



**African Telecommunications Union (ATU)**  
**Union Africaine des Télécommunications (UAT)**

General Secretariat / *Secrétariat Général* : Nairobi

**Recommendations from the**  
**2<sup>nd</sup> Digital Migration and Spectrum Policy Summit for Africa**  
**September 27-28, 2012 – Accra, Ghana**

**RECOMMENDATIONS**

1. Adopt the Recommendations from the Bamako and Kampala frequency coordination workshops (attached as Annex A).
2. Move to formalize the hitherto informal Frequency Coordination and to modify the GE06 Plan in accordance with the Agreement.
3. With regards to the DTT Standards:
  - The Summit recommends to African Administrations the adoption of DVB-T2 with MPEG-2 or MPEG-4 compression;
  - The Summit recommends to African Administrations the adoption of the dual HDTV/SD format for the set-top boxes;
  - The Summit notes that some African administrations have already implemented DVB-T and are moving to DVB-T2.

The Summit also notes that the GE06 Agreement authorizes the use of any Standard provided that the interference mask meets the characteristics of the DVB-T assignments/allotments in the GE06 Plan.

4. In considering the appropriate channeling plans for mobile services, take full account of all the options including the beneficial attributes that can be attained from economies of scale from lower cost devices, interoperability and roaming.
5. Any channeling plan adopted for the 700 and 800 MHz (Digital Dividend) bands in Africa should address national/regional developmental objectives, while striving to achieve harmonization, to the extent possible, with other Regions (APT and CEPT). Such harmonization will enable economies of scale.
6. The existence of licensed operations (of IMT and other systems) in the Digital Dividend bands in many African countries was noted. Careful consideration is needed to determine how best to handle these assignments in the future.

7. A mechanism/process for carrying out detailed interrogation of channeling options (at a continental level), and ensuring that views from such process are reflected in ITU-R (WP-5D and JTG 4-5-6-7) deliberations, be initiated urgently. This could be achieved by convening a two-day technical workshop for Spectrum Managers from all African countries before the next meetings of WP-5D.
8. Government intervention is crucial to the success of the transition from analogue to digital broadcasting. Therefore, African governments should provide funding and support for:
  - a) Rollout of infrastructure for the public signal distributor
  - b) Availability of affordable set top boxes through a variety of intervention methods such as:
    - i. purchase/importation
    - ii. manufacturing
    - iii. market distribution
    - iv. waiver of duty and import tax/zero rate taxes
    - v. incentive schemes for the vulnerable citizens
  - c) Consumer education and awareness since comprehensive consumer information and education is essential to create awareness and adoption of DTV (broadcasters, distributors, manufacturers, and retailers of consumer electronic products should be involved).
  - d) African Governments should put in place appropriate policy, legislative and regulatory frameworks to facilitate the transition from analogue to digital broadcasting.
  - e) African Governments should consider partnership with the private sector (PPP) in order to facilitate the transition from analogue to digital broadcasting.
9. Meeting noted Broadcasting and ICT technologies, as well as views presented by Industry Participants, and acknowledged the growing interest shown by Industry in developments in the African region.
10. These interactions are encouraged in the context of ATU's efforts to foster strong Public Private Partnerships in Africa.
11. The participants at the Summit endorsed that the ATU and ITU organize the 3<sup>rd</sup> Digital Migration and Spectrum Policy Summit in the 3<sup>rd</sup> or 4<sup>th</sup> quarter of 2013 to:
  - review progress on the implementation of the digital dividend and the transition to digital terrestrial television broadcasting,
  - review final reports on the results of frequency coordination workshops and consequential modifications of the GE06 Plan, and
  - decide the way forward for the preparation of WRC-15 by the African Administrations.
12. In this regard, it was recommended that the ATU and ITU organize, at the earliest opportunity, a final frequency coordination workshop for all African countries to enable finalization of modifications of the GE06 Plan.

## ANNEX A

### Recommendations from Bamako and Kampala Workshops

The following conclusions and recommendations, which were also arrived at during the Bamako meeting in March, have been adopted:

- a) Modifications of the GE-06 are feasible by which each country in the African region may be provided with the capability of four nationwide coverages with acceptable interference levels.
- b) It is recommended that further bilateral and multilateral discussions be conducted by African States to further refine the results obtained and, where necessary consider further additions or modifications to the GE-06 in order to complete nationwide coverages and meet any additional requirements from the broadcasting service in the band 470-694 MHz.

In considering the establishment of proper timelines and activities for the review and modification of GE06 Plan using the procedure of the GE06 Agreement, and more generally the coordination of sub regional roadmaps to digital switchover and allocation of the digital dividend, the following conclusions were reached:

- c) It is recommended that, in order to achieve economies of scale and development of an African-wide market for digital television set-top boxes, hence minimum cost for this equipment, consideration be urgently given by African States to the possibility of harmonizing the digital TV transmission and definition standard, at subregional or regional level.
- d) It is recommended, in order to facilitate the coordination of the roadmaps of the transition to digital TV throughout the continent, that African States complete, as soon as possible, the questionnaire issued by the ITU-Din response to Question 11-3/2 on this issue (<http://www.itu.int/ITU-D/CDS/gq/generic/questionnaire.asp?ProjectID=201>).
- e) It is recommended that the following timeline be adopted in order to meet the deadline specified by the GE-06 for the cease of analogue transmissions. The dates indicated are the latest possible dates to meet this deadline and it is preferable that they be anticipated, where possible:
  - **September 2012:** ATU Summit in Abuja on the transition to digital TV and harmonization of the digital dividend.
  - **September 2012:** end of informal frequency coordination discussions and start of formal activities for the modifications of GE-06 Plan.
  - **December 2012:** adoption of a common digital TV standard at sub-regional or regional level in Africa.
  - **June 2013:** Finalization of the establishment of national legislative and regulatory frameworks for the transition to digital TV and the allocation of the digital dividend.
  - **June 2013:** End of frequency planning activities (national and international) for the deployment of digital TV and analog switchoff
  - **September 2013:** Start of deployment of digital TV
  - **June 2014 :** start of analog switchoff in the UHF band
  - **17 June 2015 :** end of analog switchoff in the UHF band

- f) It is further recommended that African States make available all necessary human, structural and financial resources to ensure that the above dates are met.

**In addition to the above conclusions and recommendations, which had also been adopted by the Bamako meeting, the Kampala meeting agreed on the following additional conclusions and recommendations to the next ATU Summit:**

- g) Concerning the adoption of an African regional standard for digital terrestrial television on compression and transmission, it was noted that all African countries which have already made a choice on these standards have selected MPEG4 and DVB-T2, and that SADC has recommended their adoption to its members<sup>1</sup>. These standards appear to provide the most efficient spectrum usage and the corresponding set-top boxes are now available on the market. **The next ATU Summit is therefore invited to consider the adoption of the MPEG4 and DVB-T2 standards at regional African level.**
- h) Concerning the definition format, **it is also recommended that the ATU summit consider the adoption of the dual HDTV/SD format at African regional level for the set-top boxes**, since this is becoming mainstream on the market, that it is available with a small additional cost and that the adoption of a SD-only format for the set-top boxes would make future evolution towards HDTV difficult.
- i) Concerning the on-going discussions between African administrations to coordinate the frequencies of the GE-06 plan in order to ensure a minimum resource of four nationwide coverages in the band 470-694 MHz, it is recommended that those administrations currently having more than this resource be encouraged to make the utmost effort to release part of it to enable neighbouring countries to reach up to that level of resource. This is important to ensure that every country is able to successfully transition to digital television, hence release the digital dividend for its neighbours.
- j) Concerning the transition to digital television, it was noted that it entailed the requirement to separate the activities of content providers and signal distributors, which were historically carried out by the same entities when one signal meant one TV program only. Whilst there may be a need to promote competition by allowing several signal distributors to deploy broadcasting networks, **it is recommended that this should be done by enforcing sharing of transmit sites**, in order to avoid:
- multiplication of transmit sites and resulting need for final users to buy several antennas,
  - adjacent channel interference, which would result into the impossibility to use certain of the resources or the GE06 plan,
  - additional difficulties related to the protection of the public against electromagnetic waves.
- k) Concerning the information to consumers on set-top boxes, **it is recommended that Member States implement labelling of equipment which are compliant with the standards adopted** to ensure that consumers are not misled into purchasing non compliant equipment.
- l) Concerning the timing of the licensing of mobile operators in the digital dividend bands (700 and/or 800 MHz), **it is recommended that ATU Member States do not award the**

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<sup>1</sup>It was also noted that these standards have also been adopted in United Kingdom, Russian Federation, Turkey, India, Indonesia and a growing number of countries in Europe.

**corresponding licenses before sufficient progress has been made on the following processes:**

- The situation of incumbent systems in these bands has been clarified and refarming decisions taken and accepted, taking into account worldwide harmonization;
- Worldwide harmonization for the IMT band plans at 700, 800 and 900 MHz has been stabilized, to ensure that the benefits of economies of scale, roaming and interoperability will be available and the incumbents in these bands are given a fair opportunity to continue business;
- The corresponding market of handsets has reached maturity in other regions, in order to obtain the best prices for African citizens.

This would also permit maximizing the value of spectrum in the cases where auctions are considered, whilst enabling start of the mobile broadband service by the date of end-2015 decided by WRC-12 for entry into force of the mobile allocation in the 700 MHz band.