRF.

Regarding Internet resilience, it must be understood in the logic that there will always be threats and vulnerabilities, and the term "secure" simply means that the risks are made residual and therefore accepTableau[9]. Following this consideration, the picture is no better in Cameroon. The resilience of the Internet goes hand in hand with a certain proactivity which is expressed through the identification in security policies of measures that will make it possible to react to attacks and prosecute their perpetrators[10]. On

8 Eric OK, « L'Internet des objets : un nouveau champ d'action pour la cybercriminalité », in Annales des Mines - Réalités industrielles, n°2, 2013, p.68

9 « Comprendre la sécurité et la résilience de l'Internet », publié sur http://www.internetsociety.org p.5

10 Solange GHERNAOUTI, Christian AGHROUM, « Cyber-résilience,

observation, this principle does not seem to be sufficiently implemented in Cameroon. When there are cases of privacy violations through the use of *cookies* or other means, or account hacking, it does not seem obvious that the perpetrators are automatically prosecuted. It should be added that the NCHRF in its annual reports does not mention aspects related to human rights violations on the Internet.

Opportunities related to the application of the triptych security-stability-resilience of the Internet in Cameroon

A secure, sTableau and resilient internet in the face of disruptions would offer many opportunities in Cameroon. The transition to the digital age, characterized by dematerialization, contributes to the fluidity of exchanges and interactions. For administrations, the application of the security-stability-resilience principle of the Internet can improve efficiency and reduce costs. The digitalization of transactions through e-commerce, e-agriculture and e-payment creates added value in order to improve the standard of living and social well-being of Cameroonians. This digitalization makes it possible to substantially increase the supply of and demand for goods and services and to enter the society of the digital economy, which is important for the development of modern States. This would ensure economic growth. Also, this optimization of the Internet would be conducive to the creation of *start-ups* and techno-poles such as *Silicon Mountain* in Buea, which are all structures for developing young entrepreneurship and, at the same time, promoting job creation and combating unemployment. It is a truism to say it, the emergence of Cameroon will undoubtedly pass by the exploitation of the wide range that the Internet provides. The realization of this triptych can be a means to ensure the flourishing of the population in terms of access to knowledge and know-how, and an opportunity to create free software less vulnerable to virus attacks.

Conclusion

Internet access in Cameroon is still subject to threats such as cyber-attacks and cybercrime. Acts of piracy and identity theft are examples of human rights violations. In addition, there are connection interruptions and the resilience capacity of the Internet is not self-evident. This state of affairs infringes the rights and freedoms of the Internet. However, the triptych security-stability-resilience recognized by the ADIRF is an imperative for any emancipation from Internet use. Aware of this state of affairs, the State, accompanied by various actors (private public administrations, CSOs, etc.) are making efforts to apply this principle through an incremental approach. With the adoption of the Cameroon Digital Plan 2020, it will be possible to have a coordinated action of the various actors intervening in this sector. This could lead to wider availability, security and a real resilience of the Internet tool, improving people's living conditions. It would still be necessary that the various strategic axes of this plan be realized…

Recommendations

To state actors

- Ensure - through the network's distribution companies - the availability of the Internet for all Cameroonians ;
- Inform on the existence of the CSCDDF and integrate it into the national digital strategy;
- Provide NAICT and TRA with sufficient means to ensure effective and efficient control of cyberspace;
- Achieve as much as possible the Axes of the Cameroon 2020 Digital Plan.

risques et dépendances : pour une nouvelle approche de la cyber-sécurité », in Sécurité et stratégie, Vol.4, n°11, 2012. p.77

To the decentralised authorities

- Apply the cybersecurity policies issued by the central authority in local councils;
- Organize sensitization workshops on opportunities offered by the use of internet in local councils management ;

To civil societies organizations

- Organize awareness campaigns on digital dangers;
- Organize capacity building seminars on cyber security
- Promote Internet rights and freedoms.

To technical communities

- Innovate and develop free software less vulnerable to cyber attacks
- Promote the production and use of free software
- Promote the principles of the ADIRF to the public.

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THE INTERNET GOVERNANCE FORUM IN CAMEROON AND THE UPPER HAND OF THE NATIONAL AGENCY FOR INFORMATION AND COMMUNICATIONS TECHNOLOGIES (NAICT)

Serge Constant TUWA DAHO
ICT Researcher
sergedaho@yahoo.fr

Avis MOMENI
ICT Activist
avismoeni@protegeqv.org

In order to reduce the inequality of the world's inhabitants with regard to access to information through Information and Communication Technologies (ICT) and in particular the Internet, the United Nations (UN) has mandated its specialized organization, the International Telecommunication Union (ITU), to organize the World Summit on the Information Society (WSIS).

The WSIS was held in two phases: Geneva 2003 and Tunis 2005[1]. Following discussions among the various stakeholders, it was then agreed to convene another forum in Athens in November 2006. Known as the Internet Governance Forum (IGF), it can be defined as the development and application by States, the private sector, civil society and international organizations, within the framework of their respective roles, of principles, norms, rules, procedures, decisions and programs, etc that shape the evolution and use of the Internet[2].

It is therefore fitting that the African Declaration on Internet Rights and Freedoms[3] (ADIRF) states: *"It is important that multi-stakeholder decision-making and policy formulation be improved at the national level to ensure the full participation of all stakeholders..."*. In the light of this exhortation, it seems to us judicious to sift through the Internet governance model in Cameroon in order to determine if it is in conformity or if it approaches the inclusive and participatory model as advocated by the UN, through the General Secretariat of the Internet Governance Forum.

The political context and the legislative and regulatory texts in force

The tremendous potential of ICTs and the Internet in particular in terms of job creation, economic growth and social development was expressed at the highest summit of the state in Cameroon: *"Our country needs widespread access to the Internet,"* said the Head of State at the platform of national representation when he sworn in on November 3, 2004 for a second term.

1 By its resolution 56/183 of 21 December 2001, the UN General Assembly approved the holding of WSIS in two phases. The objective of the first phase (Geneva, Switzerland, 10-12 December 2003) was to formulate political will and take concrete measures to lay the foundations for an information society accessible to all.
During the second phase (Tunis, Tunisia, 16-18 November 2005), it was discussed to implement the Geneva Plan of Action and to reach agreements on Internet governance.

2 This definition is that of the WSIS Working Group on Internet Governance.

3 The ADIRF is a document adopted by the African Commission on Human and Peoples' Rights meeting in its 59th ordinary session in Banjul (Gambia) through resolution 362 on the right to freedom of information and expression on the Internet in Africa ; and which promotes human rights standards and principles of openness in the formulation and implementation of Internet policies on the continent.

In order to materialize this will, Cameroon has adopted a set of legislative and regulatory texts, as well as several institutions dedicated to the framework of ICT and the Internet.

The legislative and regulatory environment

In Cameroon, there are several laws governing ICT, although some of them require some amendments due to the very rapid evolution of the Internet and ICT. In a non-exhaustive way, we will just point out those of them having a close link with Internet governance, very often subject to debate during the related forums. These are:

- **Law No. 2010 / 012 of 21 December 2010** on cyber security and cybercrime, in particular article 1 on security and confidence-building in electronic communication networks and information systems;
- **Law No. 2010/013 of 21 December 2010 governing electronic** communications in Cameroon, in particular article 1 thereof on the harmonious and balanced promotion of electronic communications services;
- **Law No. 2010/021 of December 21, 2010,** governing electronic commerce in Cameroon which promotes the emergence of e-commerce;
- **Act No. 2015 / 006 of 20 April 2015** amending and supplementing certain provisions of Act No. 2010 / 013 governing electronic communications in Cameroon.

The institutional framework

Among the institutions in charge of facilitating the forum on Internet governance in Cameroon, we will mention:

- **The Ministry of Posts and Telecommunications (MINPOSTEL)** in charge of supervision, regulation, policy development and sector studies;
- **Cameroon Telecommunications (CAMTEL),** a public company created by Decree No. 98 / 198 / PR of September 8, 1998, historical operator in Cameroon and which holds the monopoly of management of telecommunications infrastructure.
- **The National Agency for Information and Communication Technologies (NAICT)** was created by Decree No. 2002 / 092 / PR of April 8, 2002 with the main mission, the popularization of ICT and their use to make it one of the levers of development of the country. In Cameroon, NAICT is the key player in the Internet Governance Forum.

Taking Internet governance into account in sectoral ICT policies

How to achieve a "Cameroon with generalized access to the Internet" desired by the President of the Republic? This is the guiding principle that presided the development of the ICT and telecommunications sector strategy in our country. The first telecommunications sector strategy covering the period 2005-2015 was launched in October 2005, on the eve of the second phase of the Summit. However, none of these strategies emphasizes on the Internet governance forum.

Coherence of the democratic and multi-stakeholder governance of the Internet with the Sustainable Development Goals (SDGs).

In September 2015, 193 UN countries agreed on 17 Sustainable Development Goals , to be achieved by 2030. The SDGs, which came into force in January 2016 with

the ultimate goal of eradicating poverty and ensuring prosperity for all, succeeded the Millennium Development Goals (MDGs) adopted in 2000.

How can the Internet contribute to achieving these SDGs?

Indeed, digital is a major lever for achieving the ODDs, because it carries applications likely to participate in their realization.[4]

Thus, the 11th Global Forum on Internet Governance held in Guadalajara, Mexico in December 2016, one of whose themes was "The Contribution of Internet Governance to Achieving the SDGs", called for new approaches to provide everyone with Internet access and bridge the digital divide that exacerbates inequalities. In addition, it was established that for each development area identified through the SDGs, digital could bring substantial added value. Finally, a call was made for concerted action to ensure that the benefits of the Internet reach all members of society in developing and developed countries.

Application / Applicability of the principle: opportunities, trends, threats and violations

The World Summit on the Information Society, forerunner of the Internet governance fora, innovated in comparison with previous UN summits in that it now gives way to actors other than sovereign states. These new actors include the private sector, international organizations and civil society.

Thus, the Internet Governance Forum claims not only a multi-stakeholder character on an equal footing, but also a dual people-centered and bottom-up decision-making model that has the advantage of putting human rights, the principles of openness, transparency and even freedom of expression (instead of "profit") at the centre of concerns.

Consequently, this forum in which major decisions are taken about the Internet provides an opportunity for actors other than States to be heard and to bring to the Tableau concerns related to the socio-economic development of populations, especially in countries where human development needs are the greatest.

IGF 2007, Rio de Janeiro. www.intgovforum.org

4 By way of illustration and in connection with objective No. 5: "Achieve gender equality and empower women and girls", Orange, through its m-Women programme, offers MyHealth Line in Cameroon. *In Senegal, Orange supports and promotes women's digital entrepreneurship*

Indeed, in a new globalized and increasingly immaterial economy, the development challenge is translated, at least to some extent, by the capacity of the various actors to share and organize the circulation of "globalized" information.

However, accessibility to the means of communication is very unequal since the "connected" in developing countries represent only about 5% of the world's users. What global body, better than Internet governance, offers the possibility of correcting such inequalities?

However, with the ADIRF referring to independent, multi-stakeholder and well-resourced bodies that should be established at the national level, it is appropriate for us to pause and reflect on current trends in Internet governance in Cameroon.

The exorbitant powers of NAICT and Internet governance in Cameroon

Surfing on the wave generated by the successful organization of the Sub-regional Internet Governance Forum held in Douala in May 2012, the Cameroonian government, which had made the commitment to hold the national forum of the same name, effectively kept its word and, in August 2013, the first national meetings on Internet governance were held in Yaounde.

The ADIRF invites the establishment at the national level in Africa of independent, multi-stakeholder and well-resourced organizations for the organization of IGFs. In Cameroon, it is NAICT, a state body, far from being independent, responsible among other things for the promotion and popularization of ICT and the regulation of the Internet, which is the key player in all aspects of the IGF (organization, financing, choice of the main theme and secondary themes, selection of panelists and their remuneration, choice of site, etc.). All things at the antipodes of the spirit and letter of the Internet Governance forums as advocated by the UN and the ADIRF.

Indeed, the prescriptions of the Geneva and Tunis agendas that led to the establishment of Internet governance are thus trampled underfoot. During his opening speech of the very first national IGF on Tuesday 27 August 2013 at the Yaounde Congress Centre, the Director General of NAICT, Mr. ENOW EBOTEBOT left little doubt as to the real nature of this forum in Cameroon *"... that NAICT in its capacity as Internet regulator in Cameroon, has taken the initiative to organize the National Forum on Internet Governance..."*.

Further on, he will add *"...allow me to extend our sincere thanks to the public administrations, parapublic and private sector organizations and Civil Society and* ***International Society Organizations*** *that have joined us in this meeting..."*.

Figure 10 bis : *Banner announcing the 5th edition of Cameroon IGF*

www.NAICT.cm

Another strong sign of the violation of the inclusive and participatory nature of the Internet Governance Forum in Cameroon, no other stakeholder (private sector, academic sector, civil society) took the floor at the opening session; all confined to the role of "mere participants". However, we welcome here the commendable initiative of the Minister of Posts and Telecommunications who set up a permanent public-private consultation circle for the telecommunications sector (CPPT) by decision N°017/MINPOSTEL of 29 January 2016; which circle has already held, under the multi-stakeholder model advocated by the WSIS, its first meetings in 2017.

Figure 11 : IGF 2017 Cameroon, ADIRF copies distributed by M. MOMENI of PROTEGE -QV.

Conclusion

The WSIS innovated by establishing the Internet Governance Forum and its multi-stakeholder model (States, private sector, civil society) on an equal footing. This "new policy model" is the starting point for a broad awareness on bridging the "digital divide", i.e. the uneven development of ICTs worldwide.

Admittedly, this debate is global but, it takes its source from national fora and very opportunely, the ADIRF invites these national bodies to multi-stakeholder decision-making in order to serve as a link with regional and global mechanisms.

In the light of the Cameroonian experience, we were able to observe that the model set up by the NAICT has all the characteristics of a "lone rider" who concentrates in his hands the whole process, from its conception to its organization. The other actors being reduced to the rank of mere spectators. Yet Internet governance, the platform for maximizing Internet opportunities, is and should be everyone's business, both users and non-users who just depend on Internet services.

In order to make the Cameroon Internet Governance Forum a truly inclusive and participatory process, we make the following recommendations.

Recommendations

To Government and the NAICT

- Make the IGF a truly inclusive and participatory process as advocated in the Geneva and Tunis agendas that established the Internet Governance Forum;
- Implement the flagship recommendation of the very first national IGF of August 2013 which called for the establishment of a national secretariat and sub-regional multi-stakeholder IGF and truly representative of all stakeholders involved;
- The agenda and theme of the national IGF should be determined by all stakeholders and not only by the NAICT;
- We urge the Cameroonian government to take a close interest in the governance of the network of networks because tomorrow's Internet is taking shape in today's decisions that will have social, economic and political impacts.

To the civil society

- Civil society would benefit from putting aside its internal quarrels and working in a coordinated manner to

influence the government for a truly inclusive and participatory IGF;

- Civil society is invited to explore ways and means likely to provide it with the "financial weight" necessary to "influence" effectively the development of IGFs in Cameroon;
- Civil society should partner with the technical and private sectors. Indeed, since the Internet is the backbone of our globalized world, the frequent interruptions operated by governments in the name of national security are likely to cause enormous damage to the private sector, which calls for a secure, reliable and secure Internet as one of the indispensable conditions for the smooth running of "businesses".

To the private sector and the expert community

- To contribute actively to the development of the Internet in Cameroon, whether in economic or technical aspects. What if the inventor of Skype or Facebook tomorrow was Cameroonian!?

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GENDER EQUALITY AROUND INTERNET IN CAMEROON : ASSETS AND SETBACKS

by Sylvie SIYAM SIWE,
Local Development Expert
pegmidebana@gmail.com

In Cameroon, a country of 22 million inhabitants, 51% of whom are women, located in the heart of the Gulf of Guinea, the equality of men and women, still called "gender equality", is a strongly held concept at all levels, but very controversial. Yet, as in most countries, this subject is addressed in the Growth and Jobs Strategy Paper[1] and a National Gender Policy developed and validated in 2014.

In 2016, Cameroon had 4,311,178 Internet users, an average Internet access rate of 18%, up +16.5%[2] over a year. Given the significant growth in this rate, what role could the Internet play in promoting equality between men and women in Cameroon?

According to the African Declaration on Internet Rights and Freedoms in which this concept is the thirteenth key principle, "in order to ensure the elimination of all forms of discrimination related to gender, men and women should have equal access to the learning, definition, access, use and configuration of the Internet.

What about Cameroon? Is this key principle legally framed and applied by the government and other actors? What could be the effects?

1 the DSCE adopted in 2009, is the government's main policy document for 2020,

2 Internet Live Stats, member of the Real Time Statistics project (www.worldometers.info), is an international team of developers, researchers and analysts that aims to make statistics available in a dynamic format. Its real-time statistical counters are used by many media and international organizations. http://www.internetlivestats.com/internet-users-by-country/

Normative and institutional framework around gender equality

The key principle "Equality of men and women" is strongly framed at the legal and institutional levels.

At the legal level

The following texts ratified by Cameroon at the international level may be noted, but are not exhaustive:

- the 1984 United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which promotes the fight against discrimination against women in all fields;
- the 2003 Additional Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women, which protects the specific rights of women in various fields;
- the 2004 Addis Ababa Declaration of Heads of State **and** Government on Gender Equality in Africa.

At the national level, gender equality is a fundamental right within the meaning of the Constitution[3] which proclaims in its preamble that *(i) the human being, without discrimination as to race, religion, sex or creed,*

3 Law No. 96-06 of 18 January 1996 revising the Constitution of 02 June 1972

possesses inalienable and sacred rights; and (ii) The State guarantees to all citizens of both sexes the rights and freedoms enumerated in the preamble to the Constitution.

However, in the face of rather rare references to gender equality in the Constitution, amendments were proposed at the initiative of the Network to Support Women's Political Participation in Cameroon[4], which recommended, among other things: (i) the inclusion in the revised Constitution of the following provision: *"The State shall ensure to men and women in all aspects of civil, political, economic, social and cultural life equal conditions for their development, with due respect for parity"* and (ii) the establishment of a Parity Observatory under the Prime Minister. But not all these recommendations have been taken into account.

Act No. 2010/012 of 21 December 2010 on cybersecurity and cybercrime in Cameroon regulates the security framework for electronic communication networks and information systems and aims to protect the fundamental rights of individuals. It supplements the Civil Code and the Penal Code (Act 2016/007 of 12 July 2016), *which stipulates that "criminal law is binding on all without distinction as to sex".*

Article 4 of Law No. 2010/013 of 21 December 2010 governing electronic communications in Cameroon stipulates that *"Everyone has the right to benefit from electronic communications services, regardless of his geographical location on national territory".*

The government also validated in 2014, a National Gender Policy Document of Cameroon (2011-2020)[5] with *"Promoting equiTableau access to education, training and information for girls and boys, women and men"* as one of its major strategic axes. This document was complemented by a Multisectoral Action Plan developed in 2016, which gives prominence to improving girls' and women's access to ICTs.

At the institutional level,

The Ministry of the Women Empowerment and the Family (MINPROFF)[6] is responsible for ensuring the elimination of all discrimination against women and the enhancement of equality guarantees in all fields of activity.

UN Women, the United Nations organization dedicated to gender equality and women's empowerment, has a Country Office in Cameroon whose activities consist in strengthening the capacities of partners[7] governmental and non-governmental organizations for gender institutionalization.

One of the first missions of the Inter-ministerial Committee to monitor the implementation of recommendations and/or decisions resulting from international and regional mechanisms for the promotion and protection of human rights[8] is to encourage and support training activities in the field of the promotion and protection of human rights.

Many civil society organizations are also working to improve women's access to the Internet. Among others, PROTEGE QV, CERFEPROD, Women Tech ...

Alongside this framework, this key principle is consistent with the Sustainable

4 The Network of Support for Women's Political Participation in Cameroon organized a Reflection Day held on 25 January 2008 in Yaounde, on the place of women in the Constitution of Cameroon.
5 MINPROFF-Gender National Policy Paper, (2014) with as vision, "Cameroon, an emerging country, built on the principles of good governance, where women and men enjoy the same rights and participate equitably and equally in development" complemented by a Multisectoral Action Plan for the Implementation of the National Gender Policy in Cameroon,(2016)

6 MINPROFF is responsible for developing and implementing government measures relating to the promotion and respect of women's rights and the protection of the family.
7 These are: Ministry for the Advancement of Women and the Family, Ministry of the Economy, Planning and Town and Country Planning, Ministry of Health, Ministry of Commerce, National Commission on Human Rights and Freedoms, Elections Cameroon, and for non-governmental organizations (CSOs, media, political parties).
8 This committee is created by Order No. 081/CAB/PM of 15 April 201 is placed under the Prime Minister, Head of Government

Development Goals (SDO5) and taken into account in sectoral strategies.

Indeed, this 13th key principle of the ADIRF advocates the elimination of all forms of gender discrimination, and states that *"men and women should have equal access to the learning, definition, access, use and configuration of the Internet".* It is therefore fully consistent with the SDO5 which is to *"Achieve gender equality and empower all women and girls"* with as one of its targets, *"Strengthen the use of key technologies, particularly information and communication technologies, to promote the empowerment of women"*.

The SDO5 calls for ensuring equal access of women and girls to, among other things, education, and representation in political and economic decision-making processes with a view to nurturing sustainable economies. Similarly, one of the requirements of the 13th key principle of the ADIRF is related to the development and strengthening of processes and mechanisms allowing the full, active and equal participation of women and girls in decision-making on the form and management of the Internet.

In terms of strategic orientations in telecommunications, although the Cameroon Digital Strategic Plan 2020 states in its fourth strategic axis that *"The digital revolution will only be meaningful if society as a whole adopts ICT in its way of life"*, and moreover, conditions the advent of the digital economy in Cameroon to *"the widespread use of ICT by individuals, administrations and businesses".* None of the activities in the plan outlines the measures that will be taken to catch up with women in this area[9].

One of the guiding principles of education policy in Cameroon is the *"Reduction of all kinds of disparities[10]"*, including through measures to promote equality and equity. It should be noted that in Cameroon, public primary school is compulsory and free. The gross primary intake rate in 2015 is 139% for boys and 129% for girls[11] and computer science is taught today at all levels of the education system.

Equality of men and women in access to learning and use of the internet

Despite the abundance of legal mechanisms and initiatives to ensure respect for women's human rights, gender equality remains a promise not kept and often a public laughing stock. This situation is well reflected by the Human Development Index in 2015 which is 0.474 for women and 0.555 for men.

Promoting gender equality in Internet access therefore seems rather to be translated, as the ADIRF says so well, into *"efforts to improve such access should therefore recognize and address existing gender inequalities,...".*

Computer science teaching in Cameroon's education system

As presented on the Cameroon Virtual Education System (CameroonVES) learning platform[12], Cameroon's national computer education frame of reference provides that from kindergarten the child should be initiated to identify and name parts of a computer, use some word processing, games and drawing software and also know how to take care of computers. In secondary education, the computer programs provide for classes from Grades 6 to 12 to be taught about computer history, the evolution of computers, their parts and functions, software, operating systems, programming and databases, networks and computer projects.

9 It is interesting to note that it appears from the inventory made in the context of the preparation of the said plan that MINPROFF is the worst off administration with a computer penetration rate of 5.9%. While that of the central services of ministries and some administrations and institutions in Cameroon is about 42 computers per 100 people.

10 Education and Training Sector Strategy Paper (2013-2020)
11 MINEDUB, Analysis Report 2015
12 CameroonVES is an online learning platform that offers innovative educational materials for all schoolchildren, students, parents, teachers in a safe and stimulating learning environment.. https://cameroonves.net/fr

But it should be noted that, overall, less than 30% of public institutions are equipped with computers, Internet access being another problem.

Operation 100,000 women trained in IT by 2012

Launched in 2002, this program of the African Institute of Computer Science (AICS) Cameroon to equip Cameroonian women in the use of ICTs, has eventually trained 103,350 women of all ages and social strata[13] : *"unemployed women, senior government officials, business managers, women leaders of associations, businesswomen, disabled women, minorities (pygmies, albinos, people living with HIV...),...".* This operation has certainly helped to create job opportunities or improve the efficiency of certain professionals.

However, an evaluation of the real effects of the campaign is to be recommended.

Figure 12 : Training of women in the use of computers

Internet? Yes, but for what uses?

MTA of the online magazine MaCopine [14] classifies Cameroonian women on the internet into three types:

- *"The Cameroonian woman" entrepreneur* for whom the Internet allows her to break the codes imposed by society..;
- *The opportunistic "Cameroonian woman"* who uses the Internet in order to create new love or commercial relationships..;
- *"The Cameroonian woman" of experience...* quite reserved online but with interventions always very relevant and pointed, and which privileges the politically correct.

Among the leading figures of "Cameroonian women entrepreneurs" on the web we can quote[15] :

- Rebecca ENONCHONG, founder of AppsTech, a global provider of enterprise application solutions, and invested in ActivSpaces, an incubator that hosts and offers a workspace to Cameroonian Tech start-ups;
- Dorothée DANEDJO FOUBA multimedia journalist, engineer and blogger representative / mentor for MOZILLA and responsible for promoting the brand through communities in Cameroon and Africa ;
- Beatrice KEPSEU Electrical Engineer, General Manager of POWERLINK CAMEROON[16], and regional ambassador in Cameroon of "Technovation Challenge Cameroun", which offers computer courses to girls from 12 to 19 years old;
- Anne Marie BEFOUNE, member of the League of African Cyber Activists for Democracy, promoter of the online platform ellecitoyenne.com for citizen participation and community development by and for citizens;

13 https://www.mediaterre.org/afrique-centrale/actu,20131119093240.html

14 Ma copine is a monthly magazine of information, advice and tips for women, created to give Cameroonian women a space of relaxation and information specific to their environment, and especially to enhance their image. http://macopine-online.com/femme-camerounaise-internet-reseaux-sociaux/

15 AULETCH, web magazine at the heart of the cultures of Cameroon which speaks about art, society, music, entrepreneurship, beauty and well-being, in its edition of March 08, 2017. https://www.auletch.com/top-8-femmes-entrepreneures-tic-cameroun/

16 POWERLINK is a company whose main objective is to provide products and services to companies in the telecommunications and energy sector.

- Habsatou Nadia KALKABA, Project engineer and "Techwomen 2016 Seed grant Award winner", with Givethemhope platform[17] ;

Figure 13 : Cameroon team at Techwomen Seed Grant Award ceremony[18]

- Celine Victoria FOTSO, founder of JE WANDA MAGAZINE, and promoter of MAMYMUNA dedicated to modern African mothers and CLUB WANDASTIC for the promotion of Lifestyle's afropolitan brands;

- Anaïse TCHIENDA founder of the e-commerce site wandashops with home delivery, pioneer in this field in Cameroon in 2013, and subsequent opening in Gabon.

The second type cited, "*The opportunistic Cameroonian woman" uses the internet to search for a soul mate and "change their life and that of their family through marriage. Unfortunately, very few... find a husband. More worrisome..., 60% of them end up in a prostitution ring"*[19].

This practice called called marital cybermigration[20] by Brice Arsène MANKOU, *"is one of the contemporary forms of legal economic migration, which first passes through virtual routes (the Internet), and then takes physical routes (roads, seaways or other).*

It emerges from his work that *"for Yaounde alone, the political and administrative capital of Cameroon, nearly 500 cybercafés are overrun every day by women looking for their 'white'"* on the web. While men continue to use the traditional routes to arrive clandestinely, *"the cybermigrant arrives in her host country legally since she is married to a European".*

Figure 14 : Anaïse TCHIENDA, the queen mother of e-commerce in Cameroun[21]

As presented by the author, cybermigrant women are generally between 25 and 45 years old (67%), are unemployed for the vast majority (83.3%), and single (67%) or widowed (30%)

"The "migracurrency", money sent by migrant women to their countries of origin, are used to support families.

One could ask oneself whether this movement which, according to the author, *"is a form of economic aid to families", is an opportunity or a threat?*

17 Givethemhope is a platform to provide educational and psychological support to children in the far north of the country whose education and lives have been disrupted by the Boko Haram insurgency.

18 https://www.techwomen.org/2016-program/2016-seed-grant-winners-announced-at-community-celebration

19 Baba Wame, « La recherche de l'âme soeur à l'heure des Technologies de l'Information et de la Communication : l'exemple des Camerounaises », tic&société [En ligne], Vol. 5, n° 1 | 2011, http://journals.openedition.org/ticetsociete/1004 .

20 Brice Arsène Mankou, « Les femmes camerounaises et la « cybermigration » maritale en France », Communication [En ligne], Vol. 28/2 | 2011, http://journals.openedition.org/communication/1954

21 https://cameroonceo.com/2017/07/28/anaise-tchienda-ceo-wandashops-la-reine-mere-du-e-commerce-au-cameroun/

Will decentralization in Cameroon promote gender equality in internet access?

The decentralization[22] process has made it possible to strengthen the opportunities for municipal executives to intervene in the promotion of gender equality.

Indeed, Decree No. 2010/0247/PM of 26 February 2010, which transfers competences in basic education to municipalities, entrusts them with the responsibility of building, equipping and maintaining pre-school, nursery and primary schools, and participating in the acquisition of school materials and supplies for these schools.

Similarly, Decree No. 2010/0241/PM of 26 February 2010, transferring the creation, maintenance and management of Women's and Family Promotion Centres, gives municipalities the opportunity to intervene in their computer equipment and support their connection to the Internet[23].

Finally, by Decree No. 2011/0002/PM of 13 January 2011, the same responsibilities are entrusted to the municipalities with regard to the creation, equipment and maintenance of vocational training centres.

To this end, the local council is required to include in its Council Development Plan the corresponding priority actions and associated resources.

The exercise of these competences gives the Municipalities the opportunity to define and implement local policies to promote gender equality in access to the Internet. This will be all the more facilitated by the implementation of the actions of the Cameroon 2020 Digital Strategic Plan which provides in its Strategic Objective 1 entitled

"Generalize broadband access for citizens, businesses and households", certain activities specifically directed towards decentralized local authorities (DLA) and in particular:

- Elaborate, in collaboration with the DLAs, digital development master plans;
- Make Multipurpose Community Telecentres (MCT) real platforms for exchange;
- Ensure broadband connection of all MCTs.

In conclusion, it can be noted that gender equality as advocated by the ADIRF is a concept supported by strong political will in Cameroon, which is reflected in its inclusion in sectoral strategies. However, despite the strong legal and institutional framework, this remains a promise not kept. Promoting gender equality in access to the Internet therefore seems to be leaning towards *"Improving women's access to catch up".*

Efforts have been made by public and private actors in this direction. These include guaranteed equal access to learning in the education system at all levels and some one-off operations without subsequent impact assessment. This raises questions about the effectiveness of the actions implemented. The absence in the 2020 Digital Strategic Plan of any activity aimed at closing this gap is also surprising.

Faced with this, women's use of the Internet, while in some cases being very rewarding (women entrepreneurs), can in other cases raise questions (marital cybermigration).

Despite the efforts of the various public and private actors, two of the main problems that remain are equipping school units with computer equipment and integrating the gender component into strategies.

22 Decentralization as transfer of competences and means from the central State to the Municipalities

23 Within the framework of an agreement with the Ministry of Posts and Telecommunications, MINPROFF has provided for the equipment and provision of Internet connection to the 92 women and family promotion centres (CPFF) scattered throughout Cameroon. http://www.investiraucameroun.com/tags/internet

This leads to the following recommendations:

To the central government:

- Ensure that the application of the principles of the ADIRF is integrated into national regulations (Attention: Inter-ministerial committee for monitoring the implementation of recommendations and/or decisions resulting from international and regional mechanisms for the promotion and protection of human rights)
- Set up a Parity Observatory;
- Integrate the "gender" component during the implementation of the Cameroon Digital Strategic Plan 2020 ;
- Positive discrimination in access to Internet learning (Given that it is common knowledge that lack of education severely restricts a woman's access to information and prospects);

To telecommunications operators:

- Provide specific products for women (Example: smartphone + internet access at reduced cost) at advantageous rates

To local governments :

- Integrate ICT learning into literacy classes;
- Tool cybercafés and TCP managers to the productive advice of Internet users;
- To civil society organizations and the media:
- Organize campaigns presenting the opportunities offered by the Internet in reducing women's poverty and their access to employment.

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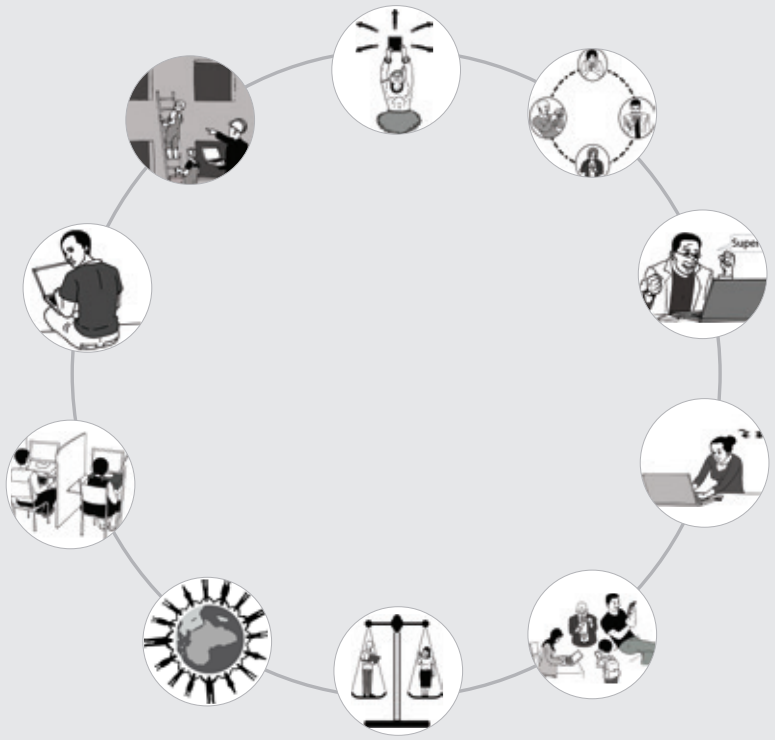

DEVELOPMENT OF THE EVALUATION INDEX FOR THE APPLICATION OF THE KEY PRINCIPLES OF THE AFRICAN DECLARATION ON INTERNET RIGHTS AND FREEDOMS : CAMEROON's CASE STUDY

In order to contribute to the implementation of the key principles of the African Declaration on Internet Rights and Freedoms (ADIRF), PROTEGE-QV will analyse the national situation with regard to those key principles adopted by the African Commission on Human and People's Rights at Banjul (Gambia) the 04th November 2016.

PROTEGE-QV has decided to develop a single composite index. Named the Index of Internet Rights and Freedoms (IIRF). It aims at analysing a country's situation at a given period of time so as to effectively provide guidance to improve on the Internet service to the population and besides, to allow comparison among coutries. The current study case succintly outlines the development of that tool in the cameroonian context.

The overall objective of the current research is to develop an integrated measurement tool with regard to the 13 key principles of the ADIRF to help contribute to a better knowledge of a country's situation in the light of these principles.

More specifically, we shall be dealing with the following :

- Identify and select for each of the 13 principles of the ADIRF the meaningful and measurable indicators that could help map efforts made by a given country in this respect ;
- Develop the aggregation procedure of indicators into sub-indexes and from sub-indexes into single index ;
- Apply this tool to assess the Cameroon's situation, by illustrating and interpretating it.

At the end of the study, the integrated tool will be applied to the Cameroon's case and the measured situation analysed and illustrated.

The index development followed three steps : the literature search, the selection of the index formulation strategy and the filling of the developed index.

PRESENTATION OF SOME INDEXES DEVELOPPED IN THE ICTS FIELD

Literature offers many indexes formulated in the ICTs domain that we reviewed in order to nurture the reflection

The Information and Communication Technologies Development index (ICT Development Index, IDI)

Based on an agreed indicator, this is a composite index published by the International Telecommunication Union (ITU), thus making it a precious tool to compare the prominent indicators « measuring » the information society. The IDI is a standard tool that governments, operators, development agencies, researchers and many other interested people can use to assess the digital divide and compare performances in the field of ICTs in various countries. The ICT development index is based on eleven indicators grouped in three sections or domains : The access, the use and the skill.

- ICTs access is measured through five (05) indicators : the landline telephone subscription per 100 inhabitants, subscription to mobile phone per 100 inhabitants. The Internet international bandwith (bits/s) per Internet user, percentage of households with a computer, percentage of households with Internet access ;
- ICTs use is measured thanks to three (03) indicators : the percentage of people using the Internet, number of fixed broadband subscribers per 100 inhabitants, number of bandwith subscribers per 100 inhabitants ;
- ICTs skills referring here to the development of capacities needed for a proper use of ICTs. These abilities are acquired through education. They

are measured in the IDI by three (03) indicators : the adult literacy rate, the gross secondary school enrolment, the gross higher education enrolment

The IDI is calculated for each country thanks to an arithmetic mean weighted by the sub-indexes of the three domains.

The « Networked Readiness Index » (NRI)

The Networked Readiness Index (NRI) has been developed by the World Economic Forum. It measures countries propensity to harness the possibilities offered by the Information and Communication Technologies (ICTs). It is published in collaboration with the European School of Business Administration (INSEAD) as part of their Annual Report on the Information Technology, also known under the french acronym RATI. The report is considered the most complete and trustworthy assessment when dealing with how ICTs affect the competitivity and the well-being of nations.

The NRI aims to better understand the ICTs impact on the nations competitiveness and has four (04) components :

- The ICTs environment offered by a given country or community (market, political, regulatory and infrastructure environment) ;
- The strong will of the country's key stakeholders (individuals, businesses, and governments) to use ICT (infrastructure, affordability, skills) ;
- The ICTs impact (socio-economic impact)

THE INDEX DEVELOPMENT MODEL

The chosen methodology is the one suggested by P. Lazarsfeld[1] involving a set of successive steps drawn by J.M Boulanger (2005), as follows:

1 Quoted by Boulanger (2005)

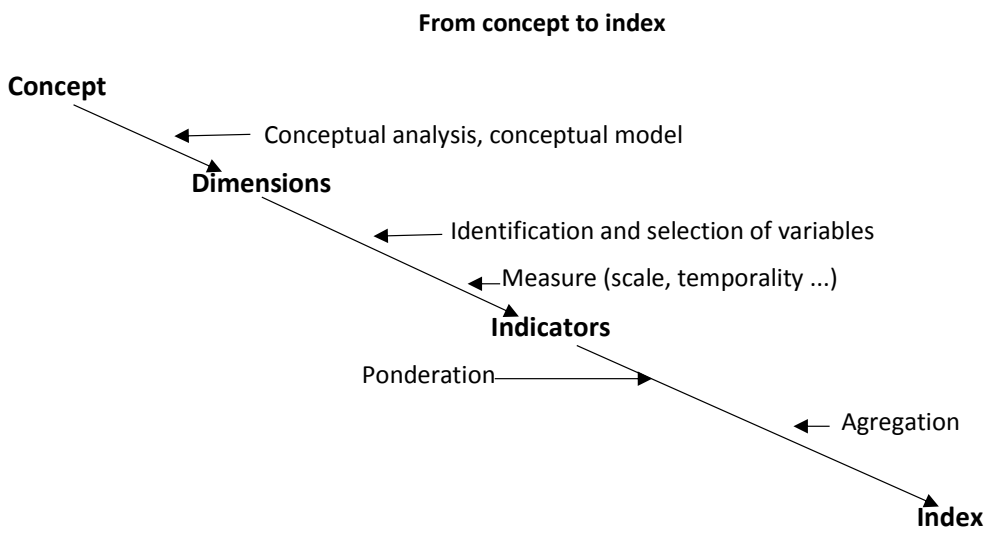

Figure 15 : *The Index development pattern*

As noticeable on the diagram, the index development starts by the identification of the various dimensions that make the concept we are interested in (in the current case, we are dealing with rights and freedoms on the Internet), bearing in mind the latter are multi-dimensional. Thereafter, the various dimensions must be broken down into variables. Some variables will be retained, based on set criteria, interest, measurability,…

Once they are selected, the variables will be measured following a set level of accuracy, the spatial and temporal scales and the unity. The final stage in the development of the index is the aggregation that makes it possible to move from indicators to a composite index. This aggregation, imposes indicators to be expressed into a common unit, failing that as it is usually the case, the various indicators have to be normalized.

The selected normalization here is axiological and consist to attribute the 0 value (min) to the observation regarded as the worst rating and 1 (or 10 or 100) to the one with the highest score (max). The whole middle values are therefore calculated using the formula : Y=X / (Max – Min) in order to stay within the limits of 0 to 1 scale (or 10, 100). The sole difference between these two methods is that for the axiological normalization, limits are chosen according to the action or assessment context, whereas in the case of the empirical normalization, it is the values observed in the database that determin the limits. This last method is the one used by the UNDP to calculate the Human Development Index (HDI).

Afterwards, it is paramount to operate a choice between the simple average and the weighted average, this last option consists of granting importance to the different variables retained to calculate the index. This method is regularly used to illustrate the importance of each variable and is outlined here in a case involving the mapping of a sustainable development index :

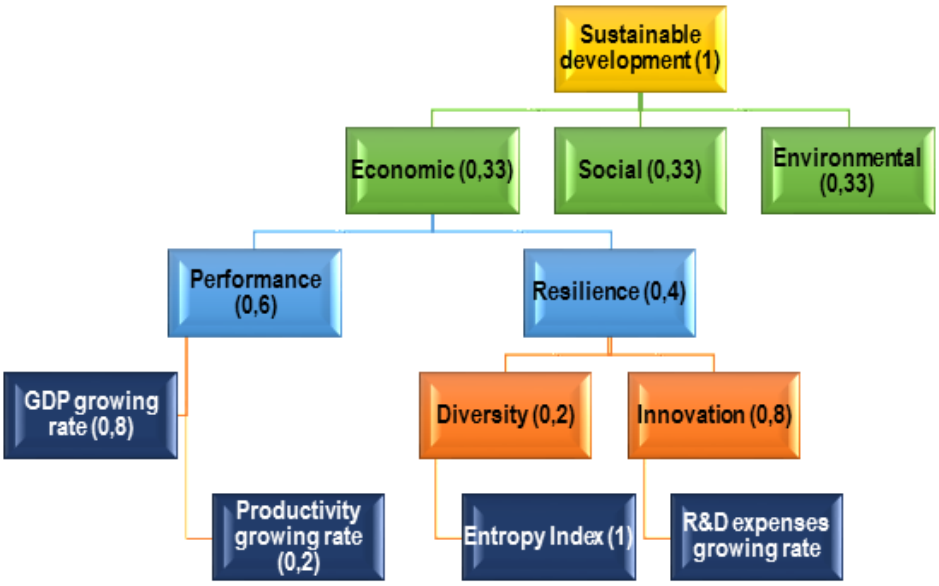

Figure 16 : The weighing pattern of the sustainable development index

A chart model reading : The GDP growing rate is attributed a 0,158, representing the product of 0,8 (its specific weighting), of 0,6 (branch weighting « performance ») and of 0,33 (branch weighting « economy »). The initials weights choice is purely subjective, based on the knowledge of the country as a whole.

Identification and selection of the rights and freedoms on internet indicators index

Identification and selection of indicators was made through an adatation of the RAND International method. This method was developed by the RAND Corporation[2]. It is one of the most known and established method when it comes to development or selection of quality indicators. It is therefore the most cited in the literature. The process includes seven steps relating first of all on a comprehensive review of the targeted literature of the topic and the fields covered so as to identify the prime indicators sample. Afterwards, experts of the relevant field are recruited from various organizations to grade the indicators, thus enabling to arrive to a final list .

The African Declaration on Internet Rights and Freedoms (ADIRF) is made of 13 key principles that logically need to bear in mind as part of the development of an index measuring the extend of application of these principles. Then indicators of each domain need to be identified and proceed with the selection of the most measurable and relevant ones.

The indicators' selection is made primarily through the literature's review. Many documents have been exploited in a bid to identify the indicators relating to the ADIRF key principles.

After the identification process and given the huge amount of indicators, a selection was necessary in order to retain just the most relevant. The selection criteria used were both the relevance and the measurability.

To select an indicator with respect to its relevance, the following questions were raised :

- Does the indicator really matches with the concern related to the measurement of the Internet rights and freedoms?
- Does the indicator capture the key desired results?
- Does the indicator have a meaning within the african context?
- Does it allow the taking into account of an important aspect of the Internet rights and freedoms?

The measurability has been assessed thanks to answers to the following questions:

- Are the data required to calculate the indicator available?
- Could we get these data each year?
- Are the data required for the calculation easily reachable?

The Tableau below presents the selected indicators.

2 Founded in 1948, RAND Corporation is an American nonprofit global policy think tank to offer research and analysis to the United-States Armed Forces

ADIRF principles	Illustration (from the ADIRF)	Indicators	Source
OPENNESS	Interconnection	Legal framework (Level : Law, Decree, Bylaw, strategy, Action plan)	Law 2010/013 of 21 Decembre 2010 Art42, 42 et 45
			Decree N°2012/1640/PM of 14 June 2012 to lay down conditions for interconnection, access to electronic communications open to general public and sharing of infrastructures
		Existence of an institution in charge to keep watch (ART)	Law 2010/013 of 21st Décember 2010 Art.36 : The Telecommunications Regulatory board (ART) must ensure that access to networks open to general public is made under objective, nondiscriminatory ; Law of 1998 regulating telecommunications in Cameroon
	Discriminatory access depending on the type of information		
GENDER EQUITY	Ability to remedy existing gender's inequalities	The Gender equity index of the African Development Bank (BAD) classifies countries graded on a scale from 0	Perspectives économiques en Afrique 2017 : Entrepreneuriat et industrialisation, BAD OCDE PNUD
		to 100, and 100 indicates a perfect gender equity.	http://www.africaneconomicoutlook.org/fr/statistiques
	Women representation at decision-making positions	Percentage of decision-making positions held by women : member of government since the 2015 cabinet reschuffle (10/65)	Our [2] calculations
		Percentage of decision-making positions held by women : parliament (56/180)	Our calculations
		Percentage of decision-making positions held by women : senator (23/100)	Our calculations
		Percentage of decision-making positions held by women : Mayor (28/360)	Our calculations
		Percentage of decision-making positions held by women : Divisional officer (2/58)	Our calculations
		Percentage of decision-making positions held by women : sub-divisional officer (7/360)	Our calculations
		Percentage of decision-making positions held by women : governor (0/10)	Our calculations
	Women representation within the Internet governance	Women representativity at the head of public corporation and Internet service providers and operators	Proposition of a new indicator. Base : Responsible up to General manager or Minister position MINPOSTEL (W), ART(M), ANTIC (M), ORANGE (W), MTN (W), CAMTEL(M), NEXTTEL(M). Our calculations.
	Equality in access, apprenticeship, usage and Internet's configuration	Internet access parity index	ART (Telecommunications Regulatory Board) / NSI (National Statistics Institute)

ADIRF principles	Illustration (from the ADIRF)	Indicators	Source
<<<INETRNET ACCESS AND AFFORDABILITY	Availability and accessibility of Internt for all	Internet penetration rate	Alliance for affordable internet. http://1e8q3q16vyc81g8l3h3md6q5f5e.wpengine.netdna-cdn.com/wp-content/uploads/2017/02/A4AI-2017-Affordability-Report.pdf
		3G coverage (% of population)	https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume2.pdf
		Mobile phone line per 100 inhabitants	Perspectives économiques en Afrique 2017 : Entrepreneuriat et industrialisation, BAD OCDE PNUD
			http://www.africaneconomicoutlook.org/fr/statistiques
	Internet affordability access costs	Mobile-broadbandprices 1 GB (% GNI pc)	https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume2.pdf
	Development of infrastructures to improve access within localities	Percentage of localities with communities centres, 151 localities out of 360 (Total number of sub-divisions) with community-based ICT Centres in 2013 : 41,9%)	Source : ART, MINPOSTEL (2013), statistical data collection 2012-2013
	Level of instruction	Mean years of schooling (proxy indicator : lower weight to be allocated))	UNDP : Human Development report 2016
FREEDOM OF EXPRESSION	Existence of texts on the content censorship (including online)	Existence of texts on content censorship (including online)	Law N°2010/012 on cybercriminality and cbersecurity in Cameroon, article 77 paragraphs 1 and 2, article 78 paragraphs 1 et 2. We are attributing a 50 value because of the absence of a text dedicated to censorship and that goes through the various aspects surrounding censorship.
	Mandatory barring of websites	Was this practice adopted by public authorities during the last two years ?	Within the two anglophones regions, internet was blocked by the government in the course of the year 2017.[2]
	Gouvernement ouvert	Open government Index	World Justice Project
			http://data.worldjusticeproject.org/opengov/#/groups/CMR
	Attacks against journalists for their online publications.	Existence of lawsuits against journalists for online published articles during the last two years.	The National Communication Council has sanctioned close to twenty written and online press institutions for having published unfounded, suggesting and offensive declarations.

ADIRF principles	Illustration (from the ADIRF)	Indicators	Source
RIGHT TO INFORMATION	Implementation of communication strategies between government and populations	Proportion of ministries departments (including the PM, the Presidency of the republic, the senate, the national assembly) with Websites (30 sur 34) (85,3%)	Ministerial departments include the presidency, the senate and the national assembly.
	Make available to the public information detained by the government.	Percentage of ministries with an updated website (17 out of 30 have a website) (56,7%)	
FREEDOM OF ASSEMBLY AND ASSOCIATION AND THE INTERNET	Legal framework	Existence of a legislative Act	There is a legislative Act regulating the Freedom of association (law N°90/053 of 19 December 1990 and the constitution's preamble) even though they do not mention the Internet..
	Shutting down or blocking access to social networking platforms and Internet in general	Has this practice been implemented by the government during the last two years? Yes	In 2017, the government suspended social networks (facebook, whatsapp, linkedin) in the anglophone regions of the country. https://www.agenceecofin.com/gouvernance-economique/1312-52832-toujours-pas-dacces-aux-reseaux-sociaux-dans-les-parties-anglophones-du-cameroun-malgre-le-retour-de-linternet
	Mechanism enabling the legalization of associations created through the Internet.	Existence of a mechanism enabling the legalization of associations created through theInternet..	This does not exist
CULTURAL AND LINGUISTIC DIVERSITY	Existence of cultural contents on the Internet	Existence of local cultural contents on the Internet.	http://www.ritesbamileke.com/accueil.html
			http://www.litenlibassa.com/index.php/culture.html
	Existence of local languages contents on the Internet.	Existence of local languages contents on the Internet.	http://resulam.com/fr/
	Existence of an educational, scientific and cultural heritage digitization program/ project.	Existence of an educational, scientific and cultural heritage digitization program/ project.	http://journals.openedition.org/ocim/1026
			http://projects.banquemondiale.org/procurement/noticeoverview?lang=fr&id=OP00008631&
			http://www.camernews.com/la-radio-publique-camerounaise-crtv-numerise-son-patrimoine-musical-avec-laide-de-lambassade-dallemagne/

ADIRF principles	Illustration (from the ADIRF)	Indicators	Source
RIGHT TO DEVELOPMENT AND ACCESS TO KNOWLEDGE	Introduction of digital media program associated with the information mastering in schools.	ICT in official training curricula at the primary, secondary and higher educational level of study and literacy program.	ICTs are introduced at nursery school (25%), at primary school (25%), at secondary school (25%) and at higher education (25%).
	Access to the Internet in public schools and other training centres	Proportion of schools/educational institutions connected to the Internet.	Missing data for Cameroon in the UNESCO report on The SDG4.
	Gender equity in access to knowledge via the Internet.	Gender Development Index	Perspectives économiques en Afrique 2017 : Entrepreneuriat et industrialisation, BAD OCDE PNUD
			http://www.africaneconomicoutlook.org/fr/statistiques
			or http://hdr.undp.org/en/countries/profiles/CMR (pour les données de 2016)
			National policy on gender and the multisectorial action plan.
			Also see the educational sectoral strategy.
PRIVACY AND PERSONAL DATA PROTECTION	Legal framework	Legal framework (Level : law, decree, bylaw)	Law on cybersecurity and cybercriminality of December 2010. Article 31 (2),Section 4 : protection of the privacy (Article 46 (2), 41, 43, 44(1), 47, 48), article 61 (1), article 74
	Unfair and illicit treatment of personal data.	Existence of a text punishing the unfair and illicit treatment of personal data.	Law on the cybersecurity and cybercriminality, article 74 (4). We grant a 50% because loyalty is not dealt with.
	Prohibition of the mass surveillance by the law.	Existence of a law prohibiting mass surveillance.	Law on cybersecurity and cybercriminality, article 44 (1). We grant 50% because this law does not provide an in-depth analysis of the mass surveillance.
	Sensitization on the inappropriate use of the personal data provided online.	Did they Sensitize on this matter ?	MINPOSTEL sensatization through SMS. 100% because SMS reach the largest possible number of people. http://www.investiraucameroun.com/telecom/1601-8414-cameroun-le-ministere-des-telecoms-a-lance-une-campagne-de-sensibilisation-sur-l-usage-des-reseaux-sociaux

ADIRF principles	Illustration (from the ADIRF)	Indicators	Source
SECURITY, STABILITY AND RESILIENCE OF THE INTERNET (cybercriminality index)	Recognition of encryption by the state as a mean to protect personal data.	Is encoding ryptage recognized by the law as a primary protection ?	Law N° 2010/013 of 21 Decembre 2010 Art42, 42 and 45
			Decree N°2012/1640/PM of 14 June 2012 to lay down conditions for interconnection, access to electronic communications open to general public and sharing of infrastructures.
	Promotion by the government of the Free and Open Source Software.	Does it exist of a policy or strategy to promote free software?	It did not exist
		Usage of free software by the administration.	Any clear information on this matter.
RIGHT TO DUE PROCESS	Existence of Acts relating to crime and offence online.	Are there online crimes or offences provided by the law ?	Penal code article 133 for the punishment of fake news propagation and false information harmful both to the public authorities and to the national cohesion.
			Law n°2010/012 of 21 December 2010 governing cybersecurity and cybercriminality in Cameroon.
MARGINALISED GROUPS AND GROUPS AT RISK	Respect and proection of the right to all to access and use the Internet.	Existence of an Act enabling both the respect and protection of individuals..	Law regulating telecommunications (the law says « any person »).
	Existence of policies aiming to promote access to the Internet for groups at risk.	Existence of programs aiming to improve the Internet's access when it comes to marginalised groups.	The community-based ICTs centres are directed towards rural areas, border areas and isolated zones.
DEMOCRATIC MULTISTAKEHOLDER INTERNET GOVERNANCE	The Internet governance structure must be open, collaborative and inclusive.	Is the institution in charge leading a transparent and collaborative approach?	No. (NAICT)
		Existence of a forum discussing the Internet governance on a regular basis.	The Internet Governance Forum since 2013
		Intégration rate of the stakeholders in the forum's organisation.	Gouvernment (25%), civil society (25%), academia (25%) and private sector (25%). http://www.igf.cm/index.php/component/content/article/13-l-igf/58-deuxieme-reunion-preparatoire-de-l-igf-cm-2017
			http://www.igf.cm/index.php/component/content/article/13-l-igf/57-reunion-preparatoire-de-l-igf-cm-2017
			The academia and private sector are not involved in the organisation.
		Integration of the stakeholders in the running of the forum.	Gouvernment (25%), civil society (25%), academia (25%) and private sector (25%)http://www.igf.cm/images/IGF.CM-17/Agenda%20IGF.CM-17-Version-%2002%20juin%202017.pdf

ELABORATION OF THE FORMULA FOR CALCULATING THE INDEX OF INTERNET RIGHTS AND FREEDOMS (IIRF) AND COMPUTER APPLICATION

After having identified and selected the relevant and measurable indicators (the information necessary for their calculation was collected), it was necessary to elaborate a calculation formula to effectively test the calculation of the Internet Rights and Freedoms Index (IIRF) for Cameroon.

Elaboration of the calculation formula

The indicators selected for the IIRF are very different in nature. It was therefore necessary to proceed with the standardization of the selected indicators, as explained above following the axiological standardization

Thus, for indicators whose objective is to maximize value, standardization is done according to the following formula:

Dimensional Index Value = (Measured Value - Minimum Value) / (Maximum Value - Minimum Value)

On the other hand, for those whose objective is to minimize value, standardization is done according to the following formula:

Dimensional Index Value = 1 - (Measured Value - Minimum Value) / (Maximum Value - Minimum Value)

Tableau 2 in annex gives the list of domains, sub-domains, indicators selected by sub-domains, their value for Cameroon, as well as the standardization formula for each indicator.

As noted above, the 13 principles of the ADIRF are considered the domains of the index. Each domain is subdivided into subdomains. In the formula adopted, all 13 domains have the same weight in the calculation of the IIRF, so it is a simple arithmetic mean of the sub-indices of the different domains. However, in a given field, the different sub-domains do not have the same weight.

So simply put, we have:

$$IDLI = \frac{1}{13}\sum_{j=1}^{13} dom_j$$

Where ⟦dom⟧_j is the sub-index for domain j.

The IIRF measurement scale is shown in the figure below.

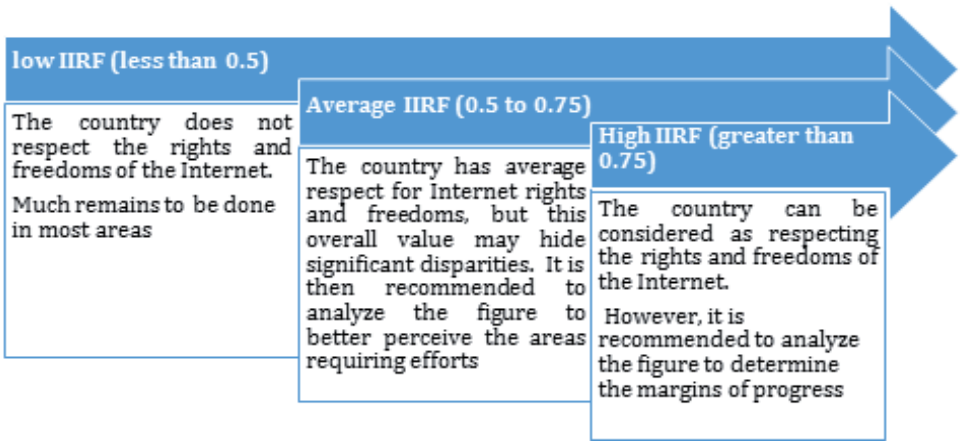

Figure 17 : *Measurement scale of IIRF*

The computer application

A computer application has been developed to automate the calculation of the Internet Law and Freedom Index (IIRF) for any African country, and to allow the index and its sub-indices to be displayed in different forms, at the request of users.

- The application allows you to:
- Enter data by country (value of each indicator);
- Normalize the value entered for each indicator via the given normalization formula ;
- Calculate the value of each sub-index (by sub-domain) for each African country by a simple arithmetic mean of the values of the indicators of the domain concerned ;
- Enter the weights (coefficients) for each of the subareas ;
- Calculate the index for each country taking into account the weights ;
- Search for a given country and display (rank) its sub-indices and/or index ;
- Search to display the ranking of countries by index, or by a given sub-domain ;

For a given country, highlight a graph such as the following, at the user's request

- The application also has the following features:
- It is dynamic so that indicators can be added at any time in a given sub-area;

The user does not have access to the application code, and therefore cannot make any changes, just displays.

PRESENTATION OF INDEX RESULTS IN CAMEROON

Thanks to this computer application, we obtain an Index of Internet Rights and Freedoms value of 0.59 on a scale of 0 to 1 for Cameroon in 2017, which reflects a fair average situation of respect for Internet rights and freedoms in Cameroon that could be misinterpreted if it is taken globally.

Indeed, this value of the IIRF hides important disparities between the fields concerned.

An examination of the figure shows that cultural and linguistic diversity (1.00) and the right to due process (1.00) are fully respected in Cameroon, while freedom of expression (0.11) and. freedom of assembly and association on the Internet(0.17), are not at all.

In a better but still weak position, there is equality between men and women (0.41) and access and accessibility to the Internet (0.37).

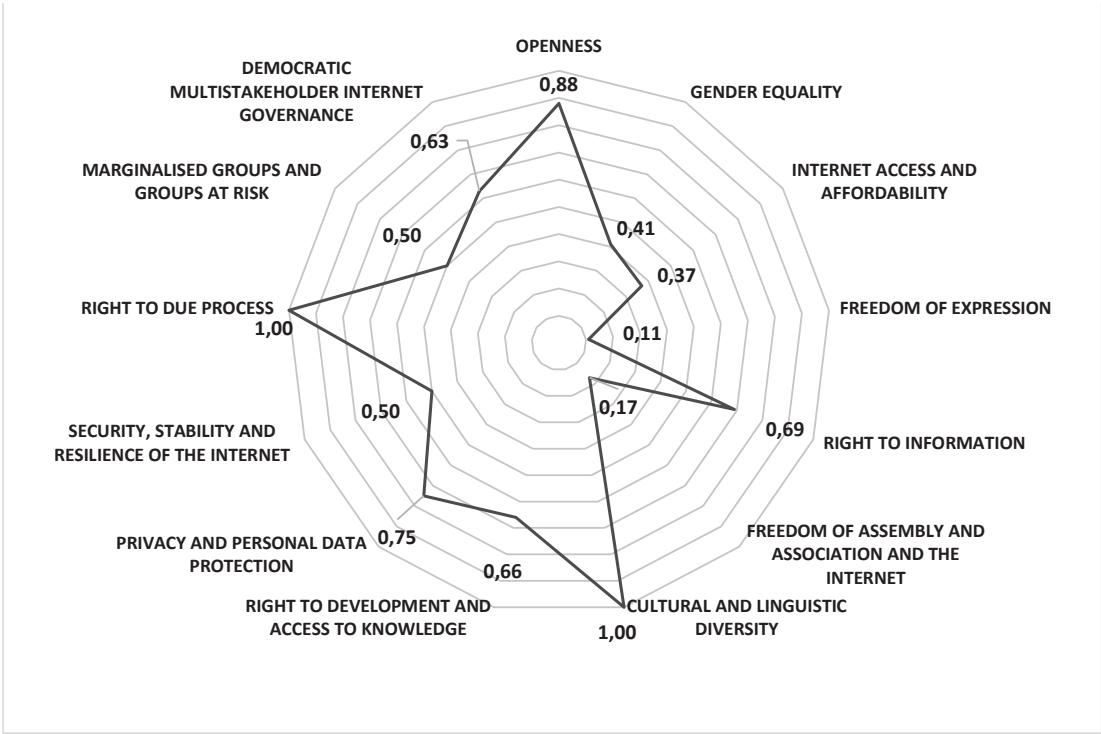

Figure 18 *: Graphical representation of the IIRF measured for Cameroon in 2017*

WHAT APPLICATIONS CAN IIRF BE USED FOR?

IIRF as a Governance Tool

The IIRF in its numerical assessment and illustration can provide a dashboard for government that can see its evolution in the overall value from one measurement period to another to determine whether or not it is making progress in the application of Internet rights and freedoms. Remember that on the IIRE scale, when the value is less than 0.5, it is bad. Between 0.5 and 0.75, it is average and above 0.75, it is good. Using the corresponding graph can help to be more precise on the aspects for which efforts must be made and even on the margins offered for progress.

IIRF as a tool for cross-country comparison

To serve as a tool for comparing African countries in terms of their respect for Internet rights and freedoms, the indicators used to inform the various fields should be calculable in all the countries concerned. However, the IIRF as currently conceived was particularly based on the Cameroonian reality. As it stands, the approach can be applied to all countries, but to have a single IIRE that can be calculated identically in all countries, it is necessary to obtain consensus on the indicators and that those selected can be measured in all countries. This is one of the reasons why the Human Development Index is covered by only three domains.

CONCLUSION

The objective of this project was to develop an Index to assess the level of application of the principles of the Declaration of the Rights and Freedoms of the Internet, to which the name IIRF (Index of Internet Rights and Freedoms) was given, and to design a computer tool to automate its calculation.

To do this, we started with a literature review that allowed us, on the one hand, to adopt the approach of developing an index following the scheme proposed by J.M

Boulanger (2005) and to take some examples of indices developed in the field of ICT, to better identify the indicators that can be used to measure the efforts made by a country such as Cameroon for each of the 13 principles that we consider as the domains of the IIRF; and on the other hand, apply the Rand International method to select the most relevant indicators that are measurable. After that, it was necessary to develop a formula for calculating the index, using a weighted arithmetic means of the sub-indexes of the sub-areas, after standardization of the indicators.

Finally, a computer application has been programmed to automate data entry, standardization of indicators, calculation of sub-indices and the index, as well as the various displays of results.

This index, whose construction is essentially based on the Cameroonian context, can however be adapted for other African countries. It can nevertheless be improved, in particular by defining measurable indicators for certain sub-areas not taken into account precisely because there are no measurable and relevant indicators, and also by adding new relevant indicators in the sub-areas already taken into account, to make them even closer to reality. This could be done, for example, by collecting data at national level, both from households and from certain administrations.

As a perspective, the IIRF can be used as a tool of governance in a country allowing it to see its evolution in the respect of Internet rights and freedoms from one measurement period to another; but also as a tool of comparison between different African countries. The latter application remains subject to expert consensus on the indicators to be used to illustrate the different areas and on the availability of information to inform these indicators. Similarly, the periodicity of the IIRF measurement remains to be defined in view of the sensitivity of the indicators with respect to the time variable.

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4 Union Internationale des Télécommunications, «Rapport Mesurer la société de l'information 2015», Résumé analytique, 2015

5 World Economic Forum, "The Networked Readiness Index 2016", 2016

APPENDIX

Tableau 2 : Indicators are selected and filled out

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Openness	Interconnection	Legal framework (Level : Law, Decree, Bylaw, strategy, Action plan)	100%	75	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Existence of an institution in charge to keep watch (ART)		100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Discriminatory access depending on the type of information		0				

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Gender Equity	Ability to remedy existing gender's inequalities	The Gender equity index of the African Development Bank (BAD) classifies countries graded on a scale from 0 to 100, and 100 indicates a perfect gender equity.	15%	47	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Women representation at decision-making positions	Percentage of decision-making positions held by women : member of government since the 2015 cabinet reschuffle (10 out of 65)	15%	30,77	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : parliament (56out of 180)		62,22	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : Senator (23 out of 100)		46	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : Mayor (28 out of 360)		15,56	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : Divisional officer (2 out of 58)		6,9	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : sub-divisional officer (7 out of 360)		3,9	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Percentage of decision-making positions held by women : governor (0 out of 10)		0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Women representation within the Internet governance	Women representativity at the head of public corporation and Internet service providers and operators	35%	86	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Equality in access, apprenticeship, usage and Internet's configuration	Internet access parity index	35%				

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Internet Access and Affordability	Availability and accessibility of Internet for all	Internet penetration rate	30%	41,03	0	100	(value-Minimum value)/Maximum value-Minimum value)
		3G coverage (% of population)		65	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Mobile phone line per 100 inhabitants		71,85	7,05	169	(value-Minimum value)/(Maximum value-Minimum value)
	Affordability of the Internet costs	Mobile-broadbandprices 1 GB (% GNI pc)	30%	6,1	0	20	1-((value-Minimum value)/(Maximum value-Minimum value)
	Development of infrastructures to improve access within localities	Percentage of localities with communities centres, 151 localities out of 360 (Total number of sub-divisions) with community-based ICT Centres in 2013 : 41,9%)	25%	41,9	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Educational level	Mean years of schooling (proxy indicator- Lower influence allocated)	15%	6,1	0	17	(value-Minimum value)/(Maximum value-Minimum value)
Freedom of Expression	Existence of texts on the content censorship (including online	Existence of texts on content censorship (including online)	20%	50	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Mandatory barring of websites notwithstanding their use.	Was this practice adopted by public authorities during the last two years ?	20%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	e-government (open)	Open government Index	20%	0,39	0	1	(value-Minimum value)/(Maximum value-Minimum value)
	Attacks against journalists for their online publications.	Existence of lawsuits against journalists for online published articles during the last two years.i	40%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Right to Information	Implementation of communication strategies between government and populations	Proportion of ministries departments (including the PM, the Presidency of the republic, the senate, the national assembly) with Websites (30 sur 34) (85,3%)	40%	88,2	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Make available to the public information detained by the government.	Percentage of ministries with an updated website (17 out of 30 have a website) (56,7%)	60%	56,7	0	100	(value-Minimum value)/(Maximum value-Minimum value)
Freedom of Assembly and Association and the Internet.	Legal framework	Existence of a legislative Act.	35%	50	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Shutting down or blocking access to social networking or shutting the Internet access in general.	Has this practice been implemented by the government during the last two years? Yes	50%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Mechanism enabling the legalization of associations created through the Internet.	Existence of a mechanism enabling the legalization of associations created through the Internet. This does not exist.	15%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
Cultural and Linguistic Diversity	Existence of local cultural content on the Internet	Existence of local cultural contents on the Internet	35%	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Existence of local languages contents on the Internet.	Existence of local language contents on the Internet.	35%	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Existence of an educational, scientific and cultural heritage digitization program/ project.	Existence of an educational, scientific and cultural heritage digitization program/ project.	30%	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Right to development and Access to knowledge	Introduction of media-related program and information mastering in school	ICT s into official training curricula at the primary, secondary and tertiary educational level as well as in literacy programs.	40	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Internet access in public educational centres and other training centres.	Proportion of schools/public educational institutions connected to the Internet.	30				(value-Minimum value)/(Maximum value-Minimum value)
	Gender equality access to the knowledge via the Internet	Gender Development Index	30	88	0	100	1-((value-Minimum value)/(Maximum value-Minimum value)
Privacy and personal data protection	Legal framewor	Legal framework (Level : law, Decree, , Decision)	25	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Fair and licit treatment of personal data.	Existence of an Act punishing the unfair treatment of personal data.	25	50	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Prohibition of the mass surveillance in the name of law.	Existence of a law prohibiting mass surveillance.	25	50	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Sensitization around the wrong use of data provided online.	Was awareness raised on this topic ?	25	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Security, Stability and Resilience of the Internet (Cybercriminality index)	Encryption is recognised by states as a means of personal data protection.	Is encryption recognised by law as a basic protection ?	50%	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
	Promotion of the Free Software by the public authorities	Existence of a policy or a strategy to promote free software?	50%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Use of the Fee Software by the administration					(value-Minimum value)/(Maximum value-Minimum value)
Right to Due Process	Existence of Acts relating to crime and offence online.	Are there online crimes or offences provided by the law ?	100%	100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
Marginalised Groups and Groups at Risk	Respect and protection of the right to all to access and use the	Existence of an Act enabling both the respect and protection of individuals..	50%	50%	0	100	(value-Minimum value)/(Maximum value Minimum value)
	Existence of policies aiming to promote access to the Internet for groups at risk.	Existence of programs (example customs facilities)	50%	50%	0	100	(value-Minimum value)/(Maximum value-Minimum value)

DOMAIN	Sub-domains	Indicators	Subdomains influence	Value	Minimum value	Maximum value	Formula calculation
Democratic Multistakeholder Internet Governance	The Internet governance framework shall be open, inclusive, responsible, transparent and collaborative.	Is the institution in charge leading a transparent and collaborative approach?	100%	0	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Existence of a forum discussing the Internet governance on an annual basis.		100	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Integration rate of the stakeholders in the forum's organisation.		50	0	100	(value-Minimum value)/(Maximum value-Minimum value)
		Integration rate of the stakeholders in the running of the forum.		100	0	100	(value-Minimum value)/(Maximum value-Minimum value)