African Telecommunications Union

Digital Migration Status (Update) in Africa

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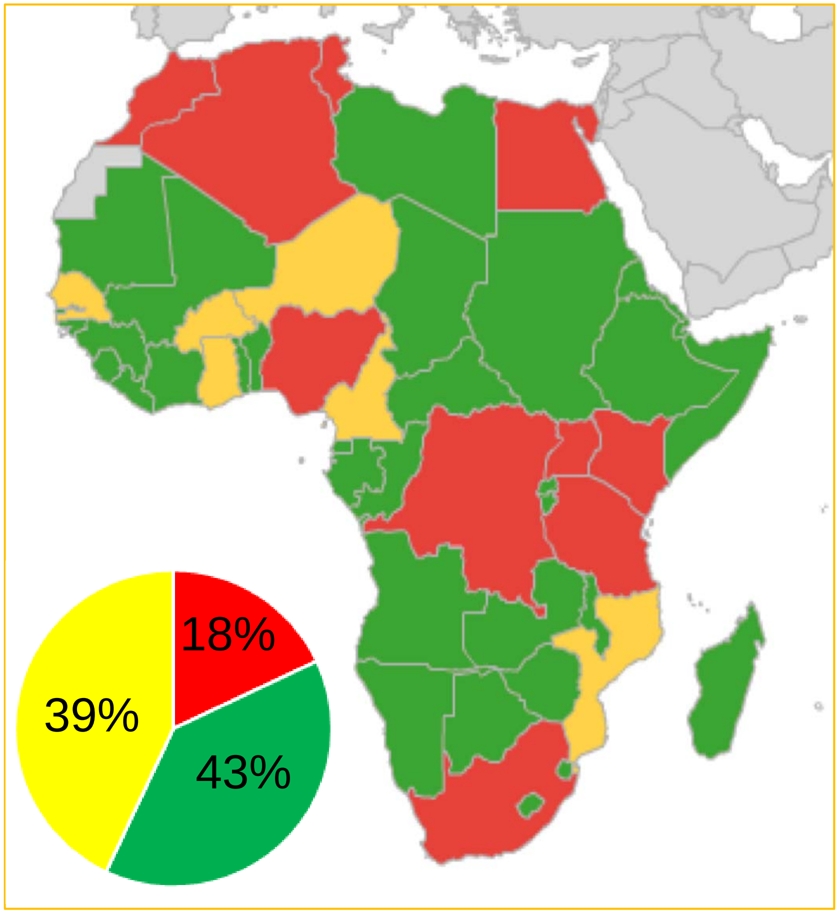
the outline

1. Analogue Terrestrial TV (ATT) before ‘DSO’
2. Back to basics of DSO
3. Status of Analogue Switch Off in UHF
4. Use Authorization of Digital Dividend in particular DD1 (790 – 862MHz)
5. Summary of ATU and other stakeholders activities and key achievements
6. Notables

Analogue Terrestrial TV Channels (ATT) before DSO



Red (18%) => High (10+ channels)

Yellow (39%) => Medium (3 – 9 channels)

Green (43%) => Low (1 – 2 channels)

Notables:

1. DRC and Uganda (with 152 MHz) and belonging to the HIGH group only high in capitals. Same is true for Medium countries except Ghana
2. "Majority of African countries, analogue TV broadcasting didn't use up much spectrum and therefore didn't occupy much in the band 790-862MHz" (Balancing Act 2014). This statement is also true for 694 – 862MHz.

Source: ATU commissioned study on prevalence of ATT by Balancing Act 2014

Back to basics

1. WHY ASO (The two-fold 'imperative')
   - Redeem part of the ATT spectrum in the UHF band (470 – 862MHz) spectrum for mobile (in particular mobile broadband): the so called Digital Dividend
   - Modernize terrestrial TV

2. WHEN ASO
   - 17th June 2015 for **UHF** band
   - 17th June 2020 for **VHF** in 33 countries

Status of Analogue Switch Off in UHF

…as per questionnaire responses of Feb 2018

Completed	… by 2020	Date not defined
1. Algeria	1. Benin (2018)	1. Botswana
2. Cote d'Ivoire (*)	2. Burkina Faso (2018)	2. Cameroun
3. Gambia (The) (*)	3. Burundi (2018)	3. Mali
4. Guinee-Bissau (*)	4. Congo Brazzaville (2018)	4. Mozambique
5. Kenya	5. DRC (2018)	5. Zimbabwe
6. Lesotho	6. Niger (2018)	
7. Liberia	7. Senegal (2018)	
8. Libya	8. Togo (2018)	
9. Malawi	9. Zambia (2018)	
10. Mauritius	10. Cabo Verde (2019)	
11. Rwanda	11. Ghana (2019)	
12. Sudan (*)	12. Guinee (2019)	
13. Swaziland	13. South Africa (2019)	
14. Tanzania	14. South Sudan (2019)	
15. Uganda	15. Madagascar (2020)	
	16. Nigeria (2020)	
	17. Sao Tome and Principe (2020)	

(*) == No ATT ever existed in the UHF band in these countries.

Use Authorization of Digital Dividend in particular DD1 (790 – 862MHz)

…as per questionnaire responses of Feb 2018

Authorized		Not yet
1. Benin	16. Mozambique	1. Algeria
2. Burundi	17. Niger	2. Botswana
3. Cameroun	18. Nigeria	3. Burkina Faso
4. Congo Brazzaville	19. Rwanda	4. Cabo Verde
5. Cote d'Ivoire	20. Senegal	5. Mauritius
6. DRC	21. South Africa	6. Sao Tome and Principe
7. Gambia (The)	22. South Sudan	7. Zambia
8. Ghana	23. Sudan	
9. Guinee	24. Swaziland	
10. Guinee-Bissau	25. Tanzania	
11. Kenya	26. Togo	
12. Lesotho	27. Uganda	
13. Liberia	28. Zimbabwe	
14. Madagascar		
15. Mali		

Note: While DD spectrum utilization is authorized in many countries, actual use is pending licensing in the majority of those countries. Both the supply side (governments/regulators) and demand side (operators) have issues that contributes to 'pending licensing'.

General characterization of countries

The general grouping of the ‘non-compliant’ countries is:

Group	Main current activity
Group 1 (majority)	Active implementation (dual illumination, partial switch-off, etc)
Group 2 (very few)	Putting together logistics (policy, regulation, implementation modalities)
Group 3 (extremely few)	Not much (lack of funds, focus is on national stability and more basic needs)

A lot has been done by stakeholders

Stakeholder (plus their collaborators)	Main Activities	Main achievements
ATU	• 3 DTT Summits; • 3 GE-06 modification workshops; • WRC-15 participation; • Studies	• Adoption of common DTT standard for Africa • Adoption of common migration roadmap • Adoption of the second digital dividend (DD2) • Favorable GE-06 modification to allow for DD2
ITU	• GE-06 planning conferences • WRC-15 • Meetings and workshops	• The GE-06 plan • WRC-15 confirming the “lower edge” at 694MHz
AU	• Summits • Studies	DTT migration guidelines and reports (in particular cost of migration)
CTO	• Meetings • Workshops	Reports and recommendations
RECs	• Meetings • Workshops	Harmonized DTT migration roadmaps (e.g. regional deadlines) and knowledge sharing

Notables

1. In general, very little ATT existed/exists in the digital-dividend portion of UHF: the digital dividend imperative can easily be met because 694 – 862MHz is virtually free (i.e. not used by ATT);
2. The official information is that **15 countries have completed DSO (about 28%);**
3. We can expect additional countries to have undertaken ASO by end this year;
4. Clearly, stakeholders have done enough to assist countries undertake the migration in good time in as much as more should be done;
5. Digital dividend imperative as well as the TV modernization imperative seem to be lacking in the majority of countries hence passive pursuance of ASO in the majority of countries: Funding and legal challenges have been topped the list of visible challenges.
6. In the countries where some appreciable level of digital dividend imperative exists and where ATT exists in the 694 – 862MHz portion, ASO has completed or is actively being pursued.

thank you

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