

# The current situation in Sub-Saharan African countries about the status of the transition



**JJ MASSIMA, Coordinator for  
Africa**

# Transition to digital TV broadcasting

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- Moving from analogue to digital terrestrial television frees up scarce spectrum for other uses, especially mobile.
- All regions are keen to achieve digital switchover, and some countries have already managed to complete the process.
- The deadline of June 2015 set for the UHF band by the ITU Regional Radiocommunication Conference in Geneva in 2006 (RRC-06) for the migration from analogue terrestrial television to digital terrestrial television applies to Africa, the Middle East and Europe, as well as to the Islamic Republic of Iran.

# Transition to digital TV broadcasting

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- In our countries, national Administrations have worked together on a bilateral and multilateral basis to develop spectrum plans for digital terrestrial television.
- 4 Digital Migration summits have been organized by ATU and ITU .
- Workshops devoted to Spectrum management and Harmonization of calculations methods at the borders
- Workshops for notifications and assignments
- **Register to MIFR !!!**



ITU marked the 17 June 2015 digital switchover deadline by holding a [Symposium](#) at its headquarters in Geneva, Switzerland, to highlight the inherent advantages offered by digital terrestrial broadcasting.

This Symposium covered the following topics:

- Objectives of the transition to digital TV– technical and regulatory frameworks;
- The Analog to Digital Switchover – stocktaking worldwide;
- Advanced Technologies for Television;
- Building a sustainable ecosystem for Digital TV.

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# **GE06 broadcasting Plans and the ITU MIFR after 17 June 2015**

# End of the Transition period



Except for the countries listed in footnote 7 of Article 12 of the GE06 Agreement:

## ➤ **GE06 Plan**

- All analogue assignments have been deleted from the Plan
- All Plan remarks with respect to analogue have been removed
- GE06 provisions are not applicable anymore to Analogue assignments.

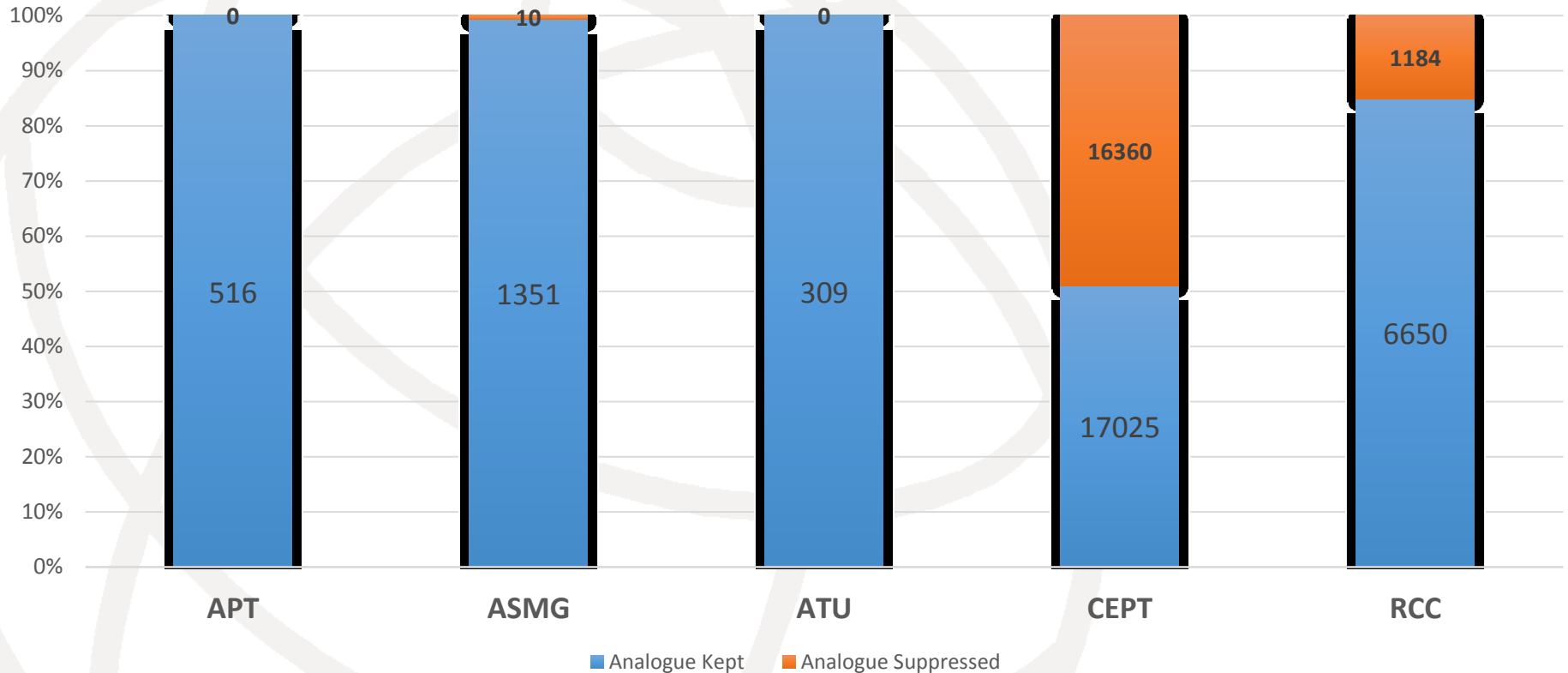
## ➤ **MIFR:**

- Administrations were asked to confirm their decision to delete or keep the analogue assignments in the MIFR, knowing that they will be kept with unfavourable findings to 11.34. i.e., not causing any interference nor claiming protection.

# Analogue at the end of transition per Sub Region



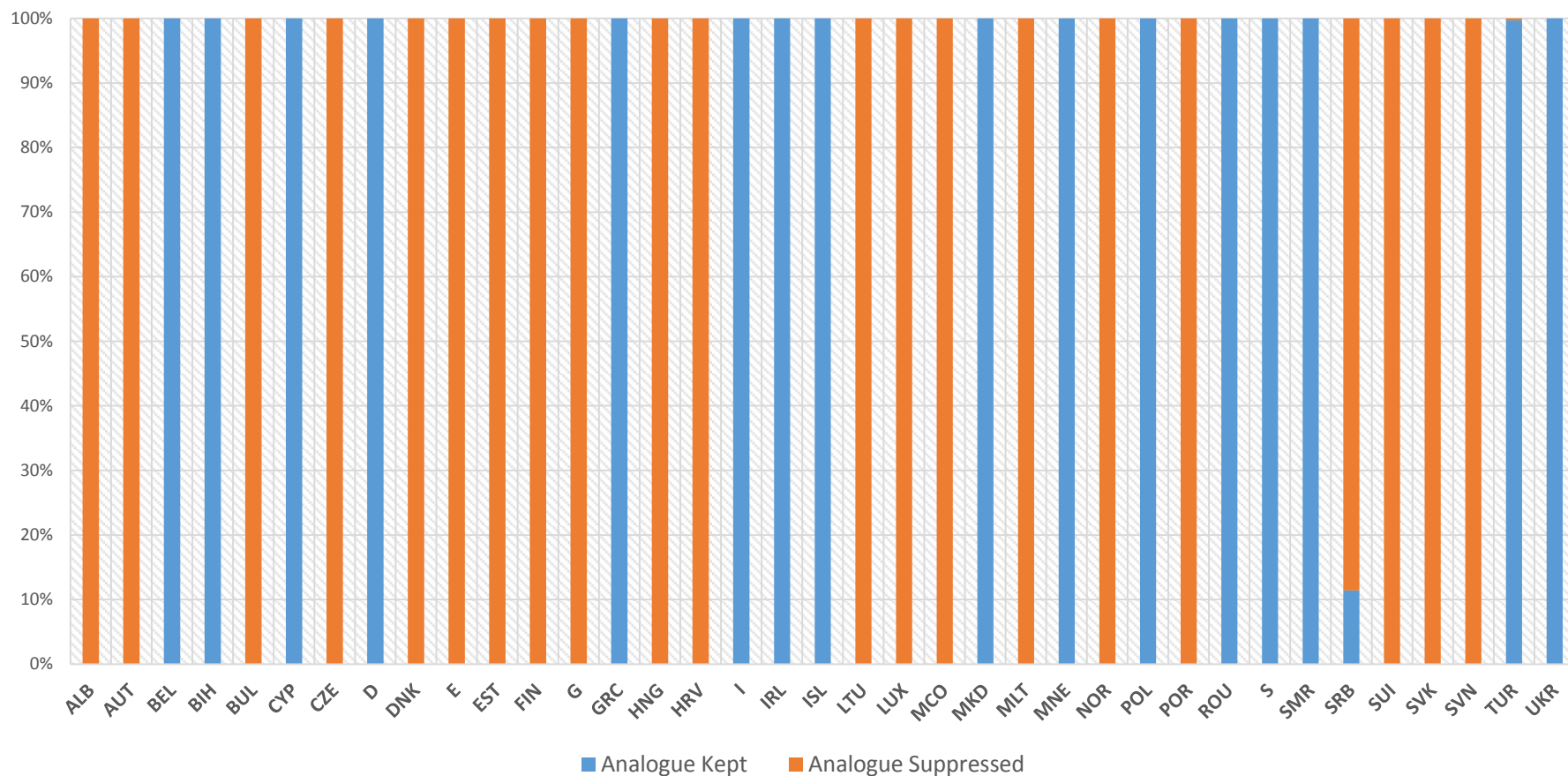
MIFR status on 9 July 2015



# Analogue at the end of transition CEPT countries (%)



## MIFR STATUS ON 9 JULY 2015





# Importance of WRC-15 decisions

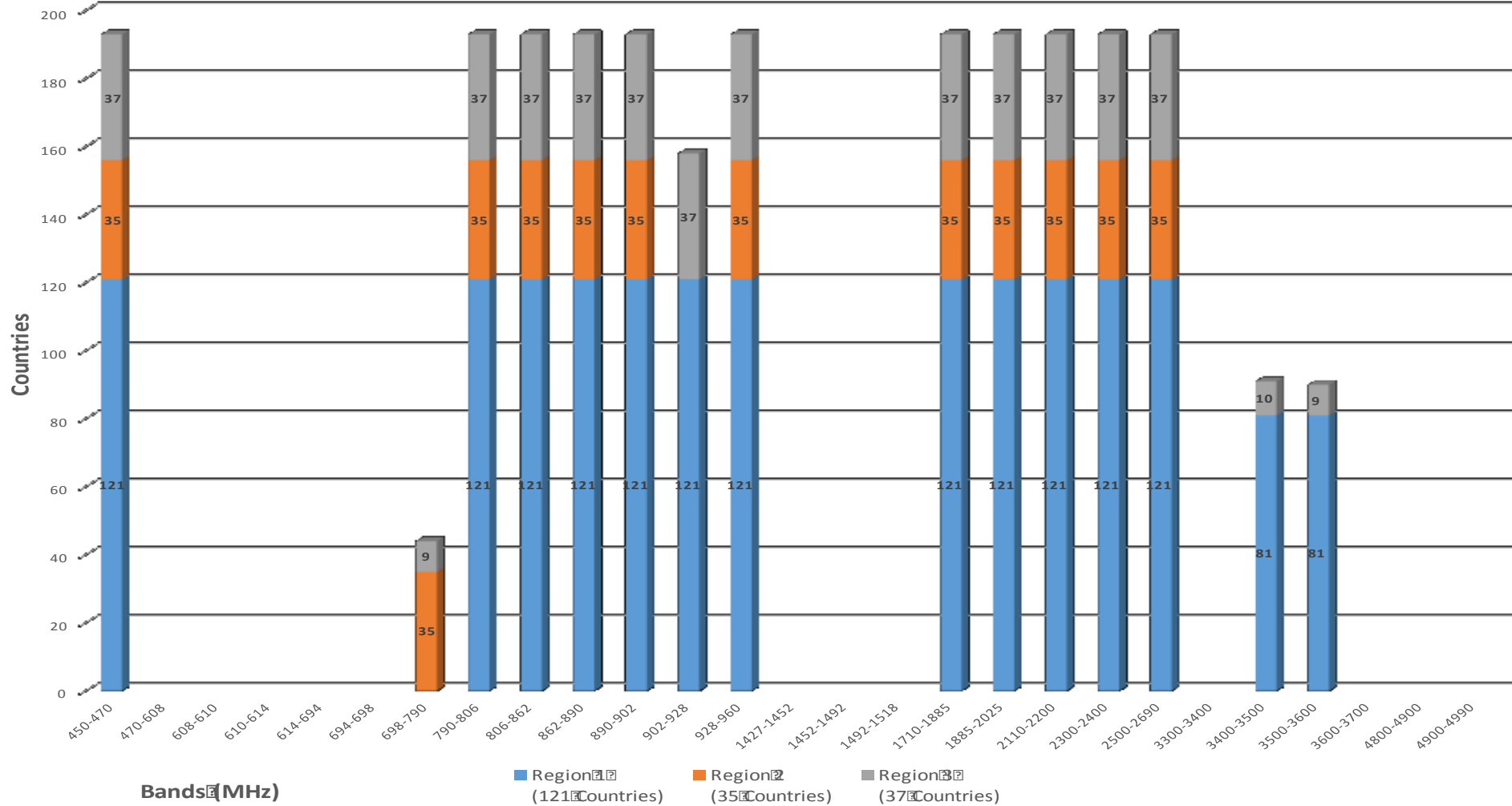
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## Agenda items 1.1 and 1.2

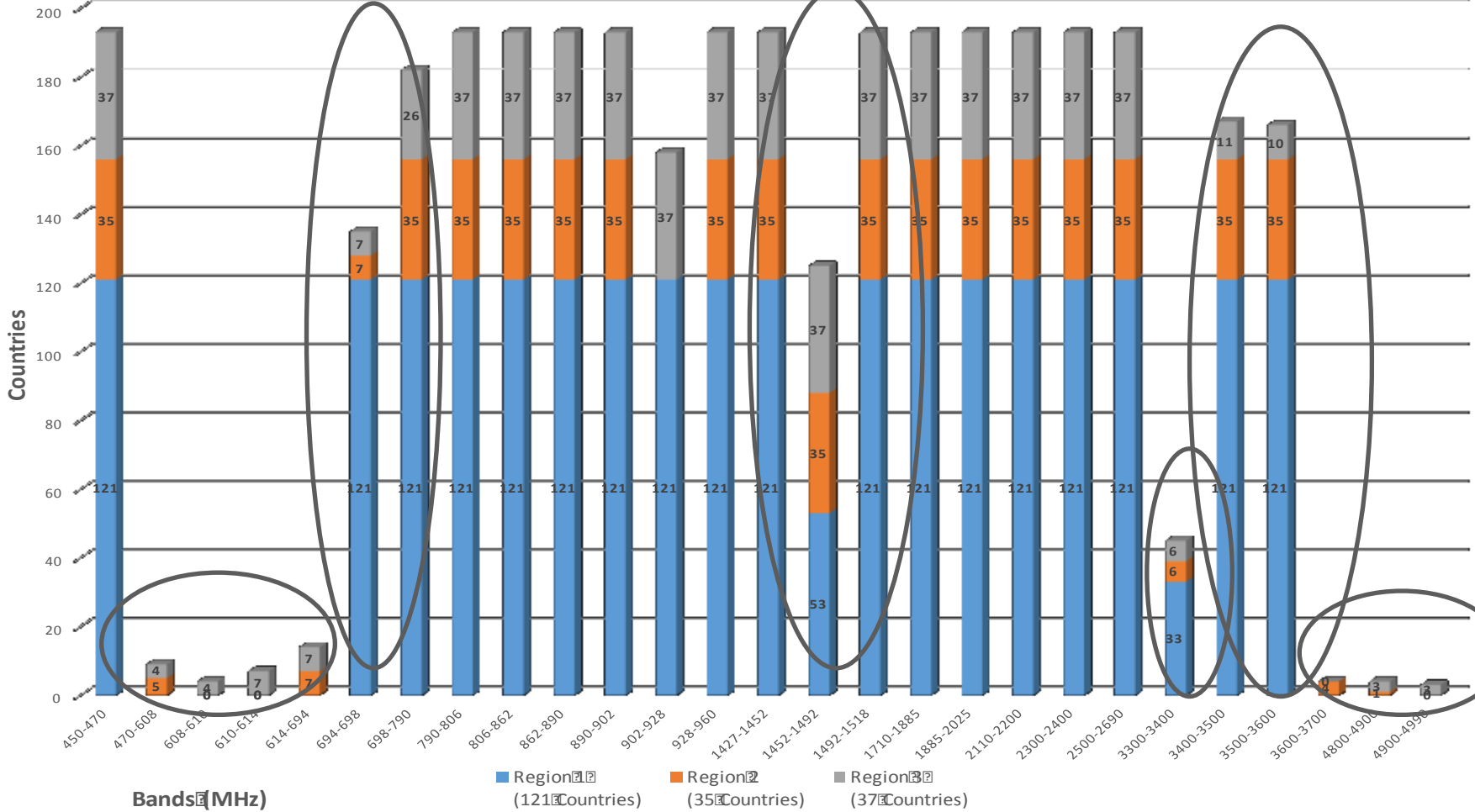
- Satisfy growing IMT broadband spectrum requirements:
  - 60% increase in IMT bands after WRC-15
  - total IMT spectrum of 1886 MHz
- Provide harmonization of IMT bands:
  - 39% increase in globally harmonized spectrum after WRC-15 318 MHz of harmonized bands in more than 80% of countries:
  - Secures future of other services through coordination procedures, technical restrictions, in some cases operation on a non-interference basis

IMT Bands after WRC-07 (Number of Countries Identified)





**IMT Bands after WRC-15 (Number of Countries Identified)**





# Digital Terrestrial Television Broadcasting (DTTB)

DSO database

# Website

- Summary of the basic information from countries
- Relevant events (e.g. workshops, frequency coordination meetings, seminars)
- Relevant publications (e.g. ITU-R and ITU-D documents, roadmaps, workshop presentations)
- Relevant websites (e.g. ITU-R and ITU-D, broadcasting organizations, GE-06)
- Contacts
- Information sources (list of relevant surveys, questionnaires of the ITU-D and ITU-R and other sources)
- Accessible both from BDT and BR web pages

*Circular Letter BDT/IEE/SBD/DM/014 from the BDT Director (23 February 2015)*

- Given the dynamically changing status of the Digital Terrestrial Television (DTT) deployment and in order to enable all administrations to benefit from the latest status and information concerning the Digital migration, **Administrations are invited to make the necessary update to ensure that their actual status and data are correctly reflected on the portal.**

# Website

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<http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx>

# Website features

### Ongoing

Albania, Algeria, Azerbaijan, Bahrain, Bulgaria, Oman, Russian Federation, Serbia, Ukraine

### Completed

Andorra, Austria, Belgium, Croatia, Cyprus, Czech Rep., Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Korea (Rep. of), Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Seychelles, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Vatican

### Not Started

Armenia, Belarus, Benin, Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Egypt, Ghana, Guinea, Guinea-Bissau, Iran (Islamic Republic of), Kyrgyzstan, Lebanon, Libya, Malawi, Mali, Moldova, Morocco, Namibia, Niger, Nigeria, Rwanda (Republic of), Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Turkey, United Arab Emirates, Uzbekistan, Zambia, Zimbabwe

### Unknown

Afghanistan, Angola, Antigua and Barbuda, Argentina, Australia, Bahamas, Bangladesh, Barbados, Belize, Bhutan, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Burundi, Cambodia, Canada, Central African Rep., Chad, Chile, China, Colombia, Comoros (Union of the), Congo, Costa Rica, Cuba, Dem. People's Rep. of Korea, Dem. Rep. of the Congo, Djibouti, Dominica, Dominican Rep., Ecuador, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Former Yugoslav Republic of Macedonia, Gabon, Gambia, Georgia, Greece, Grenada, Guatemala, Guyana, Haiti, Honduras, Iceland, India, Indonesia, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Lao P.D.R., Lesotho, Liberia, Liechtenstein, Madagascar, Malaysia, Maldives, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Mozambique, Myanmar, Nauru, Nepal (Republic of), Netherlands Antilles, Nicaragua, Niue, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Romania, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Singapore, Solomon Islands, Somalia, South Sudan, Sri Lanka, State of Palestine, Suriname, Syria, Tajikistan, Thailand, Timor-Leste, Tonga, Trinidad and Tobago, Tunisia, Turkmenistan, Tuvalu, Uganda, United States, Uruguay, Vanuatu, Venezuela, Viet Nam, Yemen



AFRICA
AMERICAS
ASIA STATES
ASIA PACIFIC
CR
EUROPE

ATSC
DTMB
DVB-T
DVB-T2
ISDB-T

ONGOING
COMPLETED
NOT STARTED
UNKNOWN

RESET

### Afghanistan

Documents provided by the country

No Document to display

#### Events in this country

Meeting with Government <i>The new platform for Europe and Africa to meet and discuss future evolutions of Digital TV</i>	29/11/2014	Paris
Documents from Country: Powerpoint presentation of Dr. ZZZ <i>This is the description about this wonderful document</i>		
Presentation during Conference <i>This is our Powerpoint</i>		
Presentation by Mrs... <i>This is just to see what happens when we have several document and if the style will work correctly, meaning one blue line and one white line alternatively</i>		
Conference on Broadband <i>A simple meeting to demonstrate the capabilities of Digital TV</i>	25/11/2014 26/11/2014	Moscow
Documents from Country: Powerpoint presentation of Dr. ZZZ <i>This is the description about this wonderful document</i>		
Other Documents: Presentation		
First Workshop at Kabul <i>Showcase where the most efficient network have been setup.</i>	12/11/2014 19/11/2014	Kabul

Country	Year Of Launch	DSO Date	TV Standard	Compression Format	Status
Andorra			DVB-T	MPEG-2	Completed
Austria	2006	2011	DVB-T DVB-T2	MPEG-2 MPEG-4	Completed
Belgium	2005		DVB-T DVB-T2	MPEG-2	Completed
Croatia	2009	2010	DVB-T DVB-T2	MPEG-2	Completed
Cyprus		2011	DVB-T		Completed
Czech Rep.	2005		DVB-T	MPEG-2 MPEG-4	Completed
Denmark	2006	31/10/2009	DVB-T DVB-T2	MPEG-4	Completed
Estonia	2006	2010	DVB-T DVB-T2	MPEG-4	Completed
Finland	2001	2007	DVB-T DVB-T2	MPEG-2 MPEG-4	Completed
France	2005	2011	DVB-T	MPEG-2 MPEG-4	Completed
Germany	2002	2008	DVB-T	MPEG-2	Completed
Hungary	2008	2013	DVB-T	MPEG-4	Completed
Ireland	2011	24/10/2012	DVB-T	MPEG-4	Completed
Israel		2011	DVB-T	MPEG-4	Completed
Italy	2004	2012	DVB-T DVB-T2	MPEG-2	Completed
Japan	2011		ISDB-T		Completed
Korea (Rep. of)		2012	ATSC		Completed
Latvia	2009	2010	DVB-T	MPEG-4	Completed
Lithuania	2008	2012	DVB-T	MPEG-4	Completed
Luxembourg	2006		DVB-T	MPEG-2	Completed
Malta		2011	DVB-T	MPEG-2	Completed
Netherlands	2003	2011	DVB-T	MPEG-2	Completed
New Zealand	2008	2013	DVB-T DVB-T2	MPEG-4	Completed
Norway	2008	2009	DVB-T	MPEG-4	Completed
Poland	2009	2013	DVB-T	MPEG-4	Completed
Portugal	2009	2012	DVB-T	MPEG-4	Completed
Seychelles		2013	DVB-T		Completed
Slovak Republic	2009	2012	DVB-T DVB-T2	MPEG-2 MPEG-4	Completed
Slovenia	2006	2011	DVB-T	MPEG-4	Completed
Spain	2000	2010	DVB-T	MPEG-2	Completed
Sweden	1999	2007	DVB-T DVB-T2	MPEG-2	Completed
Switzerland	2001		DVB-T	MPEG-2	Completed
United Kingdom	1998	2012	DVB-T DVB-T2	MPEG-2 MPEG-4	Completed
Vatican			DVB-T		Completed

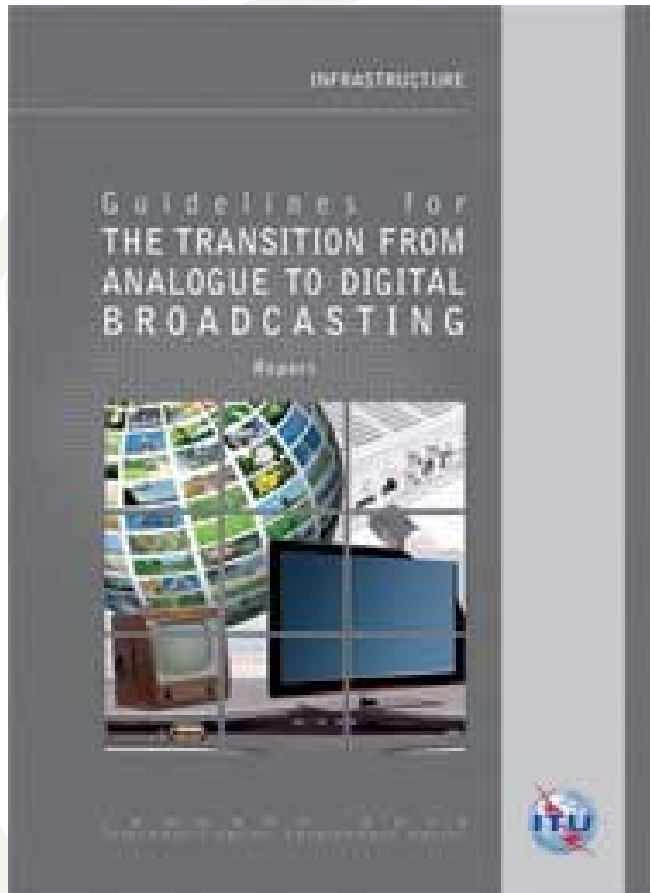
34 Countries

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# ITU-BDT Assistance in AFR Region



# Guidelines for Transition to Digital Broadcasting



- ❑ Intended to provide information and recommendation
  - On policy, technologies, network planning, customer awareness and business planning
  - for the smooth transition to Digital Terrestrial Television Broadcasting (DTTB) and introduction of Mobile Television Broadcasting
- ❑ Prepared in 2010 for Africa
  - 1<sup>st</sup> Revision (2012) for ASP adding a section on archives migration
  - 2<sup>nd</sup> revision (2014) for global including Satellite TV, Cable TV, IPTV

<http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Documents/Guidelines%20final.pdf>



- ❑ **ITU-KCC-MSIP (RO Korea)** : Roadmap for Transition from Analogue to Digital Terrestrial Television Broadcasting in Asia and the Pacific, **Africa**, and Americas (countries selected by Korea)
  
- ❑ **ITU-BDT**: Roadmaps for Transition from Analogue to Digital Terrestrial Television Broadcasting
  - 10 countries assisted



What would you like to search for?

# Status of the transition to Digital Terrestrial Television Broadcasting : Data Miner

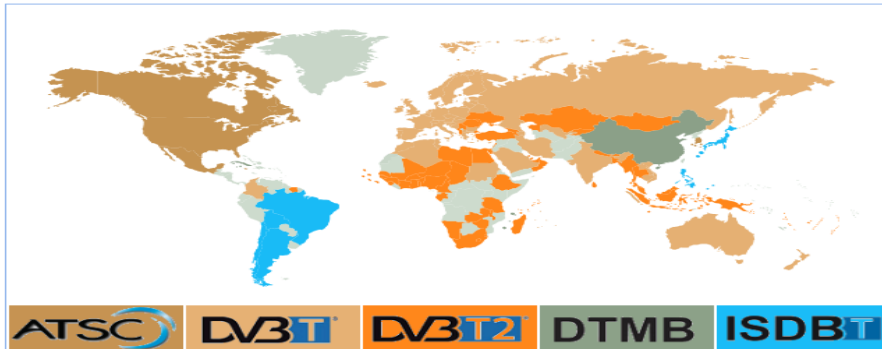
YOU ARE HERE HOME > ITU-D > SPECTRUM AND BROADCASTING > STATUS OF THE TRANSITION TO DIGITAL TERRESTRIAL TELEVISION BROADCASTING : DATA MINER

SHARE



This portal provides information on the status of the deployment of Digital Terrestrial Television (DTT)

AFRICA	AMERICAS	ARAB STATES	ASIA PACIFIC	CIS	EUROPE
ATSC	DTMB	DVB-T	DVB-T2	ISDB-T	GE06
ONGOING	COMPLETED	NOT STARTED	UNKNOWN		RESET



Country	Year Of Launch	DSO Date	TV Standard	Compression Format	Status
Afghanistan			ND		
Albania		17/06/2015	DVB-T2	MPEG-4	Ongoing
Algeria	2010	2015	DVB-T DVB-T2	MPEG-2 MPEG-4	Ongoing
Andorra	2006	25/09/2007	DVB-T	MPEG-2	Completed
Angola					Ongoing
Antigua and Barbuda					
Argentina	2010	2019	ISBD-T		
Armenia	2015	2015	DVB-T2		Ongoing
Australia	2001	10/12/2013	DVB-T	MPEG-2	Completed

**MENU**

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Related Events | Related Publications | Relevant Websites

- Data Miner**
- Comoros (Union of the), 5.06.2015
  - Morocco coordination meeting, Tunisia, 16.05.2015 - 19.05.2015
  - "Transition to digital technology, policy and regulation seminar" for rural broadcasting service providers, Mongolia, Ulaanbaatar, 22.04.2015 - 23.04.2015
  - "Transition to digital technology, policy and regulation" for rural broadcasting service providers, Mongolia, Ulaanbaatar, 22.04.2015 - 23.04.2015
  - la migration de la television vers le numerique, le choix de la norme de diffusion dans les pays membres, l'IPTV, la television numerique par satellite, la video ala demande et le deploiement des nouvelles technologies a large bande issues du dividende numerique telles que la telephonie mobile de la quatrieme generation (4G) et le Wimax, Comoros (Union of the), ARUSHA, 11.03.2014 - 13.03.2014

Full List >



**Thank you!**

