



MINISTRY  
COMMUNICATIONS AND DIGITAL TECHNOLOGIES  
REPUBLIC OF SOUTH AFRICA

## **REMARKS ON ARTIFICIAL INTELLIGENCE (AI) REGULATION WHILE ENCOURAGING INNOVATION** *04 November 2021, Windhoek*

**By Hon Khumbudzo Ntshavheni, Minister of Communications & Digital  
Technologies SOUTH AFRICA.**

Moderator of the session, Prateek Sibal – Programme Specialist on Digital  
Innovation & Transformation, UNESCO

Our Host, Dr Peya Mushelenga, the Minister of Information and Communications  
Technology of the Republic of Namibia

Fellow Ministers of Communications and ICT

Representatives of UNESCO and SADC

Members of the diplomatic corps

Ladies and Gentlemen,

*Good Afternoon*

Let me start by expressing my appreciation to the people and government of Namibia for hosting the Africa ICT Ministers Forum. I can commit South Africa's support to the Windhoek +30 Declaration about global commitment to freedom of expression, press freedom and freedom of information and its full implementation.

The economic development trajectory of Africa during the 1<sup>st</sup> to the 3<sup>rd</sup> industrial revolutions have always lagged behind those of the Western and Eastern countries.

Africa cannot afford to trail economic development opportunities brought about by the 4<sup>th</sup> Industrial Revolution. Cloud platforms and digital technologies such as quantum computing, machine learning, Artificial Intelligence, cyber security and related technologies have a great potential of increasing the production in raw materials that are in abundance in Africa and leapfrog key productions in Africa.

If I focus specifically on Artificial Intelligence, it is noteworthy that Africans are not sitting by and allowing the emergence and deployment of Artificial Intelligence and related technologies to pass us by.

For example, in 2019, AU Ministers responsible for Communications and ICTs adopted the Sharm El Sheikh Declaration wherein there was an agreement, amongst others; to establish a Working Group on AI, based on existing initiatives and in collaboration with African institutions to address the following:

- The creation of common African stance on AI,
- The development of Africa-wide AI capacity building framework,
- Establishment of an AI think-tank to assess and recommend projects to collaborate on, in-line with Agenda 2063 and SDGs

In Nairobi, Kenya, Strathmore University established the @iLabAfrica Research Centre that is seeking to promote cutting-edge research in AI, among other emerging technologies. In Nigeria, University of Lagos recently opened the AI Hub that will focus on deep learning and tools to collect data for AI purposes.

As South Africa, in our Presidential Commission Report on the Fourth Industrial Revolution (PC4IR) we also identified the development and advance of Artificial Intelligence as a key focus area in our digital economic development strategy.

A Stanford University-hosted study on Artificial Intelligence and Life in 2030 published in 2017, reported that “AI is already changing our daily lives, almost entirely in ways that improve human health, safety, entertainment and productivity”. In South Africa,

we have witnessed the leapfrog effect of AI and related technologies in economic productivity where it has already been deployed in South Africa's banking sector and auto-manufacturing. The Centre for Artificial Intelligence Research (CAIR) which was founded in 2011 and has established nodes and research networks with universities.

There are South African start-up companies such as Xineoh which focuses on simplifying AI and Machine Learning. They possess distinctive Algorithms similar to Amazon.Com and Netflix wherein they determine user behaviour and predict potential purchasing behaviour -the company has already generated more than \$30 million dollars in revenue.

We are currently looking forward to working with the mining sector amongst others on the deployment of AI and robotics in their production environments also as part of eliminating mining disaster that cost human lives such as the one in Lily Mine in our Mpumalanga Province, where the remains of four (4) mine workers remain trapped underground.

### **Ladies and gentlemen,**

Our approach as Africans towards AI innovation, we need to remember that there was the Space discovery, the Arms race, then the race to Space which we were affected bystanders, and now - it is an AI race and we dare not be left behind.

The onus is upon us to participate in this AI race and we stand a better chance participating through a coordinated and collaborative approach and not to compete as countries, universities, research institutions and ICT businesses. There are expertise in region (SADC) and in the continent, however, we need to strengthen coordination within regional groups and organisations in manner that promotes individual country development. For example, Africa can establish AI Centre of Excellence with regional centres that have specific focus areas and ensure no single region is left behind.

During South Africa's chairmanship of the African Union, the President of South Africa, His Excellency, Mr Matamela Cyril Ramaphosa at the African Union Summit of

2020, called for a unified African regional AI approach that will serve as a Blueprint to guide the African member-states in developing policies and regulations related to AI as a technology tool for advancement. As a result, South Africa in collaboration with the Smart Africa Alliance and other member-states supported by other stakeholders such as the academia, private sector, and civil society drafted an Artificial Intelligence Blueprint which would be tabled at the AU soon. We hope that this draft AI Blueprint would go a long way to getting our continent to be a global digital economic powerhouse through adoption of AI as a General-Purpose Technology of today, the future and beyond.

To achieve the goal of AI as a General-Purpose Technology of the future, we need to endeavour towards opening government data for use in AI innovation and drive positive change in people's lives. Let me reiterate that the African countries are most positioned to take advantage of AI but have additional hurdles to overcome.

As a continent, we must recognise that there are factors that are important in driving the growth of AI globally and within our continent such as:

- Increased availability of digitised data in the global economy,
- Unlimited access to computing power,
- Universal connectivity,
- Lower cost for data storage, and
- Low cost of data.

**Ladies and gentlemen,**

Pop-culture and science fiction have led many to believe that one day, machines endowed with artificial intelligence will match, or even surpass, human intelligence. However, the Stanford University Study that I had earlier referred to concluded that there is no race towards superhuman robots and that such is not even possible.

The question of AI Regulation especially from the African continent perspective is whether as the African continent we can even begin determining AI regulations?. Can we have effective Regulations without the existence of a clear policy position? What will we be regulating? However, there is the matter of ethics in science and innovation. In the areas of healthcare, education, safety and security and social net-support, governments are expected through policy formulation and regulatory approaches to safeguard the preservation of livelihoods and creation of sustainable jobs – which some may deem to be threatened by the advent of AI. Therefore, the adoption of AI must ensure the ethical, impactful and purposeful delivery.

Most nations within the Organisation of Economic Corporation and Development (OECD) have already develop policy and legislations supporting AI and has made it their chosen vehicle for economic growth and prosperity. The OECD has developed a set of AI Principles and recommendations, which was adopted by European Union (EU). The OECD states that:

*“Stakeholders should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for people and the planet, such as augmenting human capabilities and enhancing creativity, advancing inclusion of underrepresented populations, reducing economic, social, gender and other inequalities, and protecting natural environments, thus invigorating inclusive growth, sustainable development and well-being.”*

Similarly, the International Telecommunications Union (ITU) called for AI for Good approach that still has to be adopted by the member-states. In May 2020, the ITU hosted AI for Good Global Summit where it connected AI Innovators across the world to solve the problems related to sustainable development goals. I, therefore would like to encourage all the African countries to work in unison and effectively adopt the recommendations of the AI for Good principles to ensure trusted, safe and inclusive development of AI technologies and equitable access.

**Ladies and Gentlemen,**

We all know that , lack of guidance and regulations on AI, is a matter for discussion with the findings likely to vary between countries. We need to ask ourselves whether the envisaged regulations by themselves will be or not sufficient to ignite the open AI data-driven revolution in African continent.

To institutionalize open AI, Regulatory Frameworks related to the following important consideration must be put in place in relation towards the development of continental and national AI Policies and Programmes which are:

- Data-centric approach linked to developmental agenda
- Human-centred Technology development
- AI for economic and growth prospects
- Multistakeholder Approach centred, and
- Institutional Mechanisms located within Localised Agencies

Let me conclude by quoting Professor Nelishia Pillay, Head of the Computer Science at the University of Pretoria, in South Africa when she stated that *“With the right mix of policies, Africa and its citizens can reap the benefits of AI in years to come.”*

I thank you.