



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

2 nd September 2019		
9h: 00 - 10:00	<p><i>Welcoming, Registration and Opening</i> <i>Welcoming speech ITU</i> <i>Welcoming speech NCA</i></p> <ul style="list-style-type: none"> • NCA Director General • ITU Representative 	
10h: 00 - 10:30	<i>Break</i>	
10:30 - 12:00	<p><i>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</i></p> <p><i>ITU C&I Programme: Study Group 2 Question 4 and C&I Africa Group Activities</i></p> <ul style="list-style-type: none"> ➤ 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 <ul style="list-style-type: none"> • Chali Tumelo (ITU) • Vladimir Daigele 	
12:00– 13:30	<i>Lunch</i>	

<p>13:30 – 14:30</p>	<p><i>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</i></p> <p>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</p> <ul style="list-style-type: none"> • 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 <p>➤ ITU</p> <p>➤ NCA</p>	<p><i>20 slides/pages</i></p>
<p>14:30 – 15:30</p>	<p><i>Break</i></p>	
<p>15:30 – 16:30</p>	<p><i>Session 3: Conformity Assessment; Designating Authorities and Conformity Assessment Bodies/ Proposed roadmap to establish a procedure for type approval testing</i></p> <ul style="list-style-type: none"> • NCA • NCA 	<p><i>15 slides/pages</i></p>
<p>16:30 – 17:30</p>	<p><i>Session 4: Knowledge sharing on Country experiences in C&I (Type Approval) Procedures Presentation by Delegates from other countries</i></p>	<p><i>Not more than 5 slides per country (no translation is required)</i></p>
<p>3rd September 2019</p>		
<p>9: 00 - 10:30</p>	<p><i>Session 5: Technical and Regulatory framework type approval Administrative Procedures of type approval</i></p> <p>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</p>	<p><i>20 slides/pages</i></p>

	<p>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.</p> <p>a. The technical requirements</p> <ul style="list-style-type: none"> • Health and Safety • Electromagnetic Compatibility (EMC) • Radio Frequency (RF)/Interference • Electricals/LVD • Quality of service • Network compatibility/Interoperability <p>b. Legal & Regulatory requirements</p> <ul style="list-style-type: none"> • Legal Framework • Type approval & Management system • Proxy & Administrative approvals • Market surveillance activities <ul style="list-style-type: none"> • NCA • NCA <p>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</p>	
<p>10:30 - 10:45</p>	<p><i>Break</i></p>	
<p>10:45 - 12:00</p>	<p><i>Session 6: The NCA Type Approval Labs Administrative Procedures of type approval</i></p> <p>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:</p> <p>Specific Absorption Rate (SAR) Lab Radio Frequency and Signalling Lab Electromagnetic Field Strength (EMF) Lab DTT (Digital Terrestrial TV) Lab</p> <p>Specific Absorption Rate (SAR) Lab</p> <ul style="list-style-type: none"> • Meaning & Explanation of SAR • SAR Levels according to Standards • Hands on Practical for SAR testing • How to Interpret and Evaluating a SAR report/results. 	<p><i>15 slides/pages</i></p>

	<ul style="list-style-type: none"> • NCA • NCA 	
12:00 – 13:30	<i>Lunch</i>	
13:30 – 15:00	Session 7: Radio Frequency and Signaling Lab <ul style="list-style-type: none"> • 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 	<i>25 slides/pages</i>
15:00 – 15:15	<i>Break</i>	
15:15 – 17:30	Session 8: Electromagnetic Field Strength (EMF) Lab Introduction to EMF <ul style="list-style-type: none"> • EMF measurement levels according to standards • Hands on Practical for EMF measurement • EMF Visual and simulations • Analysis and evaluation of EMF Report <ul style="list-style-type: none"> • SAR Lab • RF & Signalling Lab • EMF Lab • DTT Receiver Lab 	<i>20 slides/pages</i>
4th September 2019		
9:00-10:30	Session 9 : DTT Lab <ul style="list-style-type: none"> • Introduction to Ghana DTT standards and Network • Hands on Practical for DTT testing • Analysis and evaluation of DTT report <ul style="list-style-type: none"> • NCA • NCA 	
10:30 - 10:45	<i>Break</i>	
10:45-12:45	Session 8: Introduction to Practical Work (Labs) <ul style="list-style-type: none"> • Specific Absorption Rate (SAR) lab • Radio Frequency and Signalling (RF & Signalling) Lab 	

	<ul style="list-style-type: none"> • Electromagnetic Field Strength (EMF) Lab • Digital Terrestrial Television (DTT) Receiver Lab 	
12:45 – 14:00	Lunch	
14:00-16:00	<p>Session 9: Presentation of SAR Project and Practical Work : Lab testing Specific Absorption Rate (SAR) Lab</p> <ul style="list-style-type: none"> • NCA 	
5th September 2019		
9:00-10:30	<p>Session 10 : Presentation of Radio Frequency Project and Signalling including Practical Work : Lab testing on RF(Ctd)</p> <ul style="list-style-type: none"> • NCA • NCA 	
10: 30 - 10:45	Break	
10:45 - 12:15	<p>Session 11: Presentation of Electromagnetic Fied Strength project including Practical Work : Lab testing on Radio Frequency and Signalling</p> <ul style="list-style-type: none"> • NCA 	
12:15 – 14:00	Lunch	
14:00 – 15:30	<p>Session 12: Presentation on Digital Terrestrial Television Receiver(DTT) project including Practical work: Lab testing on Digital Telestrial Television Receiver (DTT) testing</p> <ul style="list-style-type: none"> • NCA 	
15:30 – 17:00	<p>Session 13: The ITU activities on C&I with focus on Pillars 3 & 4 of the C&I Programme</p> <p><i>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</i></p>	

	C&I <ul style="list-style-type: none"> • 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	