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Submissions from entities in the United Nations system, international organizations and other stakeholders on their efforts in 2022 to implement the outcomes of the WSIS

Submission by

United Nations Economic Commission for Africa

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 26th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

Progress made in 2022 in the implementation of the outcomes of the World Summit on the Information Society at the Regional and International Levels   -   UNECA Contribution

I.   INTRODUCTION

- The COVID-19 pandemic has abundantly exposed the linkage between digitalization and development, making digital transformation increasingly important. Increasing Internet access to reach 75% of the population could create 44 million jobs. With 33 percent of people living in Africa used the internet in 2021, Africa, has recorded a 13% annual growth in internet penetration.. Many new opportunities and challenges have emerged that affect the implementation of WSIS outcomes. Today, our continent is undergoing a revolution in ICT: Access to information and communications technologies (ICTs) continued to grow during the year 2022.

- While 2022 saw the beginning of hybrid mode of operations and some institutions opening their business fully for physical presence, the impact of the COVID-19 pandemic continued being felt on nearly every aspect of human society and economy., 2022 saw the beginning of normalisation to some extent with hybrid mode of operations starting to crop up.

- Mobile cellular coverage in Africa, referring to the percentage of the population that lives within reach of a mobile cellular signal, is estimated by ITU to be at 88.4 per cent. Just over 82.4 per cent of the population is now within reach of a 3G signal, and 49.32 per cent is within reach of a long-term evolution (LTE) mobile broadband signal.

- The use of mobile financial services continues to grow with two thirds of mobile money transactions worldwide taking place on the African continent. For example, in Sub-Saharan Africa, $698 billion in mobile money took place in 2021. Countries are also exploring central bank digital currencies and crypto assets are going (IMF-2022).

- Companies are giving more and more importance to telework, which is also becoming the norm. This acceleration of digital initiated by the health crisis is not changing, Online transactions have remained predominant allowing businesses and households to maintain supply and demand for goods and services. Online learning mode that picked out during the pandemic has remained in most learning institutions sustaining the demand for connectivity across the continent

- Despite this, there is a significant gender digital divide and wide digital divide between rural and urban areas. Only 34 per cent of women used the Internet, compared with 45 per cent of men. Moreover, 15 per cent of rural households had access to the Internet in 2021, compared with 50 per cent of urban households . In the 15 to 24-year-old age group, 40 per cent used the Internet in 2020, which is higher than the regional average, yet significantly lower than the world average of 71 per cent.

- Large heterogeneity in internet access is also prevalent for instance, 80% of Moroccans having internet access on the one hand but only 6.5% of South Sudanese having internet access on the other. Also continuing to persist are issues such as the relatively high cost of devices, large segments of the population living on average income levels and limited digital skills among rural and less literate people.

- **Africa lags in Infrastructure** in several key areas necessary for development like universal access to electricity, mechanization of production, and industry automation.

- The work of the UNECA to support the WSIS objectives is carried out at a sub-programme level. In this context, ECA plays a crucial role in supporting member States in the development of key policy milestones for harnessing digitalization and innovation and will continue to provide technical assistance for member States. In this regard, based on its recent work, ECA produced a Report on the Review of the Implementation and follow up of the World Summit on the Information Society (WSIS) in Africa in 2022 and the Annual WSIS Regional Review Meeting for Africa will be held in November 2022. In term of ICT policy development, ECA will continue to support number of African countries such as Ethiopia, Nigeria, Guinea, Togo, Senegal, Rwanda, Namibia, Zimbabwe, Kenya, Botswana, Tanzania, etc. to develop their ICT policy and implementing a foundational ID system based on open-source platform and geared towards addressing SDG16.9.

- The following sections highlight major developments and activities by UNECA and collaborators in 2022 focusing on the good practices, lessons learned, as well as actions, initiatives, and important measures needed for further implementation of the Summit outcomes through the various initiatives at the regional level.

II. OVERVIEW OF ECA'S KEY ACTIVITIES

While the WSIS action lines for the Regional Commissions where UNECA is a co-facilitator falls under three action lines namely: C1, C6 and C11 with associated targets, this report covers work done in the region addressing other action lines too and by other collaborators/partners.

- UNECA has been supporting African countries to fully harness the opportunities of digitalization for advancing economic development, regional integration and prosperity while attaining the shared goals and targets of the Sustainable Development Goals and the AU Agenda 2063 over the years.   Since the beginning of the WSIS process in 2003, considerable work has been done in the African region by the various stakeholders and collaborators.
- The continent continued to implement *__Agenda 2063: The Africa We Want__*[1] which is the Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future. It is the continent's strategic framework that aims to deliver on its goal for inclusive and sustainable development and is a concrete manifestation of the pan-African drive for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance.
- The AU Digital Transformation Strategy 2020-2030,[2] continued to be implemented to achieve digital transformation and ensure efficiency in the delivery of services. Education, Agriculture and health sector strategies for the implementation of the broad strategy started being developed in 2022.
- **UNECA** has been actively involved especially in the organisation of the Africa IGF where it co-hosts the secretariat together with the African Union. The eleventh annual meeting of the Africa Internet Governance Forum (AfIGF) was hosted by the Government of Malawi between 19th to 21st of July 2022 under the overarching theme of Digital Inclusion and Trust in Africa. This year's African IGF program was built

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[1] https://au.int/sites/default/files/documents/33126-doc-06_the_vision.pdf
[2] https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030

around four broader thematic tracks (1) Affordable and meaningful access; (2) Cybersecurity, privacy, and personal data protection; (3) Digital skills & human capacity development; and (4) Digital infrastructure.

DIGITAL POLICY, DATA GOVERNANCE AND CYBERSECURITY

1. **Digital Transformation of Governments**: UNECA is supporting governments across the continent. For instance, in Botswana; the smart bots Lab as well as the Lobu farm supported by UNECA's digital Centre are initiatives that hold great promise for the economic growth of Botswana.

2. The Africa Union Continental Data Policy Framework was launched in July 2022.[3] The framework is intended to enable African countries to maximise the benefits of a data-driven economy by creating an enabling policy environment and building a positive data economy at the national and regional levels. The Framework was endorsed by the Executive Council of the AU in Decision EX/CL/Dec. 1144(XL) in February 2022. The Data Policy Framework was developed in response to a recommendation of the AU Digital Transformation Strategy,[4] which aims to guide a common, coordinated response to reap the benefits of the fourth industrial revolution. The Digital Transformation Strategy recommended that a continental framework on Data Policy and management be developed to support interventions to strengthen cybersecurity at the regional and continental level. The Data Policy Framework aims to make progress towards a consolidated data environment and harmonised digital data governance systems to enable the free and secure flow of data across the continent while safeguarding human rights, upholding security and ensuring equitable access and sharing of benefits.[5]

3. In 2022, UNESCO[6] continued advancing its work on Internet Universality Indicators Framework for Assessing Internet Development. By March 2022, 17 African countries had undertaken the assessment.[7]

4. The Policy and Regulation Initiative for Digital Africa (PRIDA) a joint project of the African Union, the European Union and ITU aimed at optimizing spectrums, harmonizing policy and regulation and enhancing stakeholder participation in Internet-related policymaking continued delivering on its mandate. Among her flagship project was the continental data policy framework with support from Research ICT Africa.[8]

5. The African Union Interoperability Framework for Digital ID continued being developed. UNECA in collaboration with The African Union Commission (AUC) is working towards the adoption of a new policy framework on digital ID. Other initiatives related to the Digital ID includes African Framework Principles for Good Digital ID; Digital Identity Framework of Engagement and the Smart Africa Digital ID BluePrint.

6. Cyber Security Lome Declaration: In March 2022 a Cybersecurity summit organised by UNECA and the Government of Togo was held in Lomé. Among the commitments

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[3] https://au.int/en/documents/20220728/au-data-policy-framework

[4] https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030

[5] https://au.int/sites/default/files/documents/42078-doc-AU-DATA-POLICY-FRAMEWORK-ENG1.pdf

[6] Stakeholders called for applying the ROAM principles and indicators at the African IGF 2021 (unesco.org)

[7] https://www.unesco.org/en/articles/african-countries-engage-regional-dialogue-over-internet-universality-indicators-study

[8] AfroAware | Data policy framework in Africa: What you need to know

made by the participating member states, RECs and the regional organizations includes: Creation of teams dedicated to the census and coordination of cybersecurity incidents, such as SIEM (Security Information and Event Management) or SOC (Security Operations Center) teams, the solutions to be brought to the cybersecurity incidents, such as CSIRT (Computer Security Incident Response Team) or CERT (Computer Emergency Response Team) teams; and to support initiatives such as the Network of African Women in Cybersecurity (NAWC) a continental network registered in Ghana in September 2021 that aims at amplifying women's voices and contributions in this critical area of Africa's cyber development.

DIGITAL INFRASTRUCTURE

7. The [Digital Economy for Africa (DE4A)](#), the World Bank flagship initiative continued supporting African Union digital transformation strategy for Africa through supporting countries to develop country specific reports focused on pillars related to the WSIS action lines and the 2030 sustainable development goals. 5 country reports including for (Botswana, Cameroon, Guinea-Bissau, Cote d'Ivoire and Cabo Verde) done in 2022 were completed by September 2022.[9] The DE4A initiative recognizes that the digital economy can help accelerating the achievement of the UN Sustainable Development Goals (SDGs). A common finding in all the reports is that inequalities in access to digital resources continued being a predominant factor in the countries assessed. This undermines the participation of the continent in matters of digital economy hindering progress towards achieving the Sustainable Development Goals.

8. There are regional initiatives geared towards supporting connectivity being implemented by various stakeholders such as the ITU within the [PRIDA project](#) [10] and [GIGA](#)[11] a project spearheaded by UNICEF.

9. There is Regional and Intra-Continental Connectivity to Support Cross Border Trade and the AfCFTA. [The AfCFTA](#) is one of the flagship projects of Agenda 2063. It is a high ambition trade agreement, with a comprehensive scope that includes critical areas of Africa's economy, such as digital trade and investment protection, amongst others. By eliminating barriers to trade in Africa, the objective of the AfCFTA is to significantly boost intra-Africa trade, particularly trade in value-added production and trade across all sectors of Africa's economy. As at June and July 2022, 54 AU Member States had signed the AfCFTA Agreement, and the AfCFTA had 43 State Parties[12] respectively.

10. The **African Trade Exchange (ATEX)** platform launched in May 2022, an initiative of ECA, Afreximbank and AfCFTA Secretariat, is a business-to-business platform which serves as a virtual marketplace for buyers and suppliers in order to strengthen regional supply chains by harnessing the opportunities of digital trade.Other notable initiatives under the AfCFTA have been launched recently such as the **Pan-African Payment and Settlement System (PAPSS)** which serves as a centralized payment settlement infrastructure

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[9] https://www.worldbank.org/en/programs/all-africa-digital-transformation/country-diagnostics?deliveryName=FCP_1_DM151549
[10]
https://asrenorg.net/eage20/sites/default/files/ITU%20Internet%20Connectivity%20Projects%20GIGA%20%26%20PRIDA_0.pdf
[11] https://giga.global/
[12] https://au-afcfta.org/

SKILLS AND CAPACITY DEVELOPMENT

11. In 2022, UNECA has been coordinated coding for girls across the continent aimed at addressing skills and gender gaps[13].   Through the Connected African Girls Hybrid Coding Camp, UNECA aims to close the Gender Digital Divide on the African continent by providing skills to girls and young women aged 12-25 across the continent that will prepare them for the 4th Industrial Revolution and make them fully involved in the African digital economy. Furthermore, the Initiative supports Sustainable Development Goal 5: Gender Equality and Empowering Women and Girls. Through partnerships with host governments, UN agencies, the private sector, and civil society organizations, UNECA has hosted three hybrid coding camps in Senegal, Namibia, and Tanzania since 2020. Over 25,000 African girls have been reached in 52 countries with the Connected African Girl Coding Camp. There were 240 innovative projects developed by trainees in the camp, 60 of which won awards for excellence.

12. In recognition of this fact and ensuring youth have access to STEAM (**Science, Technology, Engineering, Arts and Mathematics)** at a young age, ECA hosted a bootcamp on the themes of "Disruptive Energy and Water Technologies and Innovations for Sustainable and Inclusive Development". And "Re-imagining and Re-thinking STEM Education in the Fourth Industrial Revolution" in parallel with the 2022 STI Forum in Kigali, Rwanda. The bootcamp is designed to expose youths to the value chains of different advanced renewable energy technologies such as solar, wind, battery and hydrogen. Training on artificial Intelligence, robotics, coding, 3D printing and practical experiment on micro-science kits for biologic, chemistry and physics were also given for the youth. More than 150 youths are part of the bootcamp and demonstrated their talent in science, technology and innovation

13. Tech Africa Women initiative (TAW) was jointly launched by UNECA and an implementing partner Betacube on August 17th, 2022 in Tunis. This program endeavors to place a strong emphasis on community and network building, connecting female founder for synergies and learning as well as connecting them with relevant stakeholders of the African startup ecosystem to find long-term success and ability to solving the continents socio-economic challenges through tech focused entrepreneurship

14. Further, PRIDA has been supporting skills development in the field of Internet Governance through the national, regional and continental Schools of Internet Governance (SIG). As at the end of October 2022, 29 virtual/hybrid Schools of Internet Governance have been held in partnership with African countries and Regional Economic Communities. In preparation for the global IGF to be held in Addis Ababa Ethiopia in November 2022, UNECA partnered with AUC through PRIDA to train 80 youth volunteers in a five days course conducted in October 2022.

15. UNECA's support for **STEAM** education in Africa which is now a potential growth driver. It is in inspiring young versatile minds, increasing students' interest in science-related subjects in schools, and development of what is often called 21st-century skills for the workforce. It is with these initiatives that UNECA is determined and committed to support the establishment of the African STEAM center in Kigali, Rwanda.

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[13] https://www.uneca.org/stories/young-girl-trainees-gather-for-the-5th-edition-of-connected-african-girls-coding-camp

RESEARCH AND INCUBATION CENTRES

16. The UNECA Digital center of Excellence has been supporting countries to develop the digital transformation strategies. The Center received numerous requests to support digital transformation initiatives among African member states in 2022, as part of implementing the African Digital Transformation Strategy. The center supports digital transformation projects in more than 20 African countries aiding governments to leverage digital technologies to address stressing social and economic challenges.

17. In March 2022, the **African Research Centre on Artificial Intelligence (ARCAI**) was launched in Brazzaville, Congo by UNECA. ARCAI aims to provide technology education and skills to promote job creation, bridge the digital divide, enhance inclusive economic growth, and ensure Africa's ownership of modern digital tools. It will also boost research and growth in areas such as digital policy, infrastructure, and finance.

18. Work on The African Union Artificial Intelligence Continental Strategy for Africa already started. An experts consultative meeting on developing a continental strategy for Artificial Intelligence (AI)[14] in Africa organised by the African Union High-Level Panel on Emerging Technologies (APET) was held in May 2022 in Dakar. The APET report titled *"AI for Africa" will* be launched in December 2022.

19. UNESCO and the International Development Research Centre surveyed artificial intelligence priorities and capacity, stressing the need to strengthen ability in Africa to achieve gains from technology.[15]

20. In September 2021, ICC-ECA Centre of Entrepreneurship was launched.[16] In 2022 the first continental hubs were announced in Ghana, Kenya, Morocco and Nigeria to inspire innovation and improve the business environment for entrepreneurs and small- and medium-sized enterprises (SMEs) in Africa. The entrepreneurship centres are expected to develop the skills of young people, developing the next generation of African business leaders.

III. CONCLUSION

- Evidently there is significant progress across the continent in the area of Policy and Data Governance, Digital infrastructure development, Capacity building and Research and development.

- Africa's internet penetration is the lowest in the world due to the lack of infrastructure; It is therefore critical to implement ICT infrastructures solutions that will mitigate and improve access to digital technologies for all communities in Africa.

- Collaboration to close the digital divide is fundamental and makes Internet connectivity & access devices affordable. It is estimated that closing gender gap just in mobile

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[14] The African Union Artificial Intelligence Continental Strategy For Africa | AUDA-NEPAD
[15] UNESCO Launches the findings of the Artificial Intelligence Needs Assessment Survey in Africa
[16] https://iccwbo.org/resources-for-business/small-and-medium-sized-enterprises-smes/icc-centre-for-entrepreneurship/icc-centre-of-entrepreneurship-nairobi-hub/#:~:text=ICC%20and%20the%20United%20Nations,enterprises%20(SMEs)%20in%20Africa.

phone ownership and data usage in low- and middle-income countries could generate an annual USD $15 billion in revenue for mobile operators.