2020 Regional Development Forum for Africa (RDF-AFR)

Digital transformation to accelerate achievement of the SDGs
– Digital development, partnerships and funding

6-7 October 2020, 12:00 – 15:00 CAR (Virtual meeting)
with preparatory break-out sessions on 5 October 2020 (12:00 – 13:30 CAT time)

CONTRIBUTION BY Intel Corporation, USA

TITLE: Acceleration of 5G for the Digital Transformation in Africa

EXPECTED DURATION OF PRESENTATION: 10 minutes

CONTACT: Dr. Bienvenu Agbokponto Soglo, bienvenu.Agbokponto.Soglo@intel.com, +27 60 9769490]

❖ **Africa Regional Initiatives:** [Select the Regional Initiative(s) relevant for your contribution]

[No] **AFR Regional initiative 1** – Building digital economies and fostering innovation in Africa

[Yes] **AFR Regional initiative 2** – Promotion of emerging broadband technologies

[No] **AFR Regional initiative 3** – Building trust and security in the use of telecommunications/ information and communication technology

[No] **AFR Regional initiative 4** – Strengthening human and institutional capacity building

[No] **AFR Regional initiative 5** – Management and monitoring of the radio-frequency spectrum and transition to digital broadcasting

❖ **Related ITU development thematic:** [Select the thematic area(s) relevant for your contribution]

[Yes] Networks and digital infrastructure

[No] Cybersecurity

[No] Emergency telecommunications

[No] Environment

[Yes] Digital policy and regulation

[No] Capacity development

[Yes] Digital services and applications

[Yes] Digital inclusion

[No] Digital innovation ecosystems

[No] Statistics and data for evidence-based decision making

❖ **Year(s) of implementation:** [Select the year(s) for which your action/project/initiative is relevant]

[No] 2018	[No] 2019	[Yes] 2020	[Yes] 2021	[Yes/No] Others

❖ **COVID-19 response related initiative:** [Please indicate if your action/project/initiative is relevant for COVID-19 response]

[Yes] COVID-19 response related initiative: AFR Regional initiative 2

Background

Intel's purpose is to create world-chancing technology that enriches the lives of every person on earth. Inspired by Moore's Law, we continuously work to advance the design and manufacturing of semiconductors to help address our customers' greatest challenges. We stand at the brink of several technology inflections—artificial intelligence (AI), 5G network transformation, and the rise of the intelligent edge—that together will shape the future of technology. Silicon and software drive these inflections, and Intel is at the heart of it all.

It is in this context, that Intel has supported different global and regional events of ITU as speaker/panelist and shared technical and global policy expertise. Intel is also an active contributor on Digital Strategy studies of African Union and Smart Africa including 5G and the next generation of Wi-Fi technologies e.g. Wi-Fi 6E.

Proposal

The provision of high-speed and high-quality broadband connectivity and services through 5G is very important for the future of Africa. 5G is a key technology enabler for digital transformation. It represents more than just another step in the evolution of wireless. It is the convergence of wireless with computing and the cloud. 5G is a new paradigm, enabling everything to be "smart", because everything is connected.

5G addresses existing, emerging and future uses delivering diverse services with usage scenarios such as: 1) Enhanced Mobile Broadband (eMBB) with immersive experiences (e.g. Virtual Reality, Augmented Reality); 2) Internet of Things (IoT)/Massive Machine Type Communication (mMTC) with applications such as smart home, smart cities, sensors; and 3) Ultra Reliable Low Latency Communications (URLLC) with applications such as mission critical type communication including autonomous driving or industrial IoT.

5G can be a catalyst for a connected society and economic transformation in Africa. The future society and economy on the continent will strongly rely on its communications infrastructure to contribute to the digitalization of vertical markets such as education, city management, agriculture, government, healthcare, and transportation etc.

It is also important to note that 5G, AI and IoT are complementary technologies.

COVID-19 situation also clearly shows the importance of 5G for high-speed and high-quality broadband and detailed information can be seen at ITU Webinar presentation on the "Importance of 5G and AI for the Pandemics (COVID-19)[1]".

African countries have already invested billions of US dollars for the existing mobile networks and continue to invest each year. According to ITU statistics; mobile networks cover 90% percent of

---

[1] https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Documents/events/2020/Webinar%20Q2-2July6/Turhan-Muluk-Mario-Romao-Intel-Q2.2-webinar-presentation.pdf

population in Africa (fixed network coverage is very low, and penetration is less than 1% in Africa). We need to accelerate the transformation of these mobile networks into high-speed and high-quality intelligent 5G networks. Intel's whitepaper[2] on "5G Policy Implications in Sub-Sahara Africa" provides recommendations for the development of a regional, national, or continental 5G action plan as well as recommendations for regional economic communities, governments, policy makers, regulators, and stakeholders in the ecosystem for 5G readiness in order to take advantage of addressable 5G opportunities for the digital transformation of the continent.

Please see below our proposals to accelerate the deployment of 5G in Africa for the high-speed broadband network and digital transformation;

- To develop a harmonized continental 5G strategy for Africa.

-To organize regional events to accelerate the deployment of 5G in Africa.

-To benefit from the best practices of the other regions/ countries to accelerate the deployment of 5G (such as USA's "5G Fast Plan[3]").

---

[2] https://blogs.intel.com/policy/files/2019/04/Intel-5G-policy-implications-in-Sub-Sahara-Africa.pdf

[3] https://www.fcc.gov/5G#:~:text=Under%20Chairman%20Pai%2C%20the%20FCC,(3)%20modernizing%20outdated%20regulations.