

Eighth SG13 Regional Workshop for Africa "Standardization and Future Networks: Opportunities for Africa beyond 2020"

Virtual, 1 June 2021



Session 1: Future Networks and Africa: IMT-2020 and beyond IMT-2020 Networks (Part 1)

Takeaways and Conclusions

- Many measures are set up by the TSB to manage the standardization work during the pandemic
- Quantum Technology, Trust, Data handling, Beyond IMT 2020 networks and Machine Learning are study areas of high attention
- 5G is still mostly at trail stage in Africa
- Most 5G challenges to Africa relate to investments, basic infrastructure, spectrum and demand
- Taken note of the innovative applications developed by students in the Federal University of Technology, Minna, Nigeria, namely:
 - Pandemic Tracing Application
 - AI-Based Classroom
 - Wazobia open speech

Suggestions to SG13RG-AFR

- Africa needs to keep up with the new steps taken by TSB to manage during the pandemic and remain active and present
- Africa needs to make efforts to participate in the various activities relating to the standardization in the new areas of high interest in order not to remain behind
- Africa can take advantage of the various 5G use cases to develop viable business cases



Session 1: Future Networks and Africa: Autonomous Networks (Part 2)

Takeaways and Conclusions

- FG-AN is already established and has started work. it is open for all to participate
- FG-AN provides an open platform to perform pre-standards activities related to AN
- Current technologies will not take to the future; there is need to invent new technologies
- Noted the invitation to students and professional from Africa to participate in the AI/ML in 5G challenge
- There are still gaps in AN standardization that need to be addressed

Suggestions to SG13RG-AFR

- Africa needs to participate more in the FG-AN activities and encourage universities to participate in the AI in 5G challenge
- Take advantage of the open platform to contribute to the addressing of the standardization gaps



Session 2: Cloud Computing and Data Handling

Takeaways and Conclusions

- There is a lot of ongoing work in the area of network awareness and network intelligence, as well as big data driven networking; So, if Africans wish to benefit from future networks, they need to participate in the standards development process related to these technologies
- To benefit from cloud computing technologies, African countries must start putting in place data handling procedures, from data privacy laws to decentralizing data storage on the continent
- As many African countries are having their data privacy laws in place, the next approach is to consider having a regional (AU) level data protection rules that should guide handling of data. This should lead to a harmonized privacy laws as well as other critical laws needed for the protection of data for the entire continent

Suggestions to SG13RG-AFR

- To assist African countries with support to harmonize their data handling laws
- SG13, having greatly supported African countries in participating in the standards development of Future Networks, the African group (SG13-RG-AFR) should do more to enable increased participation from African countries



Takeaways and Conclusions

- Five Recommendations of Y.3800 series on QKDN have been concluded and approved while many are in the process of development in ITU-T SG13 (Q16/13)
- New Work Items are invited on QKD – AI for QKDN, time synchronization, interworking
- ITU-T initiated 3 branches of work on "quantum" since 2018:
 - Study Group 13 (Q16/13 and Q6/13): focus on network aspects of QKDN
 - Study Group 17 (Q15/17, formerly Q4/17): focus on security aspect of QKDN
 - FG-QIT4N: to study the implications of QITs for both quantum and ICT network
- ITU-T SG17 has published 3 Recommendations : X.1702, X.1710, X.1714 while 3 are under drafting: X.sec_QKDN_km, X.sec_QKDN_tn, X.sec_QKDN_intrq
- The ITU-T FG-QIT4N was established in September 2019 to provide a collaborative platform for pre-standardization of QIT for networks
- Upcoming meetings of FG-QIT4N will be on the 23rd of June 2021 and in August 2021

Suggestions to SG13RG-AFR

- There is a great need for Africa participation in the FG-QIT4N to factor in African requirements
- In the future, with the huge progress in electronic and virtual meeting tools available in ITU-T, Africa Region could further participate in ITU-T Study Groups' activities from remote
- There is a need for harmonisation of the Recommendations of QKDN with local needs to harness interoperability to achieve global recognition
- Concerted efforts to be made to determine the Use Cases in Africa to enable making useful contributions to Q16/13 and FG-QIT4N



Takeaways and Conclusions

- ICT standards play a crucial role in achieving interoperability of new technologies and can bring significant benefits to both industry and consumers
- The main advantages of participation to the standardization process for African Countries are global inclusion, rapid access to new technologies, the possibility to leapfrog technologies and reducing costs
- African countries are facing many challenges in getting involved in the standardization process. These challenges are mainly related to the lack of awareness regarding the importance of developing standards which is not a priority for many African Countries in addition to the lack of skills, travel costs, availability and language issues.
- Digitalization is a priority for Africa in many sectors including financial services, health care and education

Suggestions to SG13RG-AFR

- Participate in raising awareness among African Countries on the importance of developing ICT standards and related advantages
- Encourage a more effective participation of African ITU-T members to SG13's activities; an effective participation doesn't mean attending events only but also contributing; participation with consistency should be also encouraged
- Encourage Academia and private sectors to get involved in SG13's activities
- Help reflect the concerns, priorities and requirements of African countries in relation with SG13's hot topics
- Further collaborate with ATU in the context of enhancing the African participation to SG13's Activities



Takeaways and Conclusions

- ATU is making important efforts to encourage an efficient participation of African Countries in the standardization process including the improvement of its communication strategies, the development of dedicated groups on innovative technologies, the appointment of focal points, the collaboration with partners to organize dedicated workshops to help decision makers to be aware of the issue of standardization at regional level and develop related guidelines, ...
- Identifying possible technology use-cases and setting up an upstream standardization process would be a key to the adoption of future networks by African countries
- Many factors could help African countries adopt future technologies, including setting up adequate regulatory frameworks, policies and strategies to cut investment costs and make technology affordable, capacity building, strategic partnerships, relevance to the local needs to bring value to the key sectors, ...

Suggestions to SG13RG-AFR

