

2020 Regional Development Forum for Africa (RDF-AFR)

Digital transformation to accelerate achievement of the SDGs

— Digital development, partnerships and funding

6-7 October 2020, 12:00 – 15:00 CAT (Virtual meeting) with preparatory break-out sessions on 5 October 2020 (12:00 – 13:30 CAT time)

CONTRIBUTION BY NATIONAL COMMUNICATIONS AUTHORITY, GHANA

TITLE: Accelerating Digital Television Transition through receiver conformance regime enforcement

EXPECTED DURATION OF PRESENTATION: [5 minutes]

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- ❖ Africa Regional Initiatives: [Select the Regional Initiative(s) relevant for your contribution]
- [Yes/No] AFR Regional initiative 1 Building digital economies and fostering innovation in Africa
- [Yes/No] AFR Regional initiative 2 Promotion of emerging broadband technologies
- [Yes/No] **AFR Regional initiative 3** Building trust and security in the use of telecommunications/information and communication technology
- [Yes/No] AFR Regional initiative 4 Strengthening human and institutional capacity building
- [Yes/No] AFR Regional initiative 5 Management and monitoring of the radio-frequency spectrum and transition to digital broadcasting
- Related ITU development thematic: [Select the thematic area(s) relevant for your contribution]
- [Yes/No] Networks and digital infrastructure
- [Yes/No] Cybersecurity
- [Yes/No] **Emergency telecommunications**
- [Yes/No] **Environment**
- [Yes/No] Digital policy and regulation
- [Yes/No] Capacity development
- [Yes/No] Digital services and applications
- [Yes/No] Digital inclusion
- [Yes/No] Digital innovation ecosystems
- [Yes/No] Statistics and data for evidence-based decision making
- Year(s) of implementation: [Select the year(s) for which your action/project/initiative is relevant]





[<mark>Yes</mark> /No] 2018 [Yes	<mark>es/</mark> No] 2019	[<mark>Yes</mark> /No] 2020	[<mark>Yes</mark> /No] 2021	[<mark>Yes</mark> /No] Others
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COVID-19 response related initiative: [Please indicate if your action/project/initiative is relevant for COVID-19 response]

[Yes/No] COVID-19 response related initiative

Background [max 300 words]

The availability of high performing products that comply with national/international standards accelerates the widespread deployment of ICT infrastructure, technologies and associated services. It grants people unrestricted access to the Information Society regardless of location or choice of device, which ultimately brings us closer to the Millennium Development Goals. Widespread conformance and interoperability of telecommunication/ICT equipment and systems lead to increased market opportunities, greater reliability and streamlined global integration and trade.

The Republic of Ghana began a transition of television broadcasting services in the frequency bands 174–230 MHz and 470–862 MHz from analogue to digital technology in 2010. To ensure that all digital terrestrial television (DTT) receivers sold on the Ghanaian market conform to acceptable receiver standards, the National Communications Authority (Authority) published standards for DTT receivers (set-top boxes, integrated digital television sets, etc) in January 2013. That same year, the Authority collaborated with the ECOWAS Secretariat and other countries in ECOWAS to adopt the Ghana standard as a common ECOWAS standard.

To enforce these minimum receiver standards, a conformance regime was instituted in 2013 to require all DTT receivers such as set top boxes (STBs) and integrated digital TV sets sold in Ghana to pass a conformance test to be certified to use a receiver certification logo/sticker (the Ghana thumb logos). The logos/stickers were introduced to confirm to consumers that the receiver is Ghana DTT compliant. The Authority worked with leading global experts to formulate policies and procedures for the conformance regime to help digital terrestrial television (DTT) receiver manufacturers, assembly companies, equipment dealerships, test labs, law enforcement agencies, and the general public to ensure that all digital terrestrial television (DTT) receivers sold on the Ghana market conform to acceptable receiver standards. It also detailed the requirements and the procedures necessary to make this possible.

Proposal

At the inception of the conformance regime, the Authority did not have the capability and tools to carry out the full complement of conformance testing, and so it shortlisted and accredited eligible test labs in Europe, the Middle East, Africa and Asia to provide standard tests on all models of settop boxes and integrated digital television sets, to verify that these DTT receivers conform to the Minimum Requirements. To date, 21 labs have been accredited, and a total of 518 free-to-air DTT receiver models from all the global brands have been certified.

To enforce compliance to the conformance regime, the Authority initiated market surveillance to monitor adoption by equipment dealers, the prevalence of logo-certified receivers on the market as well as identify fake and illegally imported receivers. The Authority also established a DTT testing laboratory in 2014 to conduct some verification testing on receivers before they are logo-certified. Verification testing also enabled the Authority to identify importers who faked testing





reports as well as those who imported cheaper receivers after they had submitted compliant receivers for testing at the accredited laboratories.

The minimum specifications standard introduced in 2013 as well as its attendant conformance was only applicable to DTT free-to-air receivers. However, the satellite television industry in Ghana experienced tremendous growth, and this led to an influx of DTH receivers. Additionally, the Government employed DTH satellite services to broadcast television services to areas unserved by digital terrestrial broadcasts. Due to these conditions, receivers which have integrated digital terrestrial and satellite tuners (commonly referred to as combo receivers) became popular on the Ghanaian market. To address these developments, the Authority worked with the relevant stakeholders to review the minimum specifications standard in 2019 to include additional features as well as introduce minimum requirements for Direct-To-Home satellite Receivers for Free to Air Television Reception in Ghana. The Government of Ghana also revised its policy on the transition to digital television to introduce a Digital Access Fee (DAF) to replace television license, and mandated that Conditional Access and middleware technology in television receivers should be employed for the collection of DAF. Additional features that support the future provision of value added services such as Audience Measurement, Internet Protocol Hybrid functionality i.e. Over the Top Video on Demand services and an Electronic Program Guide (EPG) have also been added to the standard.

The Authority has begun the process of modifying the existing conformance regime to accommodate this new standard, as well as upgrade the DTT lab.

Proposal

Based on the above narratives, the National Communications Authority (NCA) through the Administration of Ghana proposes the following:

- Based on the success of the Ghana conformance regime, it is proposed that other African countries should consider adopting conformance regimes for TV receivers to protect their consumers,
- 2. It is proposed that the minimum specification document and conformance regime of Ghana should be considered for adaption by other countries. Ghana proposes to provide knowledge support where it is required.
- 3. 2020 Regional Development Forum for Africa (RDF-AFR) should adopt the NCA DTT lab as a regional or sub-regional testing hub/centre. This will contribute to the realization of the Regional initiatives 4 and 5

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