Conformance and Interoperability (C&I): Regulatory framework and practical SAR, RF, DTT and EMF tests including Creation of Basic lab facilities.

Accra (Ghana)
2nd – 6th September 2019

2nd September 2019		
9h: 00 - 10:00	*Welcoming, Registration and Opening* *Welcoming speech ITU* *Welcoming speech NCA* • NCA Director General • ITU Representative	
10h: 00 - 10:30	*Break*	
10:30 - 12:00	*Session 1: Half day slot for ITU – Presentation of the C&I Programme – including activities and status of Study group 2 Question 4 including C&I Africa Group* *ITU C&I Programme: Study Group 2 Question 4 and C&I Africa Group Activities* ➢ **Key activities on Study Group 2 Question 4 (2/4)** ➢ **Structure and details of the question** ➢ **Format and Submission of contributions** ➢ **Africa Group Activities** ➢ **Discussion on the way forward** • Chali Tumelo (ITU) • Vladimir Daigele	
12:00– 13:30	*Lunch*	

13:30 – 14:30	*Session 2: Introduction to Conformance and Interoperability (C&I) testing Creation of Basic types of Test labs: Building Test Labs and/or establishing Mutual Recognition Agreements/Arrangements at Regional/Subregional levels* This session will focus on conformance and interoperability testing. Essentially the session will discuss in detail the following key areas which are the basis for C&I testing regime • Standards & Technical requirements • Processes of standards setting • mutual recognition arrangement (MRAs) • Interoperability issues • Contribution of Testing Laboratories to C&I • framework for one stop shop Type Approval and harmonisation of standards • Requirements to set up a basic C&I Lab ➢ **ITU** ➢ **NCA**	*20 slides/pages*
14:30 – 15:30	*Break*	
15:30 – 16:30	*Session 3: Conformity Assessment; Designating Authorities and Conformity Assessment Bodies/ Proposed roadmap to establish a procedure for type approval testing* • NCA • NCA	*15 slides/pages*
16:30 – 17:30	*Session 4: Knowledge sharing on Country experiences in C&I (Type Approval) Procedures* *Presentation by Delegates from other countries*	*Not more than 5 slides per country (no translation is required)*
	3rd September 2019	
9: 00 - 10:30	*Session 5: Technical and Regulatory framework type approval Administrative Procedures of type approval* The World recognizes that counterfeit and substandard ICT devices pose a lot of challenges in developing countries, particularly the Africa region. This session will discussion the regulatory requirements, procedures and mechanism in place to	*20 slides/pages*

	accept and recognize ICT devices in a country. The presentations will specifically focus on the technical and regulatory requirements to be considered when authorizing equipment onto a market.
	
	a. The technical requirements
	• Health and Safety
	• Electromagnetic Compatibility (EMC)
	• Radio Frequency (RF)/Interference
	• Electricals/LVD
	• Quality of service
	• Network compatibility/Interoperability
	
	b. Legal & Regulatory requirements
	• Legal Framework
	• Type approval & Management system
	• Proxy & Administrative approvals
	• Market surveillance activities
	    • NCA
	    • NCA
	
	By the end of the above sessions the participants would have clearly understood the need of C&I testing, essence of MRA, technical and regulatory requirements when developing C&I regime for a particular market	

10: 30 - 10:45	*Break*	
10:45 - 12:00	*Session 6: The NCA Type Approval Labs Administrative Procedures of type approval* The essential infrastructure to C&I regime, a focus on the NCA type approval, conformance labs and experience so far. It will also look at the general laboratory administrative procedures Standard Operating and Testing procedures for: Specific Absorption Rate (SAR) Lab Radio Frequence and Signalling Lab Electromagnetic Field Strength (EMF) Lab DTT (Digital Terrestrial TV) Lab Specific Absorption Rate (SAR) Lab • Meaning & Explanation of SAR • SAR Levels according to Standards • Hands on Practical for SAR testing • How to Interpret and Evaluating a SAR report/results.	*15 slides/pages*

	• NCA • NCA	
12:00 – 13:30	*Lunch*	
13:30 – 15:00	*Session 7:* Radio Frequency and Signaling Lab • Overview of RAN Technology • WLAN & Bluetooth • Basis of Cellular Networks • Hands on Practical for RF testing Conducting testing, Radiation testing, preparation and interpreting test results	*25 slides/pages*
15:00 – 15:15	*Break*	

15:15 – 17:30	*Session 8:* Electromagnetic Field Strength (EMF) Lab
	Introduction to EMF
	• EMF measurement levels according to standards
	• Hands on Practical for EMF measurement
	• EMF Visual and simulations
	• Analysis and evaluation of EMF Report
	
	    • SAR Lab
	    • RF & Signalling Lab
	    • EMF Lab
	    • DTT Receiver Lab
		20 slides/pages

	4th September 2019	

9:00-10:30	*Session 9 :* DTT Lab
	• Introduction to Ghana DTT standards and Network
	• Hands on Practical for DTT testing
	• Analysis and evaluation of DTT report
	    • NCA
	    • NCA	

10: 30 - 10:45	*Break*	
10:45-12:45	*Session 8: Introduction to Practical Work (Labs)* • Specific Absorption Rate (SAR) lab • Radio Frequency and Signalling (RF & Signalling) Lab	

	• Electromagnetic Field Strength (EMF) Lab • Digital Terrestrial Television (DTT) Receiver Lab	
12:45 – 14:00	*Lunch*	
14:00-16:00	*Session 9: Presentation of SAR Project and Practical Work : Lab testing Specific Absorption Rate (SAR) Lab* • *NCA*	
5th September 2019		
9:00-10:30	*Session 10 : Presentation of Radio Frequency Project and Signalling including Practical Work : Lab testing on RF(Ctd)* • *NCA* • *NCA*	
10: 30 - 10:45	*Break*	
10:45 - 12:15	*Session 11: Presentation of Electromagnetic Fied Strength project including Practical Work : Lab testing on Radio Frequency and Signalling* • *NCA*	
12:15 – 14:00	*Lunch*	
14:00 – 15:30	*Session 12: Presentation on Digital Terrestrial Television Receiver(DTT) project including Practical work: Lab testing on Digital Telestrial Television Receiver (DTT) testing* • *NCA*	
15:30 – 17:00	*Session 13: The ITU activities on C&I with focus on Pillars 3 & 4 of the C&I Programme* *This session will focus on ITU activities on C&I testing. It will highlight relevant resolutions from the ITU sectors, including the PP resolution. It will introduce the ITU C&I Programme and specifically focus on Pillars 3 and 4, deliverables, including the outcomes of WTDC-17, WTSA-16, ITU-D and ITU-T SGs and Questions relating to*	

	C&I • *ITU*	
	6th September 2019	
9: 00 - 12:00	***Session 14: Brainstorming, Q&A and Evaluation Closure*** **Member States/NCA/ITU**	
12:00- 13:00	*Lunch*	
13:00- 17:00	***Tour of Accra***	