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MINISTRY OF POSTS AND TELECOMMUNICATIONS

**MINISTER'S CABINET** 

# INTERNATIONAL FORUM ON FRONTIER TECHNOLOGIES

(Douala, 06 to 09 December 2022)

## STATEMENT BY THE MINISTER OF OF POSTS AND TELECOMMUNICATIONS

Douala, Krystal Palace Hotel 06 December 2022

The Governor of the Littoral Region;

The Representative of the ITU for Central Africa and Madagascar;

The Chairman, Focus Group Artificial Intelligence for Health;

The President of TRUESPEC AFRICA;

Distinguished guests, all protocol duly respected;

Dear participants;

Ladies and Gentlemen.

It is a great honour for me to take the floor today, in this conference hall of the Krystal Palace Hotel in Douala, on the occasion of the opening of the International Forum on Technological Borders (FIFT), organised by the International Telecommunication Union (ITU), under the patronage of the Ministry of Posts and Telecommunications of Cameroon, in collaboration with the Cameroonian start-up TRUESPEC AFRICA, which is specialised in Artificial Intelligence technologies for Health.

The FIFT is a space of international cooperation, based on tangible work and real innovations of experts from around the world, in Artificial Intelligence.

This is a forum for exchange on policies and strategies, which allow actors in the technology sector to take full

advantage of the fourth technological revolution, in order to reduce the gaps that hinder a truly inclusive and sustainable development.

It is within the framework of this forum, which runs from 6 to 9 December 2022, that the activities of the ITU/WHO Artificial Intelligence Focus Group is taking place, with the mission to establish a normative framework for the assessment of methods based on Artificial Intelligence for Health.

The Group engages researchers, engineers, clinicians, entrepreneurs, regulators and policy makers in the exploration for solutions to improve the world's health systems through digital technology.

As such, it identifies all issues related to data, information, algorithms and processes related to Artificial Intelligence for Health, with the aim of fostering the international standardisation of applied Artificial Intelligence for Health processes on a global scale.

Those taking part in the work in Douala include high-level ministerial officials, senior representatives of the United Nations specialised agencies, including the ITU and WHO, the African Union, international academic institutions, eminent researchers and practitioners, ICT industry executives from the Central African sub-region, the

business community, national and international investors, and the local and international media.

I would therefore like, at the outset, to extend a warm welcome to all participants.

I would also like to express my deep gratitude to the Secretary General of ITU, the ITU Resident Representative for Central Africa and Madagascar, as well as to the Chairman of the Focus Group on Artificial Intelligence for Health, for having associated the Government of Cameroon with this important initiative.

My thanks also go to all the personalities present here, to the representatives of the competent administrations and organisations, to the experts and to all the participants in this important meeting.

Distinguished guests;

Ladies and Gentlemen.

Artificial Intelligence can be defined as the set of technologies designed to reproduce human cognitive capacities. It is regarded as the science whose aim is to have a machine carry out tasks that humans accomplish using their intelligence.

It is consequently a significant technological innovation, which is driving a number of upheavals in the digital transition processes initiated at both national and international level. On a global scale, the development of this technology is redefining the balance of forces between states. In the globalised context of competition, mastery of AI gives states a crucial competitive advantage to maintain their position in the race; it has become a power issue that will partly determine the position of countries in relation to each other.

At the national level, this same phenomenon can already be observed, with fractures emerging between citizens.

In brief, Artificial Intelligence is bound to shake up the economy and could significantly increase disparities.

In order to take full advantage of AI and use it as a real lever of power, States must therefore pay particular attention to mastering this Technology.

The major advance that the development of Al represents suggests an unlimited potential. Productivity gains are already visible for companies that have implemented this technology in their daily activities. The American research firm McKinsey estimates that by 2030, Al could bring an additional 1.2% annual growth worldwide.

For countries with stagnating productivity gains combined with high labour costs, AI could be a major growth factor.

The 21st century economy is data-driven: AI, which facilitates the collection, processing and analysis of information, is undeniable of interest and is set to become essential for almost all economic activities.

At the social level, AI also has advantages, potentially to reduce inequalities. In the field of education, for example, we are witnessing the development of AI-based solutions such as adaptive learning, which uses self-learning algorithms to detect the deficiencies of students and recommend tailored teaching.

The digital environment is characterised by an explosion in the amount of data being transmitted and exchanged (Big Data), as well as by the importance of the algorithms that regulate this data. These algorithms are increasingly based on artificial intelligence. They have a profound impact on the digital environment in which individuals interact by guiding their online behaviour (content recommendations, targeted advertising, etc.).

In such an algorithmically forged ecosystem, only users with a certain level of alertness and control can keep their free will, understand their environment and not be trapped

in a filter bubble. This phenomenon, as defined by *Eli Pariser*, results from the action of algorithms that filter results in order to propose only content that corresponds to the user's preferences, with the effect of creating a form of intellectual isolation, with the risk of losing openness and critical thinking

In everyday life, Artificial Intelligence is used in:

#### Online shopping and advertising.

When providing personalised recommendations to users, based (for example) on their search or purchase history or online behaviour

#### In online search.

Search engines are changing as they gather a massive stream of data from users to provide more relevant results.

#### In machine translation

Translation software, based on written or spoken language, relies on artificial intelligence to provide everimproving translations.

#### In connected homes, cities and infrastructure,

Some thermostats analyse our behaviour to better save energy, while city planners in connected cities hope to reduce traffic jams and better manage traffic.

#### Cars

Our cars, on the other hand, are already using AI-based safety features like navigation systems that rely heavily on AI.

In the field of cybersecurity and the fight against false information

Al-enabled systems can help detect and combat cyber attacks and other threats, using the continuous stream of data to detect patterns and trace the source of attacks.

Al is being used in the fight against Covid-19, at airports in the production of thermal imagery, and in other scenarios.

In the medical field, for example, AI can be used to detect infection in the lungs of patients subjected to computer tomography. It can also be used to collect data to monitor the progress of infections.

Al is set to transform almost every aspect of our daily lives and the economy in general, in transport, agriculture, robotics, disaster prevention and health.

Regarding health specifically, if the knowledge economy has become the driver of change, technology for health will also play a key role in the development of this field, particularly with regard to the care pathway.

In practice, digital health will play an increasingly important role in the way we receive medical care, given that it encompasses activities, services and systems applied to the health, medico-social and social fields, carried out remotely using information and communication technologies.

It also includes fields as varied as health information systems (practice management software, hospital information systems, computerised patient records, etc.), connected medical objects and devices, telehealth/telemedicine devices enabling remote practice or monitoring, etc.

And it is these fields and the uses to which they are put that are currently undergoing a major upheaval, driven by a wide range of tools, applications and software that are particularly diverse and have a strong innovation dynamic.

In this regard, Jean TIROLE in The Economics of the Common Good, (2016), p. 537 said: "Our health data have always been created during our contacts with the medical professions: in the physician's office, the hospital or the medical laboratory. Tomorrow, it will also be collected by ourselves in real-time, by sensors linked to smartphones or connected watches (as is already the case today for cardiac simulators, blood pressure measurement or arm patches for

insulin-dependent diabetes). Combined with knowledge of our genetic heritage, this data forms a formidable diagnostic and treatment tool. Big Data, i.e. the collection and analysis of large data sets, is both an opportunity and a challenge for health. It is a great opportunity in that it will provide us with much more accurate diagnoses and at the same time cheaper, because it will limit the interventions of intermediate medical professions, which are necessarily costly because of the time spent with the patient and the level of qualification required".

However, although it brings opportunities and development, the widespread irruption of digital technologies in the health sector still poses many challenges, which are as many open questions in terms of research on health services to date.

Actually, as in any integration of digital technologies in a system, the implementation of digital health cannot be entirely spontaneous; it must inevitably go through centralised decisions in terms of standards, authorisations, recommendations, pricing and reorganisation of the care offer. Digital tools can be both a solution and a difficulty for the organisation of the health system.

As far as the issues at stake are concerned, four can be identified:

- An organisational issue: digital innovation, when its intended purpose or effect is to transform current practices, cannot be thought of independently of the organisation into which it is inserted
- A societal issue: The scope of public action, like that of all the other stakeholders in the health system, must now be that of the territory.
- Socio-economic evaluation of the contribution of digital medical technologies to digital health: What is the overall economic model? Does the value to be considered have a social or economic dimension?
- A governance issue: the irruption of digital technology in health is accompanied by a multitude of challenges in terms of security and protection of health data and regulations.

Ultimately, taking all these developments and issues into account requires a clear and shared overall strategy, I mean one that is collaborative and that sets out the vision and target for integrating these technologies into the healthcare system. This justifies the holding of this exchange and experience-sharing workshop.

## Distinguished guests; Ladies and Gentlemen,

It should be underscored that the implementation of these technologies, has a recognised global potential due to the fact that a large proportion of professionals in the world have access to tools that can use applications powered by Artificial Intelligence (i.e. computers, smartphones and other terminals). Given the speed at which algorithms based on Artificial Intelligence can be developed, improved and deployed, this technology has the potential to ensure better medical decision-making.

Indeed, in the health sector, digital transformation is a solution to address the issues of patient care and management of health services. This digital transformation of the health sector was highlighted by the health crisis of 2020.

imperative therefore for states equip lt to adequate strategic themselves with tools and achieve this digitisation in infrastructures to health services.

## Distinguished guests; Ladies and Gentlemen.

Digitalisation has facilitated the functioning of many areas, bringing benefits in terms of efficiency, productivity and data management. In the health sector, digital transformation is a solution to address the issues of patient care and the management of health care services.

And the health crisis of 2020 has highlighted the importance of starting the digital transformation of the health sector.

It is therefore imperative for States to equip themselves with strategic tools that will enable them to move towards the digital transformation of each sector.

As far as Cameroon is concerned, in his speech to the Nation on 31 December 2018, the Head of State, H.E. Paul BIYA said (I quote): "... In the same vein, it is necessary for us to do more to incorporate digital progress into the functioning of our public services and our economy. The developing digital society will not wait for laggards"

It should be noted that in Cameroon, the digital sector is currently marked by:

- the vision and constant calls of the Head of State for the development of the digital economy;

- the exponential development of broadband and other access infrastructures, the development and strengthening of relevant legal and institutional frameworks to improve the competitive provision of services;
- the strengthening and defence of cyberspace;
- the emergence of a generation of young Cameroonians who adopt digital technologies to improve national digital production through the creation of SMEs and new jobs.

Thus, the development of digital technologies in Cameroon is first and foremost the object of a vision, that of the Highest Authority of the State, which in the implementation of the various development policies of the nation, has always been able to reserve a special place for this sector.

The same Head of State, who in his book Pour le libéralisme communautaire p.71, very opportunely said (and I quote again): "We must keep up with this evolution and transform our modes of production by increasing the digital content in the various sectors of activity. This is true of e-learning in education, telemedicine in health, e-administration in the public sector, e-commerce in sales" (end of quote).

This is why, in order to materialise this Vision, a strategic plan for the development of digital economy has been adopted. This plan comprises eight areas built around the three main dimensions of the digital economy, which are: infrastructure for the development of the supply of services, the new economy and the transformation of other sectors of activity by ICTs to increase digital demand, and aspects relating to supply, demand and governance.

Within the framework of the development of the supply of services, the aim is to develop broadband infrastructure, increase the production and supply of digital content, develop a local digital industry and encourage research and innovation.

As part of the increase in demand, the aim is to ensure the digital transformation of the administration and businesses, and to promote digital culture through the widespread use of ICT in society.

With regard to strengthening governance and regulation, the aim is to strengthen digital confidence, ensure the improvement of human capital and leadership in digital technology, improve governance and institutional support.

And in this context, several programmes are underway, aimed at the development of infrastructures, the digital

transformation of the Administration and businesses, the strengthening of human capital and the resilience of cyberspace.

With regard specifically to the strengthening of human capital, this involves adapting training to the requirements and developments of digital technology. Cameroon has several public and private institutions of higher education, providing training in areas related to telecoms and ICTs, as well as a specialised college (SUP'PTIC).

The successful achievement of digital health requires an adequate and secure digital infrastructure, a favourable policy and regulatory framework, the deployment of the necessary financial and human resources, and the rigorous monitoring and evaluation of success indicators.

In this light, the Cameroon Government has drawn up a National Strategic Plan - Digital Health (PSNSN) for the period running from 2020 - 2024.

This plan, which takes into account these requirements, defines the framework of initiatives and interventions related to the use of digital technologies for the implementation of this development vision.

It should be noted that many digital health and telemedicine initiatives are already underway in Cameroon.

And several Cameroonian startups have developed innovations in the field of E-health.

I would like to seize this opportunity to congratulate Dr Franck VERZEFE, a Cameroonian doctor in pharmacy, who, through his company TrueSpec Africa, is fighting against counterfeit drugs in Africa. He is a member of the World Health Organization's Artificial Intelligence for Health (AI4H) think tank. Mr Verzefe leads the Artificial Intelligence for Counterfeit Drugs Detection theme group AI4H Focus Group; responsible within the development of a global standard for the assessment and benchmarking of AI pharmaceutical systems. He was selected as one of the top 5 African social entrepreneurs in 2017 by the African Youth Awards. Franck was also recently ranked by the WHO as one of the top 30 African innovators.

#### Ladies and Gentlemen,

According to the International Telecommunication Union (ITU), digital startups and SMEs play a key role in ensuring sustainable and inclusive economic growth. They participate in the development of innovative ICT-based solutions and, through their unique potential, are expected to have a lasting impact on global, regional and national economies. In this respect, they constitute an important

niche of new jobs, especially for young people, in today's knowledge-based economy.

Hence the Head of State's very pertinent appeal to Cameroon's youth: innovate, dare and create.

Innovation refers to the introduction on the market of a new product or process significantly improved compared to those previously developed. And creation refers to the ability, the power, of an individual to imagine and realise something new. It is the ability to discover a new, original solution to a given problem. To dare is to undertake with confidence something difficult, or even dangerous. This calls for audacity and courage, two cardinal values if there ever was one.

In this respect, this triple challenge is of the utmost importance to young people who are faced with the imperative of being attentive to the challenges of our time, of addressing them with insight and efficiency, in order to propose the most relevant solutions.

Consequently, because innovation brings new answers to the challenges of our society, it is essential that innovators be accompanied in the process of migration towards digital entrepreneurship.

From this perspective, the establishment of telecommunications infrastructures for better connectivity, the development of ICT uses and content, as well as related policies, training digital such as in support entrepreneurship, regulation, including financing issues, enable these young inventors or bearers of ideas in the digital field to become part of the entrepreneurship fabric and thus participate in economic growth.

The aim of these programmes is to develop a favourable ecosystem for the detection of talent and the support of innovation among young ICT entrepreneurs, with a view to the emergence of a real digital economy through the creation of digital companies.

Beyond all the actions already undertaken, the Government has set up the Cameroon Digital Innovation Centre (CDIC), whose mission is to detect and accompany the ICT project holder from the idea right up to the viable business.

The CDIC is a flagship government programme for supporting young people, and is a state-of-the-art infrastructure, as well as an ambitious institution, a daughter of its time, which undoubtedly offers itself as a valuable tool to the detection and blossoming of talent, that is to say, to the promotion of Cameroonian genius, many of

whose figures already enjoy a solid reputation on the international innovation scene.

In addition to incubating and supervising digital projects, this high-tech digital centre is also a research and technology watch centre in the digital field. Thanks to its connected classrooms, it provides training for young people interested in ICTs and cutting-edge technologies.

As a result, in the upcoming months, young people will be trained in Artificial Intelligence, Internet of Things, Databases and Network Security.

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Ladies and Gentlemen.

In the book-interview entitled "Paul BIYA. Un nouvel élan », published in 1997, the Cameroon Head of State already stated that: "The 21st century will indeed be the century of new industries, based on what is known as

artificial intelligence, thanks the significant to development of electronics and its applications. For instance, communications and telecommunications are experiencing an exceptional expansion at the end of this century, with the recent birth of an international Internet network. Electronics is also bringing about a revolution in the fields of physics, biology and the social sciences, with remarkable prospects for its applications in development. Let us take the example of the biological sciences. With the advent of biotechnology, agriculture can now benefit from more productive and better adapted varieties. The incomes of our farmers could significantly improved with such applications" (p. 96).

Over twenty years after this prediction, the evolution of the world has totally proved President BIYA right. The revolution in the fields of computing, information, communication and telecommunications has effectively given birth to the information and knowledge society. This new society, despite the fears inherent in any revolution, is today the engine of economic development and growth of countries, the new capital of the business world.

In general, ICTs, and the Internet in particular, are accelerating the pace of the establishment of a new

economy, commonly known as the "digital economy", with high added value, and are strengthening globalisation.

President Paul BIYA was also quickly convinced that Cameroon has the assets to benefit from the positive effects of this "new boarders".

The 21st century consecrates AI as a lever of power that cannot be ignored. The opportunities offered by AI are already perceptible, and most states are deploying a strategy to ensure the mastery of this technology which is becoming a real lever of power.

However, it must be emphasised that the dividends of AI are only possible if such technologies can infuse society and do not remain the reserved domain of only a part of the population.

As such, preventing the development of digital divides is a decisive challenge: in addition to the social problems raised by digital inequalities, the international competitiveness of countries is also at stake.

The AI strategy must therefore have two areas: the development of technologies, and the increase in the capacity of citizens and businesses to appropriate them. We can already see that not all states are taking advantage of the growth opportunities offered by AI in the same way.

According to the McKinsey report, developed countries will capture between 20% and 25% of the new wealth generated by AI, compared with 5% to 15% for developing countries. This can be explained by a lower level of digital education in these states, which weighs on their ability to exploit the opportunities offered by AI. States must therefore focus their efforts on digital education.

The ability of states to have a strategy to develop their technological level while providing adequate digital education to their population will be crucial to benefit from AI without suffering setbacks.

I am therefore delighted that this forum is being held and hope that the recommendations that will emerge from it will enable us to define appropriate strategies for the development of AI for health and beyond, for a controlled appropriation of the opportunities offered by AI.

As for Cameroon, the country is committed to the implementation of the strategic plan for the development of digital economy, through the promotion of the digital culture by popularising of the use of ICTs for individuals, businesses and administrations.

#### Long live the subregional cooperation!

Long live Cameroon and its illustrious Head, President Paul BIYA!

Thanks for your kind attention.