



Digital Broadcast Migration in West Africa

An overview and strategies to accelerate the transition

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1. Introduction

This Briefing Paper provides an overview of the current state of play of the digital transition in broadcasting in the 16 countries of West Africa. Developments have been monitored over the last eighteen months but inevitably there will have been developments not yet made public. So please write in and let us know if the assessment below is correct and/or if things need updating.

2. Current State of Play

There are three countries so far piloting (prior to implementation): Ghana, Guinea and Nigeria. Of these, Ghana and Nigeria are both in what might be termed the pre-public launch phase and are the 'early adopters'. Three countries have set up Task Forces or Committees to oversee the transition - Ghana, Nigeria and Senegal - and a further three - Benin, Mali and Niger - have taken a decision to set one up.

There are seven countries where some form of public discussion has started: Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria and Senegal. Cape Verde has commissioned a consultant to write a draft strategy.

There five countries where it appears that no action has yet been taken and the process may take five years or more to complete so those starting now are unlikely to finish on time. Therefore some of these countries are likely to go over the ITU's 2015 deadline. Cote d'Ivoire has not been included in these totals because throughout the period of preparing this work, it has suffered political instability, culminating in the recent civil war.

The francophone members of UMOA have a sub-committee that has identified the issue as important and this appears to have had some impact on national policy in a number of member countries in terms of pushing the issue up the policy agenda.

Table 1: Summary of digital transition progress

Country	Public discussion	Task force	Pilot	Public Launch	Notes
Benin	•				Feb 2010: Decision to set up a Comite de Transition
Burkina Faso	•				April 2010: Presentation of a suggested strategy at ARCE Workshop
Cape Verde					March 2011: Commissioning of consultant to draft strategy
Cote d'Ivoire					No action yet taken.
Gambia					No action yet taken.
Ghana	•	•	•		NGB in JV with GBC.
Guinea			•		Star Times has run pilot.
Guinea-Bissau					No action yet taken.
Liberia					No action yet taken.
Mali	•				Feb 2011: Decision to set up a Comite de Transition

Country	Public discussion	Task force	Pilot	Public Launch	Notes
Mauritania					No action yet taken.
Niger	•				August 2010: Decision to set up a Comite de Transition
Nigeria	•	•	•		Star Times in JV with NTA. Awaiting Govt response to Task Force Paper.
Senegal	•	•			Launched draft strategy.
Sierra Leone					No action yet taken.
Togo					No action yet taken.

There are three detailed case studies on Ghana, Nigeria and Senegal and these countries are among the early adopters on the continent. Case studies covering developments in these countries are available on the APC Digital Transition website: <http://digmig.apc.org/en/frontpage>

Elsewhere on the continent, early adopters can be found in North Africa – Algeria, Morocco and Tunisia – or elsewhere in Sub-Saharan Africa: Kenya, Mauritius, South Africa, Tanzania and Uganda.

More detail is provided on the other individual countries below:

Benin: Media regulator La Haute Autorité de l’Audiovisuel et de la Communication has responsibility for licensing and frequency. A workshop was held in December 2010 at which there was a presentation on the subject from a staff member of the state broadcaster ORTB and a guest speaker from the Moroccan media regulator HACA.

Burkina Faso: L’Organisation Internationale de la Francophonie (OIF) and UEMOA held a workshop at the end of 2009 on the challenges of the transition to digital broadcasting. This was followed up with another workshop initiated by Le Conseil Supérieur de la Communication (CSC) du Burkina Faso at the end of March 2010 entitled: "The professional issues, socio-political and economic advent of digital broadcasting: To develop a national strategy to the 2015 deadline." The workshop was sponsored by the Ministry of Post, Information Technologies and Communication.

The Minister Christmas Kabore welcomed the initiative of the CSC which he said "seeks to engage all stakeholders technical, policy and institutions involved in the approach to this problem." In April 2010 the national telecoms regulator ARCE held a workshop on the same topic and presented a strategy to address the spectrum issues involved.

Cape Verde: A workshop was hosted by the Agência Nacional das Comunicações, (ANAC) and the ITU in November 2010 on "Digital Terrestrial Television" for Portuguese and Spanish speaking countries in Africa. ANAC subsequently issued a tender for a consultant to prepare a national strategy for "the transition to digital terrestrial television". The deadline for submissions was March 2011. The objectives of the consultancy study were as follows:

- Prepare a detailed study of the transition, which should contain the individual actions to be developed at different stages of transition (the introduction of DTT simulcast period, switch-off of analog TV), as well as the implementation schedule of each phase;

- Define the best regulatory policy, technical and economical to adopt, to ensure an effective analogue-digital transition with minimal impact on operators and consumers in particular;
- To foster the conditions needed to ensure that the transition to digital, and therefore the termination of analogue terrestrial TV broadcasts no later than June 17, 2015;
- Study the feasibility of creating a transportation company and the DTT broadcasting signals;
- Prepare a national strategy to ensure DTT uptake by consumers;
- submit a proposed plan for the implementation of DTT and the setting up of a Committee to oversee it.

Guinea: Star Times has run a pilot with the state broadcaster Radiodiffusion Télévision Guinéenne but there does not appear to have been much progress from this point.

Mali: In February 2011, there was an ITU sponsored workshop at which the stakeholders (representatives of public and private media, the CRT, the Ministries of Communication and Culture, media regulatory bodies) decided to set up a "comité de transition" to oversee the process. The Secretary General of the Ministry of Communications and ICT Oumar Maiga said: "The process of introducing digital TV and radio is not exclusively related to a change in technology, but also aims to create better conditions for offering quality programs enriching the audiovisual space in Mali."

The digital transition plan for Mali provides about 8 multiplexes at the national level and 8 additional multiplexes for regional capitals. The plan proposes that the MPEG4 standard will be used.

Niger: In August 2010, the Secretary General of the Ministry of Communication, ICT and Culture, Seydou Ali launched the Comité d'élaboration de la Stratégie for the digital transition in broadcasting. It was given three months to carry out its work and give Government a strategy document.

The Committee consists of two representatives of the Ministry, a representative of the Multisectoral Regulatory Authority, a Superior Council (now National Observatory) Communications, a New High Commissioner for Information Technologies and Communication, one representative of the Ministry of Economy and Finance, two representatives of the state broadcaster Office of Radio and Television of Niger (ORTN), a representative of private radio stations, a representative from telecom operators and representative associations of consumers. It is chaired by the Secretary General of the Ministry.

Sierra Leone: In September 2008 Sierra Leone's Deputy Minister of Information Mohamed Koroma said that a contractor had been appointed to transform the Sierra Leone Broadcasting Service (SLBS) into "a modern digital TV system". The country's National ICT policy has as one of its objectives: "Extend radio/television coverage to entire country by 2012." There are also plans to merge the telecoms regulator (NATCOM) and the media regulator (IMC) to deal with the converged technology environment.

3. Getting a digital broadcast transition process in place

By any objective measure, progress on the digital transition in broadcasting has been slow. In just under half of the countries, no action has yet been taken. Therefore this section provides some outline advice on why it is important to get started on the transition and on how to speed up the process.

There are several reasons why things are moving slowly in many African countries and it is worth looking identifying the perceived obstacles. Three things have been mentioned during our research as reasons not to start this process.

Firstly, policy-makers and regulators find it hard to believe that a process that involves everyone owning a television buying a new set-top box is neither feasible nor sensible in the African context. Secondly, the process requires new policy work to be carried out and often Ministries are hard-pushed to find these additional resources to address this task. Thirdly because the deadline is four years away, this seems like the work of tomorrow rather than today. These are all significant obstacles that will need to be overcome.

The first of these obstacles needs to be assessed by looking at both the costs and benefits of the transition process. As has been shown in the accompanying case studies on Ghana, Nigeria and Senegal, it is possible through a process of tax reduction to get a pricing on set-top boxes that will make it comparable to acquiring a low-end phone.

Furthermore, the spectrum freed up by transferring broadcast signals out of their existing spectrum band and efficiencies of digital transmission will give either the Government or the regulator a financial bonus. This funding can be applied to ensuring that there is a wider coverage area for television and if need be (at the end of the transition) applying some subsidy to those unable to afford the set-top box.

The second barrier of lack of internal resources is really an issue of whether a Ministry or regulator wants to prioritise the task. Neither of these bodies are usually without funds to tackle new issues. It is simply a case of acknowledging that the digital transition in broadcasting has significant benefits for citizens and needs to be got under way.

The third obstacle is the feeling that the deadline is four years away and therefore there is plenty of time. Unfortunately this is a process that cannot be compressed and left until "five minutes to midnight".

Delay often makes the process a great deal messier. In a number of countries, private sector companies have started the process of trial and public digital transmissions with the public broadcaster (through joint ventures) well before there is any policy. In some ways the companies offering these joint ventures are understandably seeking a commercial opening but it may well pre-empt a formal policy on the number of signal carriers and the allocation of new channels.

It is worth noting that in Europe that the period between the launch of the first digital broadcast signal and the shutting down of the analogue TV signal has generally taken between 3 to 14 years. Therefore time is already running out for those countries that have not yet started the process.

The sequence of events is fairly straightforward even if there are elements that have some complexity. A detailed description of these complexities can be found in the ITU's Guidelines for the transition from analogue to digital broadcasting (see Bibliography at the end of this paper).

Government or the regulator starts the process by generating a policy paper addressing the key public interest issues. The paper then has to go out for consultation, particularly with the broadcast industry that will be most affected by any decisions taken.

When the policy paper has been agreed (and if necessary turned into law), a task force or committee with all the key stakeholders will need to be set up to agree the implementation and the timetable. A Task Force or Committee can then be set up to oversee implementation.

A pilot trial might be run to ensure that all those involved with the implementation feel confident that the new digital signals can be successfully transmitted to end users. After this point, the process can be launched publicly and set-top boxes can go on sale to the public. However, this is not the end of the process as all stakeholders – particularly Government, the regulator and broadcasters will need to have a public awareness campaign to encourage take-up.

3.1. Setting Government Policy and Regulatory Objectives

In order for the digital transition process to be successful, there has to be a “digital dividend” that everyone involved (including the citizens watching television) can understand. These “prizes” that make up the digital dividend will need to be things that are not only attractive to those involved but can be paid for in some way.

Some of these “prizes” – like the re-allocation of spectrum from broadcasting to telecoms (for things like mobile voice and Internet) will bring in licence income that can be deployed to achieve public interest objectives of the kind described below.

The first part of Chart 1 below summarises a range of policy objectives that deliver dividends to Government, broadcasters and end users:

Increased coverage area: In a lot of African countries, television is largely an urban phenomenon. Private broadcasters focus their coverage areas on urban areas because they contain people advertisers are interested in. The public broadcaster usually has made some attempt to get signals out to a wider range of communities.

Governments and regulators have the opportunity to make access to television a universal access goal. So for example, if the current television transmission signal reaches 55% of the population, it might set a goal of reaching 70% of the population within 5 years.

This goal of wider coverage can be encouraged by the policy set for signal carriage. Government can adopt one of several routes: a single independent signal carrier shared by all broadcasters; several independent signal carriers offering infrastructure for hire; or several consortia of broadcasters sharing different signal carriers.

In each instance, the broadcasters stand to benefit from having an enlarged signal coverage as they will reach greater numbers of people attractive to advertisers, particularly for things like food and beverages.

Greater diversity of content: Users will be attracted by a greater diversity of content, both from existing broadcasters and new entrants. Extra channels will allow both public and private broadcasters to put out material in a wider range of languages.

In terms of the public interest, additional channels will allow the public broadcaster or other bodies (as has happened in Nigeria and Kenya) to offer education channels. These new channels will also allow some broadcasters to offer High-Definition channels.

Increased number of players: Additional channels will need to be offered in a fair and transparent way that does not disadvantage individual players. Thus far existing players have been offered two or three additional channels but these additional opportunities also need to be offered to new entrants. Indeed as with spectrum, if existing players or new entrants do not make use of these additional channels with a certain time period, they should forfeit the right to use them.

Although the Government or regulator cannot really dictate the business plan of existing and potential broadcasters, it will be important to ensure that new channel allocations are made on the basis that they add to the diversity of content available rather than simply adding “more of the same”.

More channels will mean there will need to be more income, whether through advertising, Pay TV subscription income, licence income or state subsidy. There may be casualties along the way if income does not match expenditure for new channels. But it is better to leave the management of this risk with the private broadcasters rather than try and manage it by restricting the number of players in the market.

Encouraging media as a job and wealth creator: Additional channels will require more programming. Government and the regulator can seek to pursue economic objectives by looking to encourage the growth of the local production sector. The easiest way to do this is to create some form of local production quota as a transitional measure.

For example, only local programming can be shown between 7pm and 11pm. Or that 40% or more of programming has to be local. These criteria can be tightened by insisting that a certain proportion of this programming is in vernacular languages and/or is not simply studio-based news programmes.

But the approach to producing more local programmes can be carrot as well as stick. A number of African Governments (including Kenya, Morocco and South Africa) have set up public funding agencies to encourage local film-making. Government can also help local film production by ensuring that broadcasters respect their intellectual property rights, both in terms of discouraging individual piracy and cracking down on pirate broadcasts.

3.2. Working with Partners – A Task Force Approach

Whilst private and public players can and have started the digital transition process without the Government or regulator, the scale of the task is so great that it makes sense to involve all of the stakeholders in the process.

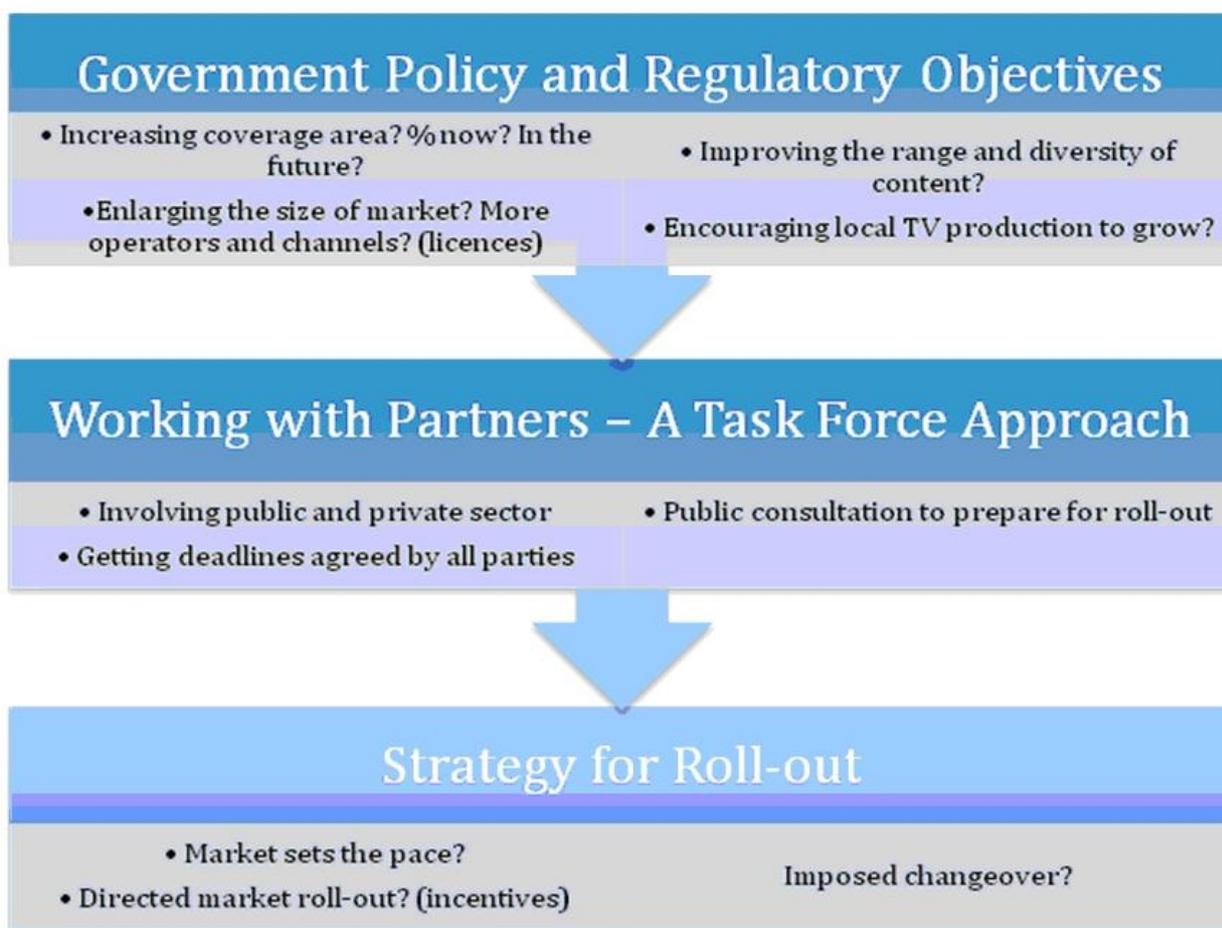
This is best achieved by creating a Task Force or Committee to create an implementation plan and a timetable for the plan. Government needs to provide clear policy leadership but it must persuade all of the players of its policy objectives if the process is to start successfully. For example, it needs at an early point to set a date for the switch-off for the analogue signal, from which all other parts of the timetable can be set. Likewise, the regulator will need to give clear guidance on how it sees spectrum re-allocation happening.

This task force or committee will contain representatives of all the relevant Government bodies, key broadcasters and ideally, some representation from consumer groups representing end-users. A smaller sub-group might be set up that is directly involved in the transition implementation.

This body has three key roles: firstly, it will iron out the details of the agreed Government policy, particularly who will do what; secondly, it will get all the relevant parties to formally commit themselves to the timetable agreed; and thirdly, it will be the focus for the promotion of the process to the public.

This far, the Task Forces and Committees in Africa have been better at the first two roles and have largely ignored the third. But it is this role that is vital in persuading the public to make the transition. Relatively simple practical things – like no-cost advertising by all broadcasters – form a vital cornerstone of raising awareness of the process and ensuring that people make the switch.

Chart 1: The Digital Transition Policy Process – An Overview



3.3. Strategy for roll-out

There are very different strategies for rolling-out the digital transition, particularly at a consumer level. With a strategy where the market sets the pace, Government and the regulator would simply let the market decide what type of set-top box they wanted to sell and the price and eventual standards would be decided by the market.

However, best practice from elsewhere seems to suggest something more like what might be termed a directed market roll-out. Government takes various decisions that give certainty to the market and offers various incentives to speed up the process. For example, by deciding on things like the technical standards (DVB-H? DVB2-H? MPEG2? MPEG4?) and the functionality of the Set-Top Box, it can ensure

that they can be ordered in larger volumes, thus creating the right conditions for a lower price for the consumer. Likewise, Government can remove all taxes from the Set-Top-Box and/or offer incentives for local assembly.

Government has the ability to impose a changeover by law or regulation but as has been observed above, it makes best sense to work with all stakeholders to ensure the success of the process.

4. Bibliography

Guidelines for the transition from analogue to digital broadcasting, ITU, 2010

African countries are committed to migrating to digital broadcasting by June 2015. This will be a costly process (both for Government and citizens) and it is currently unclear who will benefit from it or where the resources needed to make the transition will come from. Arguably it is one of the most fundamental changes in African broadcasting for over a decade and raises wider questions about how the "public interest" is expressed in broadcasting and its relationship with interactive, converged media. However, only a minority of African countries have started the policy work needed to create the transition and most of the discussion is focused on technical questions.

APC and Balancing Act's «Digital Broadcast Migration in West Africa» project aims to provide information about the transition to digital broadcasting in Africa and looks the costs, potential benefits and policy issues. The project has a particular focus on Ghana, Nigeria and Senegal and has been possible thanks to support from Open Society Institute (OSI).

For more information <http://digmig.apc.org/>