

**Sixth Regional Workshop for Africa on  
"Standardization of future networks: What  
opportunities for Africa?"**

**Abidjan, Cote D'Ivoire, 26 – 27 March 2018**

**Summary and Outcomes**



## Theme

"Standardization of Future Networks:  
What Opportunities for Africa? "

Hosted by the Telecommunications / ICT Regulatory Authority  
of Côte d'Ivoire (ARTCI).



# Opening Ceremony

- The opening ceremony was chaired by Mr. Ahmed SAKO, Deputy Director of the Ministry of Communication, Digital Economy and Post (MICENUP).
- Welcome speech was made by Mr. BILE Diéméléou, CEO of the ARTCI
- Warmly welcomed all participants and expressed his gratitude to the International Telecommunication Union (ITU), the Telecommunication Standardization Bureau (TSB) in particular, for organizing the 6th regional workshop for Africa of ITU-T Study Group 13 in Abidjan, Côte d'Ivoire.
- Mr. BILE Dieméléou noted that it is imperative for Africa to fully occupy its place in the international standardization process.

- Dr. Leo Lehmann, Chairman of ITU-T Study Group 13, noted that since the first African workshop, the number of participants has increased from about twice to more than 60 delegates.
- He was happy that the BSG program was being implemented successfully and brought its first results in terms of quality of submitted contributions and increased number of meeting attendees.
- Dr. Leo Lehmann emphasized that the influence of Africa in the work of SG13 is very important, especially the development of African needs for cloud computing and 5G studies.
- He mentioned that since the standardization of 5G is proceeding at a fast pace, Africa should be part of the process at early stage, otherwise its requirements will not be taken into account.
- He mentioned that it is the challenge of SG13 to ensure that the 5G requirements for Africa are expressed in time.



# Opening Ceremony

- Mr. Simon Bugaba, chairman of SG13RG-AFR appreciated Cote D'Ivoire for accepting to host and for the facilities
- He mentioned that participation in standardization activities is not an option for African countries
- Through such activities African countries have a real opportunity to keep up with new advancements

- Dr. Amine Mcharek, representing the TSB Director, highlighted the importance of BSG and the importance of active participation of developing countries in the standardization process
- It is noteworthy that Regional groups had made 50 years and Africa is the most active region
- The meeting welcomed the video message of the TSB Director



# Opening Ceremony

- Mr. Ahmed SAKO, Deputy Director of the Ministry of Digital Economy and Post (MICENUP) mentioned that it is an honor for Côte d'Ivoire to host the 6th meeting of the regional group of ITU-T Study Group 13.
- Mr SAKO also mentioned that the digital economy is a major challenge for the socio-economic development of our nations and the development of future networks and technologies cannot be achieved harmoniously without standardization.

- **Keynote Presentation by Dr. Leo Lehmann, Chairman of ITU-T Study Group 13**
- He described the position of ITU-T Study Group 13 in global 5G Standardization: Softwarization, Fix Mobile Convergence and Data-Aware Networking
- He mentioned that the current work on IMT2020 / 5G in a number of standardization bodies and many forums, consortia and projects are devoted to the above topics.
- He mentioned that the role of ITU-T SG13, in the IMT-2020 / 5G ecosystem is to contribute to the international harmonization of terms and definitions as well as high-level frameworks, principles and requirements.
- As part of one of its missions, ITU-T Study Group 13 seeks to include the requirements and interests of developing countries in IMT2020 / 5G technical standardization.
- In addition, ITU-T SG 13 created a new Focus Group "on machine learning for future networks, including 5G" to investigate the potential application of ML-based mechanisms in networks.



## Takeaways and Conclusions

- Objectives of the workshop include IMT-2020, Cloud Computing & Big Data, and Trusted Network Infrastructure.
- Standardization presents good opportunities for developing countries,
- Africa's participation & involvement in ITU-T Standardization is still growing but still needs further efforts

## Suggestions to ITU-T SG13RG-AFR

- ❑ Africa's priorities should observe IMT-2020, Cloud Computing & Big Data, and Trusted Network Infrastructure.



## Takeaways and Conclusions

- "The importance of development and adoption of socio-technical standards for developing countries was presented".
- There is a clear correlation between ICT characteristics and standard of living indicators, ie the impact of ICTs on social standards.
- The development of social and technical standards will link ICT development indicators to social standards indicators, which will significantly increase the effectiveness of ICTs implemented and accelerate the pace of all countries towards sustainable development goals.
- Socio-technical standards could become tools not only for scientists and specialists in the field of ICT, sociology and economics, but also for civil servants, regulators of the economy of ICT and business representatives.

## Suggestions to ITU-T SG13RG-AFR

- Africa should think about socio-technical standards



# Session 1: ITU-T SG13 Standardization & Africa-related involvement

## Takeaways and Conclusions

- Standards are essential elements in our daily lives and in the global ICT infrastructure that allows a large number of actors to interact and innovate, expand business activities and accelerate technological advances as well as to allow end-users to benefit from a wider range of choices and lower costs.
- ITU-T SG13 focuses its standardization activities on cutting-edge topics in the ICT field, such as Cloud Computing, Big Data, IMT-2020, and Machine Learning which are very beneficial for African countries with positive socio-economic impacts. Therefore, African countries should become more involved in the SG 13 standardization activities, increasing their participation and the number of contributions submitted to its meetings.
- In addition to the initiatives already taken to increase the participation of African countries in the activities of the EC13, other mechanisms should be identified for more effective participation especially in terms of contributions and new topics.

## Suggestions to ITU-T SG13RG-AFR

### Consider

- selection of a representative in each country to coordinate standardization activities and invited the SG13RG-AFR to provide adequate administrative support and mentoring.
- Strengthening the benefits of the created of regional groups for Africa
- Encouraging Member States to have a "National Standardization Secretariat"
- Encourage the regulators and the administrations of the Member States to set up internally a Validation Committee for the preparation of relevant contributions
- Encourage the administrations of the Member States to integrate in the day-to-day management of their activities, a specialized function responsible for monitoring the ITU international meetings
- Encourage member states to set up a fund dedicated to standardization that can be used to finance the participation of delegates
- Encourage member states to strengthen their capacity in the field of standardization, notably through the TSB training program to bridge the standardization gap between developed and developing countries





### Takeaways and Conclusions

- There is a need for a handbook to effective guide participation in developing IMT-2020
- Q5 / 13 is invited to support the proposal to produce a technical guide on IMT-2020.
- Joint Coordination Activity on IMT-2020 is coordinating different SDOs and ITU work on IMT 2020.
- SG13 has made progress with standardization of 5G

### Suggestions to ITU-T SG13RG-AFR

- IMT-2020 has benefits for developing countries as follows:
  - Increase in GDP
  - Reduction in transaction costs
  - Better informed decision-making through rapid access to information
  - stimulate production
  - Stimulate employment
- SG13RG-AFR to contribution to IMT2020 work in SG13 to reach the above



## Takeaways and Conclusions

- Some of the applications of machine learning include: marketing, network optimization, data monetization, fraud, eSIM, call centers.
- There are some regulatory issues to be resolved for machine learning.
- The FG ML5G has been created to pursue the ML studies as applied to the IMT2020
- Africa is encouraged to be involved into the activities of the FG-ML5G

## Suggestions to ITU-T SG13RG-AFR

- ❑ Africa has to be more active in FG-ML 5G physically but even by remote participation



### Takeaways and Conclusions

- There are use cases on cloud computing and Big Data from Ivory Coast and Senegal.
- ITU –T SG13 has published some recommendations of Cloud Computing & Big Data. There are some Recommendations under development
- Supplement No.46 to Y.3500-Series of Recommendations ‘Requirements and Challenges Regarding Provision and Consumption of Cloud Computing Services in Developing Countries’ was developed
- The advantages of using cloud computing technology, the difficulty and barriers to adopt it in African countries and the potential that African countries may have was articulated.

### Suggestions to ITU-T SG13RG-AFR

Cloud data services, can help with country’s development issues, as well as create real business opportunities; to this end, SG13RG-AFR should

- Collect use cases for sharing experiences
- Attract the African experts to submit contributions
- Be a platform for developing countries to solve the challenges highlighted
- Contribute to adoption of the cloud computing and the increase of advantages that comes with it, in several African countries that have not adopted it yet.
- Contribute developing infrastructure through partnerships
- Facilitate introducing cloud computing into university courses
- Raise awareness of the benefits of Cloud Computing through workshop
- Contribute to collaboration for secure CC environment
- Encourage African countries to participate in CC & Big data activities



### Takeaways and Conclusions

- Technology and service are the two most important determinants in the trust.
- Consumers must adapt to new technologies before to judge whether they can trust.
- Technological convergence is on but Trust is at the centre of it all
- ITU -T Q16/13 has developed Three Recommendations on Trust
- The use of these new technologies is accompanied by risks. The confidence of users in these technologies (digital trust) today is based on a fragile balance

### Suggestions to ITU-T SG13RG-AF

Contribute with ideas for

- Benefits for Africa include Economy, Education & Health
- Trust considerations is an important item for standardization
- Establishment of Digital Trust infrastructure



### Takeaways and Conclusions

- There is a wave of African countries developing their own local standards in collaboration with SDOs like ITU
- The Socio - Economic Future of Africa with a perfect integration of networks of the future (NGN) has been envisaged

### Suggestions to ITU-T SG13RG-AFR

- African countries need to bring their standardization efforts and challenges to the ITU for possible improvements and for better utilization
- Technological Initiatives of infrastructure integration programs, including NGN, could be solutions for Basic social services in African countries



### Takeaways and Conclusions

1. Awareness levels in Africa are growing but still more effort is needed
2. Africa does have experts
3. ITU may need to change the approach to whom it is talking to in Africa
4. ITU standardization topics are relevant
5. African countries participation is in most cases uncoordinated

### Suggestions to ITU-T SG13RG-AFR

- Governments, Policy makers need to be brought on board
- Ensure awareness of those whom standards affect the most (social life market place)
- Consider packaging standards to suite social issues –Social Technical standards may help popularizing ITU standards

