



ⁱ Digital Broadcast Migration in West Africa: Getting the most out of the transition

Part 1: Direct Challenges and Benefits

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1. Introduction

The digital migration is probably going to be one of the biggest upheavals in African television since the medium was first launched on the continent. It is a process of change that will affect both the broadcasters themselves and those who watch television.

Since the owners of televisions will need to buy either a digital set-top box or television, it will also have costs that will be widely felt, particularly amongst the poor. It may be necessary to subsidise set-top boxes for poorer television owners.

In a continent that has so many pressing economic demands, it is somewhat strange to be spending money on subsidising a medium that is not as widely used as say radio or mobiles unless there is some wider purpose. Without a clear and articulate statement of the potential “digital prize”, there is the danger that Africa’s citizens will simply not see the point of making the digital transition.

Up until now, the process of the digital transition has been presented largely as a technical issue with the bonus also being a technical one for telecoms or broadcast operators: the additional spectrum made available is often described as the “digital dividend”. Deals are sometimes being done by public broadcasters with private investors on spectrum that will affect future broadcast policy.

Because the transition is in its early phase in most countries, little or no attempt has been made to include anybody in the policy discussion beyond Government policy-makers and broadcasters. Even in those countries where the process is more advanced, there have been no consistent campaigns to explain its implications to the public who will be affected by it.

The changes also contain the potential for a number of opportunities to do things in a better way. The availability of more television channels and the changes in the structure of signal delivery open up new possibilities in both public and private broadcasting. These broader opportunities form part of the overall digital transition prize.

The challenge for all those involved in the process is how to find ways of getting the most out of the transition, both in terms of lowering the costs involved and getting the maximum amount of benefits from it for all of Africa’s citizens. It is important to do this for the following reasons:

- Citizens who have access to a range of channels – both public and private – are ultimately better informed about what is happening in their country and can play a wider part in their country’s affairs. More channels can potentially offer both information and entertainment to a wider number of citizens.
- Television as a medium is currently largely an urban phenomenon in many African countries but it makes good sense to extend television’s transmission coverage area as part of creating a “national conversation”. Television is one of several pieces in a media diet that will ultimately deliver this conversation that will also include Internet via a PC and mobile Internet. The digital divide can be closed across geographic areas but it will also need a clear focus on access to electricity.
- Some significant part of the diverse content delivered through a wider range of channels can be in the vernacular languages of its viewers. This has already happened in the more liberalised countries with FM radio and the increased spectrum that results from the digital transition can be used to help deliver the same on television. This will decrease the gap between those who feel less confident and proficient in the official language or languages of their country.

The policy imperatives – to get maximum benefits and lower the costs - can be addressed by looking at how the digital transition can be used, either directly or indirectly, to improve the lives of a wide range of people. Table 1 below summarises the potential direct and indirect challenges and benefits that might come out of the digital transition.

Table 1: Summary of Challenges and Benefits

Potential direct benefits	Potential indirect benefits
Challenges	Challenges
Subsidising set-top boxes	Financial threats to Government broadcaster
Cost of production equipment	Financial threats to all broadcasters (enough Pay TV or advertising revenues?)
Cost of transmission equipment	Convergent media (fragmentation, Pay and FTA, multiple devices)
Additional channel production costs (business models?)	
Rewards	Rewards
Diversity of content, more channels (local, languages and education)	Universal access to television (widening electricity access)
Freeing up of spectrum (income)	Changing and improving Government broadcasting to public interest broadcasting (different models?)
Wider transmission coverage through shared infrastructure	Increasing skills and jobs in TV and film sector
	Encouraging local content (externalising production?)
	Encouraging interactivity between broadcasters and viewers

2. Part 1: Direct Challenges and Benefits

Part 1 of this policy paper looked at the direct challenges and benefits from the digital transition in broadcasting in Africa.

2.1. The costs of changing to digital production and transmission for broadcasters and Government

There are two sets of direct costs associated with the transition, one set has to be paid by broadcasters and another set of costs that falls directly on television users. Broadcasters will need to pay the costs of both the production and transmission equipment needed to operate digitally. It is difficult to estimate the costs needed to finance the production equipment.

All African broadcasters will have already started to go digital on the production side and each will be at a different stage in the process. However because Africa's Government broadcasters are almost entirely funded by a combination of advertising revenues and direct public funds, it will probably fall to the Government to finance this part of the transition.

Estimates vary widely as to the cost of rolling out digital transmission. The case study for Ghana suggests that it may cost as much as US\$26 million to reach the whole population, whereas one signal carrier in Uganda is investing US\$2.5 million to cover 70% of the population. These countries are more or less identical in terms of area but differ vastly in terms of topography. The estimate for Ghana is for 100% of the population, including the 30% of the population that is currently not covered.

The answer to the question of who pays for this digital transmission infrastructure? is really one of describing the different potential policy approaches that are possible. The best answers to the question of who pays have to produce both fair access to all broadcast players in the market and an overall increase in television coverage.

In former times, when Government wanted to expand telecommunications access to its citizens, it first turned to the state-owned incumbent to carry out the task. As the last ten years have shown, these organisations have not always been capable of delivering a national infrastructure. Worse still, they have not been trusted by other private sector players in the market to carry their traffic because they have favoured themselves over others and have not always shown the competence required for the task.

The policy responses to these difficulties in the telecommunications sector mirror somewhat the kinds of responses that might be taken in the broadcast sector in relation to digital transmission infrastructure. In most cases, the key has been to separate out broadcast content creation and signal carriage function. In other words, broadcasters no longer need to be vertically integrated organisations that both make programmes and provide their own transmission infrastructure to get them to viewers.

On this basis, three broad options have emerged: competitive signal carriers, a single national signal carrier and continuity of the status quo. In liberalised markets, the regulator can issue licences to multiple signal carriers for the new transmission signal. For example, in Uganda and Tanzania, each country licensed four digital television transmission signal carriers.

The business model for these licensed signal carriers is two-fold: to charge broadcasters regular fees for transmitting their signal (thus saving them the cost of putting up and operating their own infrastructure) and/or to allow the signal carrier to offer Pay TV services, either directly or indirectly through another broadcaster. In effect, several broadcasters share the cost of their infrastructure but have a choice of signal carrier provider. The capital cost and the risk is borne by the licensed signal carriers.

The alternative to this competitive model is to create a single national signal carrier, separate from the national broadcaster. Although created before the digital transition, South Africa's Sentech represents an example of this type of separate signal carriage vehicle. In this instance, the Government bears the full cost of the signal carriage function but recoups its expenditure through charging all broadcasters for services.

This is also somewhat similar to the road that has been embarked on in Kenya with KBC creating a nominally independent subsidiary (Signet) to handle the signal carrier function for all broadcasters. However, the Kenyan Government has sought to find an external investor to carry the burden of the capital investment and the waters have been somewhat muddied by a deal between the Government broadcaster KBC and an external private sector company.

The final option has been to simply leave the process of the digital transmission in the hands of the Government broadcaster and the private sector players. In this case, everyone will build their own digital

infrastructure in a way that will probably mirror the existing transmission coverage pattern. The Government broadcaster will have a slightly wider transmission coverage area nationally (financed entirely by Government) and the private sector will be largely focused on urban areas. In this case, there may be no expansion of the overall coverage area and there will not be a diversity of content delivered to a wider range of viewers.

With the separation of the signal carriage function and the sharing of transmission infrastructure through one or more signal carriers, all broadcasters should eventually be able to offer a wider coverage area to more citizens.

However, policy-makers and broadcasters will not achieve higher levels of television transmission access in their country unless the overall level of access to electricity is increased. Indeed, it is worth considering making universal access to television and to electricity, dual objectives of any policy for the digital transition.

2.2. The cost of changing to digital receivers for citizens

The biggest financial cost of the digital transition will be borne directly by Africa’s TV watching citizens. In order to receive the digital television signal, they will either need a digital Set-Top-Box (STB) or a digitally enabled television. The STB (sometimes described as a decoder) plugs into an existing analogue television enabling it to receive digital signals.

In terms of STBs, policy-makers and regulators have two broad policy choices: they can simply announce that digital transition is taking place and let the market decide what equipment is best suited to deliver the change or they can set a standard that is agreed with all key stakeholders. For reasons of economy of delivery, there has been a global consensus that it makes sense for Government to set the standard for the type of STB to be used.

In broad terms, there are two main factors that affect cost: the level of features the STB has and the likely volumes in which the chosen STB will be selling.

Given that cost will be an issue for a significant number of citizens, those Governments that have already made this choice have tended to choose STBs that cost as little as possible. Therefore they have chosen STBs with relatively low levels of functionality. In South Africa there has been a debate about whether an interactive function should be included in the STB.

Little or no work has been done on the extent to which there are citizens who currently have access to televisions who may not be able to afford to make the digital transition. Table 2 below makes some comparisons between different devices and their average cost at the low-end of the spectrum.

Table 2: The low-end average cost of different devices, including STBs

Category					
Type of device	STB without tax	STB with tax	Low-end Mobile handset	Desktop PC	Digitally Enabled TV
Avg cost range	US\$20-30	US\$40-60	US\$45-55	US\$350-400	US\$550-650
Notes			Basic		29" & 32"

The question of who can afford what is not a simple one. There are few reliable income figures because large parts of the economy of each country are not formally recorded, hence the term informal economy. Furthermore, because of the need for access to electricity, television owners will tend to be disproportionately urban dwellers where the potential income levels will be higher.

In the absence of more detailed data, the proxy chosen to determine affordability in the research case studies commissioned has been ownership of a mobile phone as part of a mobile subscription. Handsets are often subsidised but the same will also be true for digital STBs. The lowest cost handset is on average in the US\$45-55 cost range. Therefore, mobile subscribers represent a category of people in each country that will be able to afford a US\$50 device.

The table below shows three different countries with the estimated subsidy required to ensure everyone was able to buy a Set-Top Box to ensure their television set could receive a digital signal. The estimates for South Africa have been made by its Government as part of the elaboration of a subsidy scheme but have not yet finally been confirmed.

The subsidy assumed in the case of Ghana and Nigeria is sufficient to lower the cost of the STB to an affordable level when taken together with tax reductions; in other words, to a level around US\$30-35 per STB.

Table 3: The cost of part-subsidy in selected countries

Country	Households unable to afford	Estimated % unable to afford	Overall subsidy cost?	Cost of subsidy per household?
Nigeria	6.58 million*	37%	eUS\$69.1million	eUS\$10.50
South Africa	5 million	37%	US\$5.6 million	US\$11.31
Ghana	1 million	33%	eUS\$10.5 million	eUS\$10.50

* Based on TV households unable to afford

There are potentially three different policy approaches that can be adopted in relation to the cost of STB for those unable to afford them: do nothing; lower the cost through removing some or all of the elements of tax on it; subsidise part of the cost for those who cannot afford it. The “do nothing” approach will probably result in the loss of a significant portion of the African TV audience in the medium-term.

Depending on what elements are removed, the lowering of taxes will enable the price of the STB to come down to between US\$30-35. Media owners have often supported the removal of taxes on the STB to promote the transition. For example in Tanzania, the Chairman of the Media Owners Association of Tanzania Reginald Mengi has said this is one way to reduce the STB cost. With the price point at this level, there will be significantly more people who will be able to afford purchasing it. Unfortunately, there is no proxy like mobiles for a device bought at this price.

The most equitable but clearly the most costly approach is to provide a part or total subsidy for those unable to afford it. Informally policy makers have told us that both the element of cost and the difficulty of administering such a scheme have made this option unattractive in their minds.

A number of countries (South Africa, Ghana and Nigeria) have seen the transition as an opportunity to create an industrial strategy around the transition. In these cases, the Government is encouraging the private sector to set up assembly plants for STBs in the country and in so doing create more employment. The most ambitious is South Africa that sees STB assembly as the platform for exporting them to the rest of Africa.

2.3. Benefits – More spectrum, more channels, diversity of content and new business models

Broadcasters will have the opportunity to acquire the use of more channels because:

- The spectrum efficiency of digital broadcast transmission will allow greater use of the same amount of spectrum. Using a “multiplex”, one former analogue channel’s spectrum can carry several channels, including datacasting and HD. For example, in South Africa, early proposals suggest that SABC will get eight channels and eTV will get 4-5 channels, with an option to apply for more spectrum later.
- Control of the signal – either through a set-top box or a digitally-enabled television will mean broadcasters can both specify who receives the signal and combat piracy. In theory, the small number of African public broadcasters charging licence fees could cut off the signal to those who have not paid their licence fees. Using the MPEG4 standard together with Digital Rights Management software will also allow broadcasters a significantly higher level of control over their content and this may help to combat piracy by other broadcasters.
- For Governments and their regulators, the digital dividend will mean that they can free up spectrum in the 790-862 MHz band. This freed-up spectrum can then be sold for other uses, particularly to mobile operators who are looking forward to use this additional spectrum for carrying data.

With the opportunity for new channels, the digital transition offers a key moment to address the generation of local African content. In policy terms, it offers the opportunity to review the effectiveness of local production quotas and of Government schemes that support local production.

Over 2,000 languages are spoken in Africa and many of them represent different cultures within countries. Whilst the growing number of African “vernacular” radio stations has begun to cater for some of this diversity, African television broadcasting has not always been capable of providing the same degree of language and cultural diversity. For example, in Mauritius it has been proposed that MBC will use extra channels to broadcast in tamil, télégou, urdu, marathi and mandarin, the other main languages of the island after French and English.

Although there are some notable exceptions, as much as 80-90% of content on African television stations comes from US, European and Latin American international content providers. These international content providers produce programmes for their own markets but offset the costs through selling global rights. However not surprisingly, locally generated programmes across the globe are nearly always more widely watched than international ones.

Nollywood has demonstrated that fiction programmes from one African country can be watched widely by people in other countries. Fiction output of this kind shapes how Africans see themselves. Several other African countries have also started to produce programmes that are more widely seen outside of where they were made.

The challenge for policy makers is to create effective incentives for broadcasters to make local programming. In the case of Nigeria, there are clearly implemented local content quota regulations.

Broadcasters are obligated to maintain at least 60% and 80% local content for terrestrial television and radio respectively. This is applied across board with the further restriction that 100% local content applies to the 7-10pm “family belt” throughout the country. NBC polices operators and applies sanctions when infringements are observed.

This regulation is less stringent for cable and satellite stations as these are to maintain only a minimum of 20% local programme content. Local content is provided in English and a wide variety of local languages either by local producers or the stations themselves.

In terms of public broadcasting, Nigeria’s national Government broadcaster NTA has used one of the additional channels it has secured through the digital transition to set up an education channel.

However, the reward of extra channels come at a cost as new production for these channels will need to be covered by advertising revenues. Currently broadcasters have not given much thought as to how they will create a new business model that will be based on a very different set of content offers, with themed channels becoming much more prominent in the future.

Currently, the rights for bought-in international programmes cost between US\$200-300 per hour at the bottom end to US\$1,000-2,500 at the premium end. Production costs at a local level vary enormously but may be as low as US\$5,000-6,000 per hour at the low end to US\$10,000-15,000 for things like drama. However, nearly all broadcasters have archive programmes they can re-use and can make greater use of “repeats”.

These costs will need to be covered by advertising and sponsorship or in the case of the public broadcasters by (in a few cases) higher licence fees or more government funds. Therefore more detailed work needs to be done of the business models needed to sustain additional channels.

3. Part 2: Indirect Challenges and Benefits

Part 2 looks at the indirect challenges and benefits that might also form part of the policy discussion.

3.1. Universal access to television (widening electricity access)

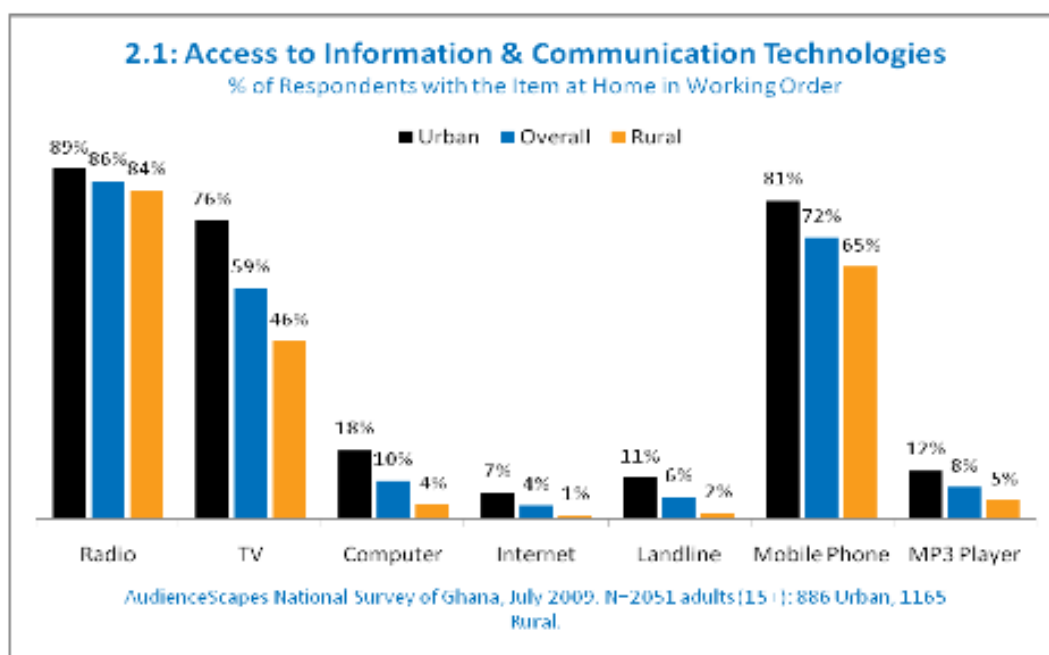
Citizens of any country have the right to communicate and whilst defining this kind of human right can be difficult, there is no doubting that the absence of such rights create considerable problems.

The “democratic conversation” in a country may take many different forms but is essential if all of a country’s citizens are to participate in its political processes. This is particularly important in Africa where the sheer diversity of languages and the arbitrary nature of colonial borders mean that there are often both minorities and significant majorities who may feel excluded from the democratic process.

As alluded to in Part 1, these communications rights have a cultural element. It is important to be able to see locally made content and that this content is in a first language. If you do not have access of this kind, particularly to fiction content (drama series, films, comedy series) then you are in effect, looking at yourself through someone else’s mirror.

The chart below from a 2009 Audienscapes survey in Ghana gives a useful overview of the degree to which citizens can access different media: in other words, the degree to which they have access to the

tools and channels of communication. The different coloured bars in the chart illustrate the level of access to different types of media: urban (black), rural (yellow) and blue (overall).



Radio is by far the most widely established form of media and whilst almost the same number of people have access to mobile phones¹, only somewhere between 10-20% (according to a range of surveys including AudienceScapes) actually make use of it as a media to get and pass on news and information².

The most striking urban vs rural disparity is to be found amongst those with access to television. Even in a relatively wealthy African country like Ghana, urban citizens are just under twice as likely to have access to television as their rural counterparts. Both television and Internet access are largely urban phenomena and the wider spread of both will be curtailed by the lack of access to electricity.

According to the World Energy Outlook database for 2009, the average access to electricity in Sub-Saharan Africa is 30.5% of the population. The disparity again is clearly illustrated as 59.9% of the population is the average for urban areas and 14.3% of the population is the average in rural areas.

As can be seen from the survey chart from Ghana above, this power deficit creates a number of media divides between those who live in urban and rural areas. The urban population increasingly has access to a wide range of media and this access will continue to improve over the next 5-10 years.

By contrast, the majority of those in rural areas are currently largely excluded from television watching (the focus of this paper) and the Internet. Whilst radio is undoubtedly both a powerful and a cheap medium, television offers many opportunities to make people better informed and to show them (with pictures) how to do certain things. It can also offer fiction content that speaks directly to their experience. And for those who have little or no literacy, it enables them to take part in the same version of the “democratic conversation” as their urban counterparts.

¹ A significant number of which have built-in radios.

² Broadly similar points are made about Sierra Leone and its four different Provinces in another AudienceScapes survey: <http://www.audiencescapes.org/country-profiles/sierra-leone/communication-habits-demographic-group/provinces/provinces-315>

Many African Governments (and international organisations) have focused on promoting the use of Internet (particularly broadband) as a way of encouraging national development. However, it is neither logical nor equitable to exclude television for rural citizens from the same kind of universal access strategy. Indeed, some African countries have recognised this in the national ICT strategies: for example, Sierra Leone has specified that it will have radio and television coverage for the whole country by 2012.

Two key policy issues flow from recognising the important of providing different media to a wider number of citizens: firstly, how can this be done in a cost effective way?; and secondly, what are the mechanisms for making it happen?

The delivery of broadcast signals can be done in a number different ways: by terrestrial transmission; by satellite transmission; and over fibre and (maybe) wireless. The costs and challenges for each approach broadly mirror the kind of network roll-out decisions made by telecoms operators. The physical shape of countries and the density of their population affect all of these choices. It is cheaper and easier to deliver terrestrial transmission in a geographically compact country like Senegal than it is in very large country like DRC.

On the basis of population density, terrestrial transmission (and on occasions, fibre transmission) offer the most cost-effective route for delivery. With scattered and sometimes isolated populations, satellite transmission is by far the best way to reach smaller numbers of people: satellite signals can cover whole countries relatively effectively. However, although the cost of satellite antenna may restrict who can then get access to the signal, it does mean that a digital signal can be delivered effectively across wide geographic areas.

Although it is not the primary purpose of this Briefing Paper to tackle electricity issues, certain things have to be done if the broadcast transmission coverage area is to be increased in African countries. There needs to be an integrated approach to providing universal access of this kind that brings together extending the supply of electricity with the extension of universal service coverage. There is no universal access to media of this kind without access to electricity³.

In Mauritania, the Agence d'Accès Universel is responsible for extending water, electricity and phone services to rural areas. There does not need to be a separate agency but whether it is a universal service agency (such as those that exist for telecoms) or simply a function within another organisation (like a regulator), there needs to be an acknowledgement that the supply of electricity is a crucial ingredient for universal access. Spending universal service funds on improving electricity supply will inevitably increase the use levels of different media.

Mobile operators are nearly always the organisations in most countries that have extended their network to cover most of the population. These towers might be shared in some instances with broadcast signal carriers. The remote cell sites can produce some surplus power that can be shared with villagers. There is no reason why such a power supply cannot be used to power TV sets, either individually owned or communally used in a bar or public area. Also, Governments need to actively encourage micro-power producers in rural areas so that there are places where solar and wind energy can offer villagers access to electricity.

³ For example, Audiencescapes 2009 survey of Tanzania: Obstacles to watching television: 50% of those in rural areas and 26% in urban areas said problems with electricity.

One of the mechanisms for addressing increasing the transmission coverage areas is the licensing process for independent signal carriers. The licence framework needs to include the overall policy objective of extending the existing coverage area to as many people as possible. Initially, these companies will need to make back their investment from the existing coverage areas but after a certain point in time, it would be worth including extending the cover area as a licence provision and/or giving separate satellite signal licences to companies that can offer coverage across a country.

Government and regulators also need to focus on how best to deploy the universal service access funds many have gathered up to address the collateral policy objective of extending the availability of access to electricity.

3.2. Changing and improving Government broadcasting to public interest broadcasting (different models?)

The historic roots of African public broadcasting lie in colonial times where there was some distance between the tightly controlled colonial government media and the high-flown public broadcasting rhetoric of some of the colonial powers. In the years after independence, a number of factors came together that made Government control of the media seem essential. Part of the challenge for post-independence Governments was the task described as "nation-building". Countries that were often fragile coalitions of different ethnic groups within sometimes arbitrary borders felt an understandable need to try and bring people together around a common understanding of national citizenship.

But however worthy this aspiration was, Governments soon found themselves trying to clamp down on any criticism or difference expressed through the media. This was sometimes defended on the grounds that it was more important for people to have food in their bellies than have the right to disagree about issues. Anti-imperialist rhetoric and a sensitivity to criticism meant that many Governments sometimes took control of the media to ensure that any opposition found it hard to find a voice. Cold War alliances meant that international Governments were keener on preventing countries falling under the influence of the communist Soviet Union than on stressing a regard for human rights and democracy. A concern for independent or public service media was simply lost as collateral damage.

State control of TV and radio was often matched by control of one or more national newspapers. Very rapidly the content of TV and radio became either the captive of the ruling party or subsequent military rulers: indeed, one of the first targets of any coup was control of a national television or radio station to announce the coup was taking place. Control over radio and television by the ruling party and its President meant in many cases that they had a near monopoly over information a country's citizens could obtain.

It is in this rather unpromising soil that any notion of African public broadcasting has grown up. So on the African continent there exists everything from the most tightly controlled state radio and TV (which is literally the mouthpiece of the Government) to broadcasters who make an effort to represent the views of the country's citizens to the Government and to each other. But there is no African country where the public broadcaster has the independence and autonomy to represent what might be called "the public interest".

Furthermore, the process of liberalising the airwaves that has taken place in many African countries has fundamentally changed the position of the African public broadcaster. The public broadcaster is one among many TV channels and is no longer pre-eminent. The impact of the digital transition will simply reinforce those changes and create significant challenges for the role of the public broadcaster.

In financial terms, there are only a small number of African public broadcasters who raise their income through charging licence fees to users. Because of income levels in Africa, these broadcasters only raise between 10-30% of their overall income in this way. The balance of their income comes largely from advertising with the occasional supplement from Government.

Advertisers have some very simple objectives: they want to reach certain kinds of audiences and be associated with different types of programming to reach those audiences.

The African public broadcaster has – however well or badly they achieve them – public service objectives that include: expanding the transmission area to reach more people; broadcasting in the vernacular languages of the country; commissioning local programmes; and providing programmes that are educational.

One of the African public broadcaster's bulwarks against audience decline has been its transmission network that is usually more extensive than its private sector counterparts. Thus it has been able to still lay claim to a larger audience despite losing significant parts of its urban audience. Alongside the basic public service objectives listed above, the African public broadcaster carries the burden of being the main channel of communication for the Government of the day.

In a liberalised media environment, the public broadcaster is no longer the sole player and audiences have a choice. Survey work shows that in these circumstances (with certain exceptions) audiences are more likely to trust private or NGO-run broadcasters. As a result, the audiences for the public broadcaster begin to decline and declining audiences lead to less income, making them more rather than less reliant on Government funding. A good example is the rising cost of football rights in a competitive media environment. This means that many public broadcasters are unable to afford key events like the World Cup and have had to go "cap-in-hand" to government for the funds to get them.

Private broadcasters have begun to steal some of the best clothes of the public broadcasters. The rise of vernacular radio in more liberalised countries has arguably changed the nature and scope of the public broadcaster. And in a smaller number of countries, private broadcasters have begun to use locally commissioned content (in local languages) as a strategy to increase market share.⁴

The digital transition simply reinforces these challenges. The digital signal carriers will make available (at a cost) extended transmission areas to all broadcasters, creating a level playing field. Even modest increases in the number of broadcast channels will add to the resources the public broadcaster will need to find. The fragmentation of audiences across more channels may also diminish its ability to raise advertising revenues unless it has a clear business strategy that will defend its existing audiences from competition and explain how it will develop new channels.

⁴ The example of the rise of Citizen TV in Kenya illustrates how this strategy works.

African public service broadcasters can either survive by reconciling commercial and public objectives in an unequal struggle between the two or they can take this moment to re-invent what they do, how they fund what they do and how they run themselves.

African Governments need to think hard about whether keeping the public broadcaster in its current form is either of benefit to the Government or its citizens. A public broadcaster that cannot reach a significant part of the population has a considerably lesser claim to legitimacy than one that can. Also in terms of news and information, citizens will simply turn elsewhere to get them if the public broadcaster denies it to them. Events in Egypt and Tunisia have demonstrated that there is arguably a decisive shift from "one-to-many" broadcasting to "many-to-many" channels when censorship prevents certain kinds of discussion taking place.

Before turning to the task of considering how African public broadcast might be changed, it is worth reviewing what public broadcast means and if and how it is relevant in African circumstances. The definition of public broadcasting below is based upon work done by the UK Broadcasting Research Unit (1985) and is very much a European vision of how public broadcasting works. The italic comments below are meant to put it into an African context:

i) Geographic universality (stations are available nationwide)

The challenge for African countries is to make television part of a universal access policy and to expand access to electricity more widely.

ii) Caters for all tastes and interests, including minorities

African public TV broadcasters need to ensure that they have coverage available in vernacular languages, including minority languages. The best are already achieving this goal.

iii) Reflect national identity and community

This goal is usually achieved by commissioning local, fiction and non-fiction output that reflects contemporary debates about national identity even if they are more expensive than simply buying rights for international programming. There is a history of considerable achievement by some African broadcasters in this field but current financial weakness undercuts their ability to continue doing so.

iv) Independent of vested interests and Government

This has been almost impossible to achieve in the African context and failure to do so undercuts the level of trust from citizens in public broadcasters.

v) Paid for by its users

The payment of the licence fee for the broadcaster demonstrates its legitimacy. In the African context, only a relatively small number of viewers can afford to pay a licence fee and thus the economic model for the public broadcaster largely depends on advertising and Government.

vi) Competition on quality programming, not audience numbers

This has been difficult but not impossible to achieve in the European context but is hard to achieve in Africa when there is such a heavy reliance on advertising revenues that means finding maximum audiences at nearly all times in the day.

Because of the history of public broadcasting across the globe, there is a confusion between the role and funding of the public broadcaster and the wider area covered by public broadcasting. The latter also includes public interest channels (sometimes called public access television), campus radio and community radio and television. In the African context, it is important to be clear that the public broadcaster may not represent the totality of what might be called “public interest” media.

In terms of changing African public broadcasting, there are many ways of approaching it and the options suggested below are simply ways of generating that discussion:

3.3. Making changes to the existing public broadcaster

The most major step that a significant number of African Governments could make would be to step back from the direct ownership of media: in West Africa, for example, there is the Ivorian Government’s ownership of *Fraternite Matin* and in Nigeria, various State Government’s ownership of newspapers.⁵ There is no public interest logic for the continued ownership of individual media assets or cross-media companies.

In terms of the public broadcaster, one of the key changes that could be made would be to create an independent board to allow for an element of “arms-length” governance by Government. This Board could contain a significant element of independent appointees (including members of civil society), in much the same spirit as the best run telecoms regulators have followed this route on the continent.

The Board would be part of the process of setting public and commercial objectives for the broadcaster and would be responsible for ensuring the organisation met these objectives. It would seek to ensure that the public broadcaster worked with a range of potential partners to improve both its content and its public interest funding. At moments where its coverage causes controversy, it would be the Board that took responsibility and acted as a firewall between the Government and the broadcaster’s management and journalists.

Whilst it would carry content that sought to maximise audiences, the public broadcaster would seek to innovate by doing things like: offering popular learning programmes; commissioning local drama series; and mounting professionally hosted talks and debate shows on key issues of public interest.

3.4. Expanding the civil society space

The not-for-profit community radio sector has grown enormously in Africa, providing different coverage, often in previously under-served areas. But community television on the continent is still in a much more pioneering phase. Currently there are two community TV stations: Cape Town TV⁶ in South Africa and Coastal TV in Ghana. Both are regional stations serving areas outside of the country’s capital.

⁵ Outside West Africa, examples would include the New Vision Group in Uganda, the Times and Mail in Zambia and Noticias in Mozambique.

⁶ According to SAARF, it has a daily evening viewership of 300,000.

Compared to radio, television is expensive to fund but there is no reason why more regional community TV licences should not be issued. A combination of advertising and external funding would provide a basis for creating community television stations that allowed a wide range of contributions and views. Again these might have Boards of independent trustees that would provide overall governance and transparency.

There is no reason why in a more plural media landscape that a licence for a national community TV station might not be offered, particularly as it could buy its channel signal transmission from an independent signal carrier. Existing broadcasters (both public and private) charge those with public interest programming for air-time and this kind of licence might provide a better opportunity to develop a coherent public interest channel.

3.5. Changing funding mechanisms

Currently, public interest media in Africa is supported in a number of different ways. Advertisers and Government put money into the public broadcaster. Donors and NGOs often fund both documentaries and fiction output which they then pay to get shown on television channels. Donors and NGOs are also significant advertisers in many countries. They also fund a range of different web sites that tackle a range of specialist issues⁷. A small number of Governments put money into encouraging local film production and these sometimes air on the public broadcast channel.

Although these different types of funding all supports public interest media, they do not necessarily all support the same kind of things. One way of strengthening public interest media would be to create a national fund that put money into programming that met the various public interest criteria outlined above. The Fund again would have a set of independent trustees capable of taking good decisions on programme proposals. Furthermore, the Fund could invest in programming for a range of platforms including mobile and the Internet. For example, the Kenyan National ICT Board already runs a local content development programme. Perhaps some of the proceeds of the digital dividend might go into a fund of this kind. The existence of a Public Interest Media Fund of this kind would focus interest and attention on whether these kind of objectives were being met more widely by the media.

3.6. Increasing skills and jobs in TV and film sector

African policy makers have tended to see media in terms of discussions around content and in relation to technological changes like the digital transition. Unlike their telecoms counterparts, African media regulators are not tasked with encouraging investment in the sector. Government involvement in ownership of media and politician's patronage of media have both encouraged the view that media is not really a business.

However, media in general (and television in particular) is an important sector for the overall development of a country's economy. The skills that are required to make programmes and the advertising that goes alongside them are 21st century skills. It is noticeable that even where relatively small countries have liberalised the television market, the quantity and quality of these skills is nearly

⁷ Though some projects have a wider audience focus: for example, stories on mobiles (www.yoza.mobi) and Young Africa Live on the Vodafone Live portal funded by the Shuttleworth Foundation.

always better than in those countries where there is only one television broadcaster. Furthermore, liberalisation has increased the number of people working in the media.

So television is an important source of jobs and growth in a healthy economy and things like fiction programming can be sold, both on the continent and increasingly, globally. The better skilled those in African television are, the greater the likelihood that they will have the creative skills to create interest in their country and to sell programmes about it. Advertising and marketing skills are vital for selling in today's global economy. The new African online media (whether delivered over mobile, PC or laptop) requires the kind of content skills that come out of producing media like television.

Given the importance of television (and its near relative film), it is important that policy-makers and regulators have strategies do two things: firstly, create the pathways and structures required for people to learn and improve their skills; and secondly, to attract investment into the sector to help it grow.

This requires the same kind of holistic working that has been necessary to grow the ICT sector. The Education Ministry that is responsible for funding media training will need to work with the Ministry responsible for working with media companies. Just as making the digital transition in broadcasting happen requires Task Forces or Committees that bring together private and public stakeholders so will the development of media as an industry.

Some countries – like Kenya⁸ and South Africa⁹ – already have in place structures of this kind, whilst others – like Burkina Faso¹⁰ – play host to key industry events. Countries like Nigeria have discussed setting up these kinds of structures and there are continent-wide organisations like the Africa Media Initiative¹¹.

The policy objectives for bodies of this kind might include some of the following:

- Creating a digital and creative economy;
- Providing support for companies and individuals to develop new skills and to produce audio-visual content of the highest quality;
- Supporting events (like festivals and trade shows) that promote the profile of the country's content;
- Network media producers with sources of finance and business skills, encouraging investment in the sector.
- Help "old media" respond to the challenges of new media.

As Africa increasingly has access to cheap international bandwidth through fibre, the challenge for countries is to develop local content that can be used across all forms of media.

3.7. Encouraging local content (externalizing production?)

When international programmes like telenovelas can be bought for as little as US\$200 per hour and local productions cost between US\$6,000-10,000, there is little commercial incentive to produce local content.

⁸ Kenya Film Commission.

⁹ National Film and Video Foundation

¹⁰ FESPACO

¹¹ <http://www.africanmediainitiative.org>

Although there are examples (like Citizen TV in Kenya) of private television companies that have used local content as a strategy for growth, the number of examples thus far is very small.

Therefore in order to encourage local content – both non-fiction (like news, documentaries and debates) and fiction (drama, soap operas, etc) – policy-makers need to consider whether it makes sense to have a local content quota imposed on their local television broadcasters.

Local content quotas of this kind are usually imposed by specifying a percentage of material that needs to be produced locally. Sometimes this content quota is imposed across a certain time portion of the schedule: in the case of Nigeria it covers the prime time evening viewing hours. South Africa has a very complex local content quota that also specifies output in particular languages¹². It may be important within the quota to specify how much of the local content has to be newly produced and how much can be repeated programmes.

The policy objective of such a local content quota is two-fold: firstly, it encourages local production that allows people to see themselves reflected in the programmes they watch on television. Far from being an imposition, local television content is always more widely watched globally where there is a choice. Secondly, the production of local content helps build a local production sector ecology with all the skills required to help it become fully professional.

However, by itself a local content quota may not allow a fully professional production sector to grow up. Most Africa television companies are still vertically integrated: they do everything from making the content to transmitting it. The difficulty with this model is that the “creative gene pool” of ideas is limited to the people employed by the television companies.

There are external independent production companies and freelance producers but they get few opportunities to make a lot of productions as most are produced “in-house” by the television companies. Therefore, the level of skills both inside and outside the television companies remained limited.

The UK regulator Ofcom enforces a 25% independent production quota on television companies: in other words, television broadcasters have to commission and produce 25% of their programmes from independent production companies.

It makes this market intervention for three reasons: it believes that the vertical integration of television companies restricts viewer choice; without the quota, independent producers would have little or no negotiating power the television companies; and because of the geographic concentration of television companies.

The impact of this intervention in the UK was to create a service sector, where all of the different skills in the production ecology could be hired outside of the TV companies: for example, companies were created that offered post-production and studio hire.

¹² Review of Local Content Quotas, ICASA, 2000. This document does not describe the present quota but gives a feel for the complexity of the the country’s quota system and its history.
www.info.gov.za/view/DownloadFileAction?id=70333

This independent production quota is another way of driving the development of television and film in those countries that already have larger sectors of this kind. But it can also be used to start a developmental growth process in much smaller markets.

3.8. Encouraging interactivity between broadcasters and viewers

There are now two broad types of media: "one-to-many" (like newspapers, television and radio and their online equivalents) and "many-to-many" channels (like blogs, Twitter, YouTube and Facebook). The "one-to-many" broadcasters have incorporated elements of the latter like "citizen journalism".

The challenge for "old media" in Africa is that (with the exception of radio) access to it is unevenly distributed: in other words, not everyone gets to take part in the conversation. Newspapers and television are still largely urban phenomenon. Newspapers are largely bought by the wealthier and read by the more educated. However, increasingly newspapers are being read on the Internet, either on the office PC or a mobile phone.

It is the mobile phone that offers all television broadcasters a bridge between their current reach and a wider distribution. Mobile phones have almost the same penetration footprint as radios. Until recently, most phones could only send SMS text messages. But the number of smartphones and feature rich phones will increase over the next 5 years and will probably be a majority of users in larger countries and a significant minority in smaller countries.

Mobile Internet offers users the opportunity to access interactive media like Twitter, Facebook and YouTube. A mobile can also have a radio in it and there are cheap handsets that have terrestrial TV signal receivers in them. This is not to suggest that mobiles will be a substitute for having access to television (in the home or elsewhere) but it will allow a wider distribution of television content. But they will also allow citizens to send news video clips and opinions from their phone which can then be rebroadcast.

Policy-makers and regulators need to encourage interactivity between broadcasters and viewers because it allows citizens the opportunity to put their views to makers of television and to correct things they think are wrong. Broadcasters need these interactive channels to keep in touch with their audiences and to build a sense of loyalty amongst them. Part of developing a lively and creative digital economy is to encourage a wide range of citizens to contribute to and debate with those who appear on TV broadcast channels.

ⁱ 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/>