

Digital Migration Worldwide - Status

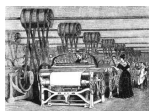
Radiocommunication Bureau



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Technological revolutions



1771 - The First Industrial Revolution in Britain, based on mechanization of the cotton industry



1829 - The Age of Steam and Railways



1875 - The Age of Steel and Electricity



1908 - The Age of Oil, the Automobile, and Mass Production



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We are in the middle of the fifth technical revolution!

The Age of Information and
Telecommunications
1971



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(c) TVhistory.TV Library



1928 Baird Model "C"



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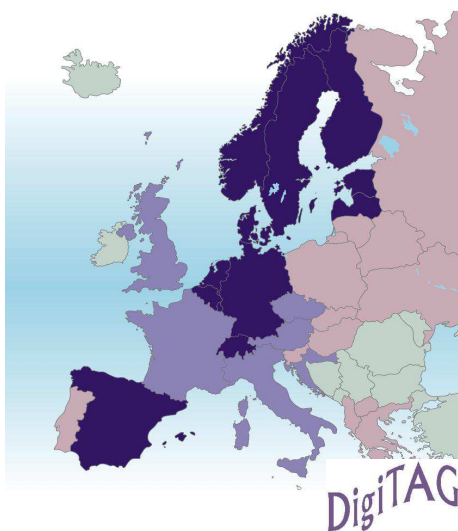
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Europe 2011



Countries with ASO completed

Countries with ASO process underway

Countries with some DTT services launched

Countries with DTT services Not yet formally launched

Target ASO 2012



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Italy – 80% DTT Penetration

- Over 20 million households relied on the DTT platform for their primary television services (Mar 2011). An increase of 945,000 households since Jan 2011.
- Nearly 2.8 million DTT receivers have been sold since the beginning of the year.
 - 62% were DTVs
 - 33% were set-top boxes and 5% were MHP-enabled receivers.
- Since the launch of DTT services in 2004, nearly 50M DTT receivers have been sold.



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Poland – latest news

- Parliament has just approved the legislation for Digital Switchover
- ASO 31 August 2013
- Simulcasting analogue and digital programs
- Broadcasters responsible for informing viewers about transition
- Currently 2 multiplexes – 87% population coverage



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Russian – Latest News

- ASO expected to be completed in 2015.
- 43 million people will be able to access DTT services by the end of 2011. Up from 20 million in 2010
- Over 30% of the population.
- 20 television programme services, some in HDTV will be available
- DVB-T2?



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Asia – 2010

source ABU TC Oct 2010, Tokyo

- IRN – 2 DVB-T MPEG4 (14 channels) in Tehran. ASO 2015
- MLA – DVB-T trial last 3 years, DVB-T2 trial next year.
- THA – DVB-T trial since 2001, decision on standards, ASO 2013
- BRU – started DVB-T MPEG4 1HD and 5SD
- HK – CMMB MFN of 4SD MPEG2 and SFN of 1HD and 2SD MPEG4
- SNG – considers DVB-T2 for improved indoor coverage.



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United States

- High power ASO completed June 2009
- Low power ASO (channels 52-69) planned for December 2012
- 1.5B on STB coupon program
 - \$US40
 - 63M coupons issued, 34M claimed



United States (2)

- ATSC mobile standard released 2010
- Mobile broadcast trials in Washington DC
- ATSC started studies on second generation standards



Mexico

- Digital Switchover to be completed in 2015
- Selected ATSC standards
- 68% population relies on terrestrial television



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Brazil

- Population 180M, over 55M TVs
- 4th largest TV market of over 80 viewers/day
- Its own TV standards based on ISDB-T (Japanese)



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Costa Rica

- 2017
- 60% population relies on terrestrial television
- ATSC analogue
- ISDB-T Brazil system for digital



Kenya

- September 2009 - First DTT multiplex operated by the public service broadcaster Kenya Broadcasting Corporation (KBC) in its capital Nairobi.
- 2010 World Cup - DTT in Webuye, Nyeri, Mombasa, Kisumu, Nakuru, Eldoret, Meru, Kisii and Malindi.



Kenya (2)

- Analogue switch-off to be completed by 2012.
- The government will provide funding of Sh152 million (€1.3 million) for the digital switchover process.
- The broadcast industry is calling on the government to subsidize DTT receivers.



Kenya (3)

- Signet Ltd, a newly formed subsidiary of KBC, will distribute the DTT signal.
- The DVB-T standard in combination with MPEG-4 AVC compression technology. In a first phase, standard-definition television services will be available.



South Africa

- Analogue switch-off to December 2013. Initially, was to be completed by November 2011.
- Adopt the DVB-T2 standard for its DTT platform. This follows the decision taken by the members of the Southern African Development Community (SADC).
- To finalize STB specifications (again)



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South Africa (2)

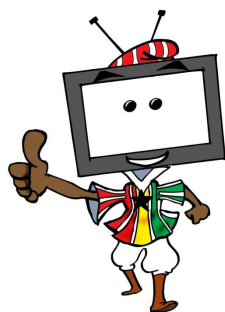
- 90% population digital television coverage
- 10% population in the remote areas
 - Continue receiving analogue coverage
 - Satellite
- Gov. set up Universal Service and Access Fund
 - 6% population will receive subsidy for STB



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It's Digitime - Ghana



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Ghana Time Table

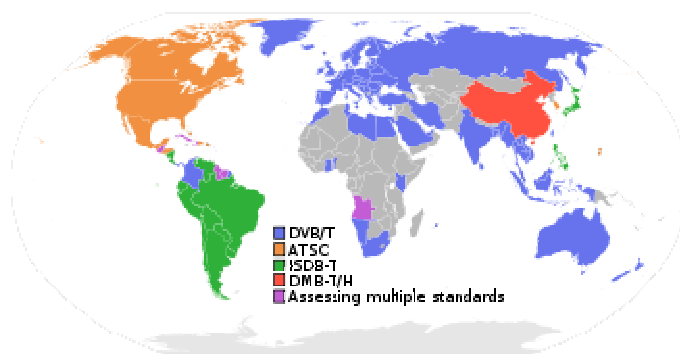
NDBMTC Final Report to Govt	13 th Jan 2010	30 th Aug 2010
Development of Legal Framework (Amendment of Electronic Communications Act)	Sept 2010	December 2010
Public Awareness Campaign	September 2010	December 2014
Establishment of National Digital Migration Implementation Body	January 2011	

Ghana Time Table (2)

Licences for Digital TV	January 2011	March 2011
Nationwide Roll-out of Digital TV (Simulcast Period)	April 2011	2013
Coverage of all Regional Capitals & environs	By December 2012	
Phased Analogue Switch-off	To be determined according to locations and conditions	
Completion of Switchover	2014	
Appraisal Report of Switchover Process	6 months after completion of switchover	

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Digital TV Standards



http://en.wikipedia.org/wiki/List_of_digital_television_deployments_by_country

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Current status

- Group 1 – ASO completed
 - Mauritius, Singapore, USA, Netherlands, Sweden, Germany, Switzerland...
 - High penetration of cable and satellite broadcasting
 - Small markets



Current status (2)

- Group 2 – Started DTT transmissions or trials
 - ASO 2012 or 2013
 - Majority of countries, particular in Europe, North America, Japan, Australia, South Africa, Kenya, Ghana...



Current status (3)

- Group 3 – Some started DTT trials
 - ASO 2015 or later
 - Legislation not yet in place



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Thank you for your attention!



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