Fifth ITU-T Regional Workshop for African on "ITU-T Standardization work on Future Networks: Towards a Better Future for Africa" 2-3 April 2017 at Novotel Cairo Airport Hotel Egypt

IMT-2020 REQUIREMENTS FOR AFRICA

Presented by: Engr Charles Chike Asadu

Deputy Director, Innovation Centre

University of Nigeria, Nsukka

chikecasadu@yahoo.com

chike.asadu@unn.edu.ng

charles.asadu@ties.itu.int

IMT-2020 REQUIREMENTS FOR AFRICA

CONTENT:

1. **FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017**

2. **ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA**

3. **STRATEGIES TO BE ADOPTED**

4. **CONCLUSION/RECOMMENDATIONS**

IMT-2020 REQUIREMENTS FOR AFRICA

- **FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017**

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

RESOLUTION 92 (HAMMAMET, 2016)

instructs Study Group 13

1   to maintain the roadmap of IMT standardization activities in ITU-T, which should include work items to progress standardization work related to the non-radio side of IMT, and share this with relevant groups of ITU-R and ITU-D as the mission of the lead group for IMT (especially IMT-2020);

2   to promote the studies on network requirements and architecture, network softwarization, network slicing, network capability openness, network management and orchestration, fixed-mobile convergence and emerging network technology (such as ICN, etc.);

3   to establish the Joint Coordination Activity for IMT-2020 (JCA IMT-2020) and coordinate the standardization activities of IMT (especially IMT-2020) among all relevant study groups and focus groups and other SDOs,

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

RESOLUTION 92 (HAMMAMET, 2016) also notes:

- that IMT systems have contributed to global economic and social development, and are intended to provide telecommunication services on a worldwide scale, regardless of location, network or terminal used;

- that IMT-2020 will be utilized widely in the near future to build a user-centred information ecosystem, and it will make a positive and important contribution to the United Nations Sustainable Development Goals;

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

ITU-T Study Group 13 (SG13) established an ITU-T Focus Group on IMT-2020 (FG IMT-2020) in May 2015 to identify wireline standards gaps to be filled in the development of International Mobile Telecommunications (IMT) for 2020 and beyond – '5G'.

The FG submitted nine deliverables for consideration by the first meeting of ITU-T Study Group 13 in the 2017-2020 study period, and established four working groups:

1. High level network architecture and fixed-mobile convergence, championed by Dr Namseok Ko, ETRI, Korea;

2. Network softwarization, championed by Prof Akihiro Nakao, University of Tokyo, Japan;

3. End-to-end network management, championed by Olivia Heeyun Choi, and Sangwoo Kang, KT Corporation;

4. Information centric networking (ICN), championed by Dr Marc Mosko, PARC.

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

- Q20/13 perceived gap between the capabilities of African countries and their abilities to realistically contribute to the necessary provisions and requirements of the envisaged IMT-2020.

FALL OUT FROM ITU-T SG13 MEETING OF FFB 2017

- Q20/13 also noted the need for African countries to contribute to the work of Q20/13 in the following Thematic areas of interest: IMT-2020 for rural areas, developing countries; low cost IMT-2020, capabilities, requirements, Architecture, use cases, and softwarization; to identify relevant use cases, focused on the involvement of the various potential business roles; migration from existing networks to IMT-2020 (step-wise migration); as well as the satellite component of IMT-2020.

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

New work items proposed for Q5/13

Acronym	Title	Editor	Priority	Consent / Approval	Reference
	Gap analysis on Knowledge-centric trustworthy networking and services in developing countries	To be named	Medium	Nov 2017	
	Gap analysis on IMT 2020 (non-radio) in developing countries	To be named	Medium	Nov 2017	
	Gap analysis in developing countries on Big Data	To be named	Meduim	Nov 2017	
	Mechanism of identification of recommendations requiring implementation guidelines	**To be named**		**Awaiting handling decision from TSAG**	

Draft Recommendations and action plan for the first version of the Q.20/13 work

Rec	Question	Short Title	Status1)	Latest Pub Date2)	Priority	Target for Consent	Revised/New Text Location	Contact (Editors)
Y.IMT2020-terms	20/13	Terms and definitions for IMT-2020	N		H	11-2017	TD14(1/13)	Shin-Gak KANG
Y.IMT2020-reqts	20/13	Requirements of IMT-2020 network	N		H	11-2017	TD15(1/13)	Shin-Gak KANG, Byung Jun AHN, Namseok KO
Y.IMT2020-frame	20/13	Framework of IMT-2020 network	N		H	11-2017	TD16(1/13)	Byung Jun AHN, Shin-Gak KANG, Namseok KO
Y.IMT2020-arch	20/13	Architecture of IMT-2020 network	N		H	Q2-2018	TD17(1/13)	Byung Jun AHN, Shin-Gak KANG, Namseok KO
Y.IMT2020-CE-Req	20/13	Requirements of Capability Exposure in IMT-2020 networks	N		H	11-2017	TD10(1/13)	Wei Chen, Hu Cai, Yachen Wang
Y.IMT2020-CEF	20/13	Capability Exposure Function in IMT-2020 networks	N		H	Q2-2018	TD11(1/13)	Ren Guo, Wei Chen, Yu Yang

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

Proposed Future tasks for Q20/13 were based on the following Output documents

- New draft Rec. Y.IMT2020-terms - Terms and Definitions for IMT-2020

- New draft Rec. Y.IMT2020-reqts - requirements for IMT-2020

- New draft Rec. Y.IMT2020-frame – framework for IMT-2020

- New draft Rec. Y.IMT2020-arch - functional architecture

- New draft Rec. Y.IMT2020-CE-Req - Requirements of Capability Exposure for IMT-2020

- New draft Rec. Y.IMT2020-CEF - Capability Exposure Function in IMT-2020 networks

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

One of the New work items proposed for Q5/13:

is Gap analysis on IMT 2020 (non-radio) in developing countries which was on a medium priority and Consent with Approval date of Nov 2017, while the Editor is yet to be named

FALL OUT FROM ITU-T SG13 MEETING OF FEB 2017

The issues arising from the foregoing include:

- African delegates to actually make submissions on the thematic points identified by Q20/13 on requirements of IMT-2020 for Africa

- Q20/13 to encourage Q5/13 for African contributions to these thematic point, which is yet to be done

IMT-2020 REQUIREMENTS FOR AFRICA

- **ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA**

ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA

Considering that Q20/13 noted the need for Africa to make input to the work of Q20/13 on the following thematic points: IMT-2020 for rural areas, developing countries, low cost IMT-2020, capabilities, requirements, Architecture, use cases, and softwarization, to identify relevant use cases, focused on the involvement of the various potential business roles, migration from existing networks to IMT-2020 (step-wise migration), as well as the satellite component of IMT-2020.

ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA

- **In order to ensure effective participation by all the regions, Q20/13 again requested that the African region makes input to the work of the group particularly at the level of IMT-2020 Requirements as it affects Africa for consideration before its April 2017 e-meeting**

ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA

Again, one of the New work items proposed for Q5/13 is Gap analysis on IMT 2020 (non-radio) in developing countries.

This was on a medium priority and Consent.

While Approval date is for Nov 2017,

And the Editor for this work item is yet to be named

ROLE OF Q5/13 IN IMT-2020 REQUIREMENTS FOR AFRICA

Two options are now left for Q5/13:

- either to take the challenge for creating the necessary awareness and involving the delegates of Africa to make the necessary input to the work of Q20/13 on IMT-2020 requirements for Africa,

- Or request through communication more clarifications on these thematic points before Africans can make the required contribution to the work of Q20/13

IMT-2020 REQUIREMENTS FOR AFRICA

- **STRATEGIES TO BE ADOPTED**

STRATEGIES TO BE ADOPTED

- Q5/13 should consider at its SG13 RG AFR workshop and meeting coming up 2-5 April 2017 the need to adopt a stand towards ensuring that Africa contributes to the work of Q20/13 by either going through the creation of awareness for Africans to contribute to the work of Q20/13 if they have the required capacity to make input or, communicate with Q20/13 and others groups to be identified, to provide necessary definition, clarification on those thematic point to enable Africans to contribute to their work

STRATEGIES TO BE ADOPTED

Q5/13 should as matter of urgency, nominate Editor for one of the New work item proposed for Q5/13, which is Gap analysis on IMT 2020 (non-radio) in developing countries, which is on a medium priority and Consent, with approval date for Nov 2017

IMT-2020 REQUIREMENTS FOR AFRICA

- **CONCLUSION/RECOMMENDATIONS**

CONCLUSION/RECOMMENDATIONS

- The FG on IMT-2020 agreed that Even if the meeting(ie. ITU-T SG 13) reached consensus on several important terms and definitions, still much work needs to continue to harmonize and further development of terms and definition.

- FG IMT-2020 agreed to provide its document to ITU-T SG13 for consideration and further work on terms and definitions for IMT-2020 in the study period.

CONCLUSION/RECOMMENDATIONS

The objectives of Q20/13 are:

- Review ToR of Q.20 and discuss on the direction of the Question.

- Initiate new draft Recommendations according to received contributions (especially based on the FG IMT-2020 deliverables) and meeting discussions.

- Review contributions, and discuss future work plan (including possible interim activities)

- Participate in joint sessions with other Questions as needed

CONCLUSION/RECOMMENDATIONS

- It now behooves on Q5/13 to key into the provision of Q20/13 to Review contributions, and discuss future work plan (including possible interim activities) to request for opportunity for Africans o contribute to the requirements of IMT-2020 as it concerns Africa

CONCLUSION/RECOMMENDATIONS

- Q5/13 should then communicate with Q20/13, the need for it to adequately oblige African delegates the definitions and clarifications desired to enable Africa contribute to the work of Q20/13, considering timing of activities of Q20/13

- This can be in form of workshops, technical report or through any other medium from Q20/13 or any other group.

CONCLUSION/RECOMMENDATIONS

- initiate other method Q5/13 will need to relate with SG13 in ensuring that the necessary assistance will be granted it to be able to mobilize African delegates towards contributing to Q20/13 activities

THANKS

- *Engr Charles Chike Asadu*
- *Deputy Director, Innovation Centre*
- *University of Nigeria, Nsukka*
- *chikecasadu@yahoo.com*
- *chike.asadu@unn.edu.ng*
- *charles.asadu@ties.itu.int*

REFERRENCES

- RESOLUTION 92 (HAMMAMET, 2016)
- FG IMT-2020 Chairman's Report
- Report of Q20/13 meeting Feb 2017
- Report of Q5/13 meeting Feb 2017