Transition from analogue to digital broadcasting

Russell Southwood, CEO, Balancing Act

Modern Spectrum Management and transition from Analogue to Digital Broadcasting - Trends and Technologies", Banjul, Gambia

The Challenge – Finding the benefits

- More efficient use of spectrum – Re-allocation with financial benefits
- Improving signal quality
- Increasing the number of people who get access through enlarging the coverage area (power issues)
- Offering more diversity of content and improving quality, particularly local content
- Increasing investment and jobs in a larger TV sector (competition)

Current state of play

- Public launches: 5 countries
- Pilots: 10 countries
- Started: 7 countries
- Not started?: 30 countries
- Will Africa meet the 2015 deadline?

Public launches and pilots

- Difficulties of assessment: Pilots may actually be very limited in scope
- Publicly launched: Morocco, Mauritius (will switch off analog in 2011), Kenya, Nigeria and Tanzania
- Pilots: Tunisia, South Africa (delayed by standards discussion), Uganda, Guinea, Central African Republic, Burundi, Gabon (private operator), Ghana, Rwanda and DRC
- Tanzania example: Three signal carriers but only TBC/Star TV rolled out so far. Initially four regions (Dar, Dodoma,Mwanza and Arusha).
- Set-Top Box: US$45.70 to buy or US$5.87 pm to rent. Selling at 1,000-2,000 per day when first launched

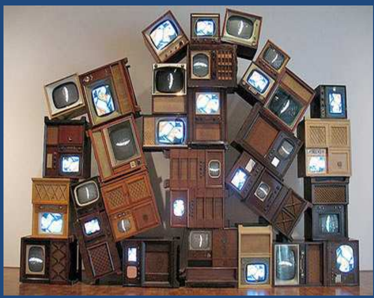
Started the process

- Algeria (National Committee set up); Botswana (Digital Migration Task Force set up in Sept 2008); Egypt (workshop held February 2009); Ethiopia (Study done, waiting for Government to set up Task Force); Namibia (work done by NBC); Lesotho (outline policy in place); Mozambique (Govt has received plan of implementation); Cameroon (co-operation agreement between CRTV and Chinese?)
- Policy processes can take 2-3 years. Deadline is 2015.
- Then only 2-3 years to implement.

Not started?

- The following 30 countries appear to have no policy or planning process for the implementation of digital broadcast transmission: Angola, Benin, Burkina Faso (seminar held), Cape Verde, Chad, Comoros, Congo-Brazzaville, Cote d'Ivoire, Djibouti, Equatorial Guinea, Eritrea, Gambia, Guinea-Bissau, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Niger, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, Swaziland (study planned), Togo, Zambia and Zimbabwe.
- Any updates on this position?

Economic costs



- Not just distribution and transmission Cf Swazi TV US$3.7 million contract with Spescom for production (2007)
- Cost of Set Top Boxes in Africa: US$50-100. UK average: US$46 but as low as US$7.67-15. NBC US$26.48 to licence-payers.
- Budget 19" digital TV in SA (US$381) and high-end 46" digital TV in Kenya (US$2,000)
- Sharing transmission will help reduce costs and increase coverage area
- Advertising or Pay TV subscription to support new channels? New Business models?

Technology issues

- Standard to be adopted. ITU commitment to DVB-T. SA looking at Brazil modified ISDB-T
- Edge of coverage area: Analog = signal snowy and blurry picture. Digital = No picture
- MPEG 2 vs MPEG 4

Compression standard	Countries where announced
MPEG 2	Algeria, Mauritius
MPEG 4	Ghana, Kenya, Tanzania, Tunisia, Uganda

- MPEG 4: Better compression, more channels. Upgrading raises processor power issues.

What's in it for the viewer?

- Digital Dzonga Pilot Survey: 35.6-38% failed to set up STB themselves. 87.2% thought "worth the effort."
- Multiple channels – potentially more to watch
- Additional languages
- Better deliver of public interest programming?
- Time-based vs themed channels

Policy and Regulatory Issues

- Set Top Boxes – Proprietary or open access? Conditional access? Interactive?
- Cost of Set Top Boxes – How many will not be able to afford? What can be done to lower costs?
- Waste disposal issues?
- Coverage area? SA – 60% to achieve "critical mass" Case for Universal access policy? Subsidy for UA policy? Link to power?
- Access to signal carriage – One signal carrier? Incumbent broadcaster? Separate agency? Access issues? KE vs TZ
- Public interest content – languages (SA, MU); channels (NG – Education), etc; new public interest structures?
- Additional channels – Who gets licences? New commercial opportunities?

Creating a Road Map

Government Policy and Regulatory Objectives

- Increasing coverage area? % now? In the future?
- Enlarging the size of market? More operators and channels? (licences)
- Improving the range and diversity of content?
- Encouraging local TV production to grow?

Working with Partners – A Task Force Approach

- Involving public and private sector
- Getting deadlines agreed by all parties
- Public consultation to prepare for roll-out

Strategy for Roll-out

- Market sets the pace?
- Directed market roll-out? (incentives)

Imposed changeover?

Implementing the Road Map

- Early decision on standards to allow volume production (compare to neighbours)
- There has to be a "prize" for users (signal quality, better services like interactive, more and better channels, languages, etc)
- Critical mass of coverage (area by area and over key urban areas
- Public campaign involving all broadcasters and Govt; carried by all the broadcasters
- Supporting strategy to encourage external investment by key players