



African Spectrum Working Group  
**(AfriSWoG)**

Annex 10  
13-November-2013  
Compilation

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A compilation of all the views submitted as of 13-November-2013

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## Agenda Item 1.2

<p><i>Part A: Description</i></p> <p>to examine the results of ITU-R studies, in accordance with Resolution <b>232 (WRC-12)</b>, on the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and take the appropriate measures</p>
<p><i>Part B: Key Elements – the notables</i></p> <p><b>As discussed during the first AfriSWoG meeting:</b></p> <ol style="list-style-type: none"><li>1-Taking effect of the allocation after WRC-15</li><li>2-Refinement of the lower band edge around 694MHz which also refers to band segmentation between DTT and IMT</li><li>3-Protection of Channel 48 of UHF DTT</li><li>4-Channelling plan adapted to the 694-790 MHz band</li><li>5-Band usage technical parameters in particular the OOBE</li></ol>
<p><i>Part C: Current Status of Band</i></p> <p><b>Zimbabwe view (as reported in Dakar report of March 2013):</b> [...] Africa pushed for an allocation in the 694-790 MHz band [...] the need to bridge the digital divide between urban and rural as [being a] chief [reason] among them;</p>
<p><i>Part D: Options and Associated Implications</i></p> <p><b>Zimbabwe view (as reported in Dakar report of March 2013):</b> [...] envisaged outcomes of the allocation from the view point of DTT four multiplexers to deliver up to 110 Standard Definition programme channels with ample capacity to deliver HDTV - if so required, provision for free-to-air and Pay-TV for public and commercial broadcasting respectively;</p> <p>general considerations/principles when developing channeling arrangements [...] global harmonization, spectral use optimization; keeping guard band and duplex to a minimum as some of the main principles</p>
<p><i>Part E: African Common View</i></p>

**ZIMBABWE view:**

- Supports band segmentation with boundary at 694MHz.
- Guard band of appropriate size to come from the band immediately above 694MHz.
- Protection of DTT Channel 48 a key priority for Africa.
- DTT spectrum requirements to be accommodated within the band 470 – 694 MHz
- Supports channeling plan that has a mature and ready-to-implement IMT technology and fosters economies of scale to bring the much needed mobile broadband benefits of the band immediately
- Need for African countries to make strong decisions on deployment timelines for IMT in 694-790MHz band
- Need to push for partial and or full harmonization with APT Plan.

**KENYA; NIGERIA; GABON; SUDAN and CAMEROON view:**

Support the edge to above 694 MHz so as to protect DTT Channel 48

**SOUTH AFRICA view:**

Need to establish a focus group to work on the roadmap in respect of WP 6A, 5D and JTG 4-5-6-7 activities.

**ECCAS view :**

ECCAS is of the view that the results from the studies being conducted at the ITU on the conditions to use the band 694-862 MHz are to be adopted. [Les résultats sur les conditions d'utilisation de la bande 694-862 MHz qui seront déterminés par les études de l'UIT sont à adopter].

**SADC view:**

- SADC country already supported the use of the 700 MHz band for mobile (IMT) services and will continue to support such use.
- This agenda item will determine the technical and regulatory conditions for use of the 700 MHz band such as lower band limit, OOBE limits, the protection of existing services, etc.
- SADC countries support the retention of the lower band limit (694 MHz) and the alignment of a channel plan based on the Region 3 APT band plan (ITU-R Rec. M.1036 (A5)). As a minimum, the lower duplexer of this plan will be supported.
- SADC supports the adoption of technical and regulatory limits in line with those adopted in Region 3 to maximise economies of scale.

**GSMA view:**

Lower duplexer of 3GPP band 28 was recommended by GSMA and that is 703 – 733 MHz (UL) paired with 758 – 788 MHz (DL), i.e. 2 x 30 MHz. This allows the CEPT band to be used from 791 MHz;

GSMA also noted adoption of stringent OOBE limits may impact on the cost and availability of devices.

**Qualcomm view:**

- Support for conventional duplex arrangement.
- Cautions that the adoption of CEPT OOBE limits, as liaised from JTG4567 to WP 5D would constrain the operation of IMT at 700MHz. OOBE limits derived from studies using appropriate methodologies such as those used in APT studies (e.g. statistical, Monte Carlo etc..) may provide adequate protection without unacceptable constraints on IMT.
- Noting WP 5D's working Document Towards a Preliminary Draft New Report addressing Coexistence between different IMT Systems in the UHF Band (Doc. 5D/TEMP/167-E), support the

retention of both channeling options (2X30MHz/2X45 MHz, A5) which are based on contributions from African countries to WP 5D, this will provide flexibility for countries wishing to implement combinations of A3/A5 in 700/800MHz.

- Out of band emission studies under WRC-15 AI 1.2:

Qualcomm recommends that OOB limits that allow for harmonization with APT/3GPP Band 28 should be maintained at this time. With the current momentum on adoption and/or licensing of APT 700, it can be expected that there will be trials and/or implementation of Band 28 networks, allowing validation of the OOB limits before WRC-15.

- Consideration of Digital Dividend spectrum plan options under AI 1.2

Qualcomm is of the view that options that allow flexibility for countries to attain full or partial harmonization with APT/3GPP Band 28 should be maintained at this time.

[The ATU meeting in March 2013 in Dakar, under the] summary of notable comments, conclusions or agreed way forward [recommended the following]:

There is need for Africa to state clearly that it continues to support the [694-790MHz] allocation as per Resolution 232 and that the lower band edge should be 694 MHz so as to protect Channel 48 of DTT [...]

#### *Part F: Recommendations and Way Forward*

AfriSWoG preliminary recommendations are contained in **Annex 10** to the report of the 1st meeting of the group.