Research report

Business

Digital transmission meeting report Conference on frequency coordination and digital television transmission in African countries was held on 13th February 2013 in Cairo Egypt, at an invitation by the Egyptian Government, the ITU (International Telecommunication Union) and the ATU (African Telecommunication Union). The meeting followed the African Telecommunication Union policy spectrum and Digital migration summit that took place in Bamako, Mali from 1st to 2nd December 2012. The meeting aimed at promoting the exchange and cooperation of digital experience in television transmission in the Eastern and Western African countries and on issues relating to transmission spectrum and digital dividend in television transmission. The event also aimed at coordinating regional roadmaps and frequency coordination, with a view of harmonizing and facilitating the use of digital spectrum. This meeting was important for political, social and economical aspects of all African countries that attended the meeting. This paper gives the meeting’s report on the frequency coordination and digital terrestrial transmission held in Cairo, Egypt. The digital and frequency coordination meeting emphasized frequency evaluation plan (GE06 Plan), implemented in 2006 by the Regional Radio-communication for television broadcasting. It also postulated television broadcasting in170-250 MHz and 475-860 MHz. bands and consequential actions while bearing in mind short and long term spectrum needs for mobile and broadcasting industries at the same time ensuring efficient and equitable access to the spectrum, proper timeline and activities for the modification and review of the GE06 plan. The meeting was open to all broadcast media stakeholders (Governments, broadcasters, regulators, mobile operators and the general public). Twenty African countries were represented by 220 delegates. The meeting The

meeting’s opening ceremony was lead by Egypt’s Minister of Communication, Government spokesman and the Minister of technology. Speeches were delivered in turn by the director of International Telecommunication Union and General Secretary of the African Telecommunication Union. The speeches emphasized on the need for African countries reconsideration, re-planning of the transmission spectrum and management of the digital transmission. In his speech Communication Minister thanked the participants and appreciated the meeting’s organizers saying that the meeting came at a time when African countries were committed to digital migration and transition. The minister then officially opened the meeting and wished the delegates a successful conference. Discussions touching on various broadcasting issues were discussed in the meeting; however, a significant in depth discussion went to consistency and appropriate levels of monitoring operators making mixing decisions (Pang 86). It was concluded that elevated level mixing in comparison to average viewer’s levels resulted in high dynamic range mix resulting in unintelligible effects or being uncomfortably loud. It was recommended that monitoring levels be placed at 78dBSPL per channel and viewer listening levels found this to be valid and translated well to the viewers. Meeting’s future steps To ensure efficient and equitable access to the spectrum, the meeting emphasized on feasibility and establishment of the minimum number of multiplexes having a national wide coverage for all countries in 475-860 MHz bands (21 to 48 UHF channels). Using a fixed rooftop reception facilitated the use accessible equipments, provision (in the case of MPEG-4 and DVB-T2) of over 80 standard television programs and a maximum of 20 high definition programs. On the other hand, additional requirements could be considered

and satisfied through further technical discussions. By the end of the meeting, an initial assessment by International Telecommunication Union and Radio-Communication Bureau was conducted to establish available channels in various African geographic zones and interference levels associated to these channels by additional administration to those instituted by the GE06 Plan. The delegates in the meeting presented additional possible frequency assignments to fill the minimum four multiplexes, having a complete nation wide coverage in the agreed upon channels of 21 to 48 UHF channels. Further to frequency allotment as recorded in the GE06 Plan and due to limited time, the additional frequency assignments had to be made limited to the border areas. Compatibility analysis conducted by the International Telecommunication Union on the basis of the frequency notices showed that there was need for additional assignments. Further refinements to the initial input were inevitable so as to resolve cases associated to frequency interference. At the end of the meeting, the following conclusions and recommendations were adopted: the GE06 Plan modification so that every country in the eastern and western Africa could attain the four coverage capability with minimum interference, it was also recommended that African states should further conduct multilateral discussions so as to refine the meetings findings and recommendations. Concerning digital switchover and digital dividend allocation, the following conclusions were made: to achieve economies of scale and African digital television development, cost of obtaining required gadgets like television boxes should be regulated by the state, such considerations were to be given urgent priority by the African states so as to harmonize the digital transmission and definition standards. It was also recommended that the African states avail

all structural, human and financial resources to ensure that the meetings recommendations are implemented. Works cited Pang, Sauming. Successful service design for telecommunications a comprehensive guide to design and implementation. Chichester, U. K.: Wiley, 2009. Print.