

CHAPTER I

INTRODUCTION

Background of DSO in Nigeria

In its background study on the Nigerian broadcast industry, titled Developing a High level frame work for DSO, the Mediaator (2013) reported that Nigeria's broadcasting sector is highly dynamic and serves tens of millions of television households in Africa's largest country. It states that economic growth, competition and technological developments are driving rapid change in every value chain.

The study notes that for regulators, this presents a set of emerging issues that need to be addressed through the modernisation of existing frame works and that the key enabler for a healthy and sustainable media ecosystem will be digital switch over.

In a follow up study Mediaaator UK (2014) states that Nigeria currently has 155 analogue stations mostly operating on a regional state basis - the report notes that there is no truly national spine of TV channels and 70 percent of the population have access to 4 or fewer TV channels. It further notes that analogue TV content is relatively weak and the pay DTT platforms offer a few new digital -only Nigerian channels primarily in entertainment. That the Nigerian TV advertising market at the time is worth 200 million dollars leaving little for high quality TV channels, that Nigeria's TV ad market significantly underperforms other emerging markets - bringing it into line could be worth hundreds of millions of dollars more.

The report quite significantly notes that getting the TV ad market to work is essential for the creation of a viable digital broadcasting eco-system.

DIGITIZATION

Digitization is the process of Conversion of analog information in any form: text, photographs, voice, etc. to digital form with suitable electronic devices, such as a scanner or specialized computer chips, so that the information can be processed, stored and transmitted through digital circuits, equipment, and networks.

According to Digitag (2012) Digital switchover (DSO) is described as the process of launching the DTT platform and switching off analogue terrestrial television platform. The Digitag report states that National administrations in Europe, Africa and parts of Asia agreed to this process at the ratification of the Geneva 2006 Agreement which put in place an all-digital plan for the use of frequencies in the VHF (173 MHz to 230 MHz) and UHF (470 to 862 MHz) bands. This plan, which entered into force on 17 June 2015, has served as an important impetus for countries to migrate from analogue to digital technologies.

A digital television is a TV broadcasting system that can transmit images with 720 to 1080 horizontal lines of resolution as compared with 480 lines of the ordinary (analog) television system. Digital television offers interference-free, CD-quality sound and multiplexing of up to 6 channels under one bandwidth.

The digitization of broadcasting in Nigeria as mentioned earlier is pursuant to the International Telecommunications Union (ITU) Radio communication Conference of 2006 (RRC-06) and the subsequent Geneva 2006 Agreement (GE-06), which recommended the transition from analogue form of broadcasting to digital by June 2016, by all countries in the world.

The Digitag report further notes that-however, experiences have varied between countries. Different approaches have been implemented based on local requirements and resources available. In Africa and parts of Asia, pay-Digital Terrestrial Television (DTT) platforms have emerged as key stakeholders in the DSO process while in other countries, most notably in Europe, public service broadcasters have driven roll- out of the DTT platform based on an extensive free-to- air television offering.

In India for instance, digitization process that is being extensively implemented has started promoting transparency and has begun to usher in new era envisaged for broadcasting in that clime. The biggest gain of digitization which is transparency in the broadcasting sector will increase investments, encourage cleaner and innovative businesses and above all give consumers a choice of a-la-carte channels. It is envisaged that Nigeria like India will implement the digitization process in phases the way we implemented cashless policy in geographical or state locations.

According to Visalat Baseline study (2016)the UK's switch to digital television was the biggest single change to broadcasting for a generation. It delivered more choices for millions of viewers and made way for new services that will confirm its role as one of the global leaders in broadcasting and creative industries. The switch over in the UK started in 2008 and in the end of that year only 0.3 percent of the household switched over. By the end of 2010, 7.1 million homes or 27 percent experienced the DSO and by the end of 2012 the DSO was 100 percent completed and almost all the 26.7 million homes switched from analogue to digital broadcasting.

The Visalat Baseline study notes that in 2006 OFCOM estimated the benefit to the UK economy from spectrum released by switching off analogue TV signals will be between 5-10 billion pounds. Ebuebu (2016) commenting on the Switch over in the UK states that they have completely switched over. He says that he could see the value that has been added beyond just the free box that you get. 'They have put pay TV, internet, video on demand, the component basically, voice data, all of that together is in one box.'

Digitag (2012) notes that all over the world, countries are converting their analogue terrestrial television platforms to digital. After decades of analogue television, digital is being introduced and the analogue platform shut down. There is no gain saying that the switch to digital television is no easy feat. First of all Digital frequency plans must be put in place and coordinated with neighbouring countries, secondly , viewers must change their television reception equipment and many transmission sites must be upgraded over a relatively short period of time. The cost of the process can be high, depending on the size of the country and the number of viewers affected by analogue switch-off. According to Digitag, it is for this reason that the process has been most successful when managed in coordination between all broadcast industry stakeholders, including broadcasters, manufacturers and network operators, national regulators and governments. Together, tremendous benefit can be achieved through digital switchover. These benefits include an increase in efficiency in the use of spectrum and the launch of new services for viewers, which in turn, helps to secure the future of the terrestrial television as a viable economic platform. As countries increasingly adopt digital TV technology, analogue TV will become obsolete, making its maintenance difficult and costly.

BENEFITS OF THE DSO

A major benefit of Digital transition is that Digital technology offers greatly increased spectrum efficiency on the terrestrial television platform. In a given frequency channel, intended originally to broadcast one analogue TV service, digital permits between 4 to 22 digital television services to be accommodated, depending on the technology used and the quality of services desired. Viewers have nonetheless been able to access many more and new television services.

With the inevitable pressure on the scarce resource of frequency spectrum, more efficient use means that some capacity, the so-called digital dividend, has been made available for new types of services. In Africa and Asia, according to the Digitag report the digital dividend will allow for the launch of mobile telecom services using frequencies in the 700 MHz and 800 MHz (694 to 862 MHz) bands.

Digital Television will without doubt be perhaps the only way to secure the future of Terrestrial Television. Traditionally, the terrestrial platform has been the cornerstone of free television services. National and local broadcasters depend upon the terrestrial platform to reach their viewing public. Despite the availability of many other television delivery platforms such as cable, satellite and Internet Protocol Television IPTV, the importance of the terrestrial platform remains. It is one of the only television platforms to offer viewers access to local content. Services are generally offered either for free or for a modest subscription fee, depending on the service package selected.

Digitag observes that in many countries, the launch of digital technology has helped revive the terrestrial television platform. The availability of a new multichannel service offering, often freely available, has enabled the terrestrial platform to successfully compete with other methods of delivery. New broadcasters have entered the market, increasing competition and viewer choice. It has also enabled governments to put in place the necessary regulations to ensure the availability of local content, media pluralism and viewer protection. In many European countries, broadcasters have offered new content in a multi-channel approach while broadcasters in the United States, Japan and Australia have concentrated on offering high-definition television services. In Africa, pay operators have emerged as key stakeholders on the DTT platform and offer extensive, and competitive, pay - DTT packages while in Asia, plans are underway to offer extensive free-to-air services.

Another key benefit will be that DTT offers fresh opportunities for change of broadcast technology and equipment away from the analogue equipment that is getting obsolete and difficult to maintain. As the demand for analogue services and products decreases, manufacturers will no longer produce professional and consumer analogue equipment. Prices will increase as it will no longer be possible to benefit from economies of scale. The equipment in use will need to be maintained yet few technicians will be trained to do so. Instead, analogue equipment will become increasingly difficult to source and expensive to maintain. Technical innovation will stop since resources will be diverted away from research and development of analogue equipment towards the growing market for digital products. Countries that do not undertake digital switchover will find it increasingly difficult, and expensive, to source and repair analogue equipment. The status of digital switchover is changing rapidly. In 1995, ISDB the United States became the first country to publish a DTT standard, known as ATSC. It was soon followed by the development of the T DVB- and standards in 1997 and 1999. Since then, countries around the world have launched their DTT platforms based on using one of these three standards. China has its own digital terrestrial TV specification 'DTMB', which was standardised in 2006. Around the world, nearly all countries have formally adopted a DTT standard and most have launched DTT

services. In North America, Europe and some parts of Africa and Asia, analogue switch-off has been completed. Most other countries have targets to complete the process between 2015- 2020.

Maduka (2014) notes that obviously, digital broadcasting has many advantages over the analogue. Programme presentation would be well improved by the time analogue is over. These are true in terms of clarity and quality of signals and spectrum efficiency. According to him, some stakeholders argued that since technology has opened a world of possibilities for broadcasting, a huge spectrum will be available for radio and television broadcast in the country. As a result, more frequencies or wavelengths will be available for television stations in the country. It will also afford the industry opportunities for interactive broadcasting as the television sets would now do much more than just receive signals.

In fact, digital television signals in particular will be clearer and stronger in their audio and video output. It is worthy of note that television sets would perform the tasks of computers and telephone handsets, under digital technology. This implies that, TV sets would be able to provide access to the internet. It would also be able to store data from received audio and visual signals. In essence, the ephemeral nature of the, broadcast media would have been reduced, if not eradicated. The broadcast media would begin to have catalogue value.

But the DSO is not without demerits according to Maduka - the main challenge of digital broadcasting lies with the actual migration from analogue to digital. Although, other challenges rest on this one, the issue of meeting the set deadline is something to worry about.

In Maduka's view, a critical consideration on the DSO is who gains and who loses by the process of digitization: He identifies the following as beneficiaries of the Digital Switch Over.

a/CONSUMERS:

Will they gain? Yes and No. It's great for those who can afford it, but for the lowest common denominator already burdened with rising salaries and falling incomes, it's going to surely pinch. Digital broadcasting will afford the viewer's more programming choices arising from efficient spectrum utilization. Digital broadcasting will play a vital role in information dissemination due to its high receptivity, vast coverage and efficiency. The viewers are going to receive clearer pictures because digital broadcasting promises television pictures that are as clear and crisp as a Cineplex feature. There will be optimum utilization because viewers will be able to receive multiple channels from one station. The variety will, therefore, enhance the gratification efficiency of broadcasting.

More so, digital broadcasting enhances media convergence which affords the audience to use TV in conjunction with telephone, computer and other information and communication technologies. The technological possibilities of digital television are immense. It could provide the broadcast of theater quality sound and picture via cable, antenna or satellite; multicasting which enables the transmission of multiple programmes within one digital signal; and signals for data communications that could potentially bring to TV the capabilities of web pages and interactive compact discs. Digitization provides not only chance for consumers to get different content but also a chance for them to get broadband connectivity, which will bring a great information revolution.

Digitization will provide choice of channels to consumers-through a-la-carte selection, provide high quality service, controlled pricing of pay channels and thus lowered billing to consumers. Consumers will

only pay for what they wish to watch. Consumers will get internet video-on-demand and value added services through set-top-boxes.

b/BROADCASTERS:

The broadcasters are going to enjoy an era of cost effectiveness with digital broadcasting. This is because; a station can carry up to four channels on the same frequency. Also digital programme productions are flexible and faster than the analogue. Again, stations may generally rely on syndicated programmes because the digitalization process encourages equal opportunities that result in healthy competition. Consequently, this will delineate content, multiplexing and transmission.

However, the amount of money spent on salaries and maintenance and infrastructure will reduce because digital technology does not go with bulky equipment. And few people are required for the manipulation of such equipment. It was on this basis that private media practitioners support the cost effectiveness of digital broadcasting. The personnel needs of practitioners in a digital broadcasting era will be far reduced. For example, in the analogue master control and programme injection room where about 12 people working at a time is needed, only one person will be needed in a digital era. By so doing the practitioners can make more money. Digital radio gives more business opportunities for radio stations.

Digital broadcasting equipment will enable the simultaneous transmission of a minimum of four programmes and four channels from the same station that used to transmit only one programme or channel in the analogue transmission. Moreover, digital television offers variety of added services such as multimedia, banking, home shopping and faster rates of data transmission or data casting. Content-makers will now get the money they ought to get as they will know how many people are subscribed to their channel, but no longer will they be able to give the spiel of millions of viewers watching their channel without the relevant proof. There is also possibilities that they will save some of the carriage fees paid to the Signal Distributor or Multiple System Operators (MSOs). Digitization is good for broadcasters as it will not only bring subscription revenues in line but will also enable broadcasters to launch new channels since there will reduced the carriage fees.

c/SIGNAL DISTRIBUTORS (SD) OR MULTIPLE SYSTEM OPERATOR

Monies coming from carriage fees will take a beating, though it won't vanish entirely as some revenues from placement etc. can be made. The incomes of Multiple System Operators (MSO) could rise with better reporting from the Local Cable Operators (LCOs). It is great for MSOs as they will get fair revenues from customers after having invested in the boxes. Foreign Direct Investment FDI will also flow into the country too since the MSOs can now look for investments.

d/LOCAL CABLE OPERATORS(LCOS):

While quality of content will mean greater number subscriptions to niche channels and hence more commissions, the overall revenues of Local Cable

Operators will reduce as the set-top boxes will mean zero unaccounted connections, unless of course there are pilferages .Digitization has been described as the biggest step in the broadcast industry For Local Cable Operators LCOs, revenues will go up when they offer services like cable modems and broadband connectivity. Even some of the small local cable operators will not be rendered unemployed

as some have predicted because there will be transparency and correct accounting of their channels viewership. Even others smaller groups but with key channels could also flex their muscles. The big leagues of Direct to Home DTH Operators with niche channels in their bouquets or folds will be the biggest gainer.

e/CONTENT PROVIDERS:

The content providers do not only have increased avenue for legitimate exploitation of works and avenue for airing programmes, but increased demand for all genres of programmes to fill the additional programming demands in the increased available channels. As the existing broadcast stations start increasing the number of channels resulting from the digitization process, the demand for programme or contents will increase. Consequently, the content providers will be well engaged in the bid to satisfy the numerous stations that will be yearning for programmes. This will create competition which will result to quality content provision. At the end, the content providers will maximize profit. They will now have a better idea of the reach with their contents and this will provide them greater power to be able to negotiate harder with content buyers.

f/REGULATOR:

The regulator, in this case, NBC, will be acquiring increased revenue that will be accruing from additional licenses. On the long run, specialized areas of broadcasting will be encouraged, thereby addressing areas that were hitherto neglected by commercial broadcasters. In addition to this, digital broadcasting will enhance the full propagation of local content being emphasized by NBC. Also, the clamor for community broadcasting will have reduced setbacks because with the multiple channel approach, some of the channels of a station could be community oriented. In fact, the benefits of digitization are not limited to the ones presented here; they are numerous.

Government will get more money through tax on all connections as no under-declaration will exist, and that there will be no ambiguity in content acceptability rating. Digitization will be a big leap for everybody involved, either as an advertiser, as a businessman, as an agency or regulator.

When the transition is fully completed, the spectrum will be freed up. Thus, the spectrum can be applied to other services. The desire of government through NCC is to generate money by auctioning spectrum space and the implication will be that a huge spectrum will be available for radio and television stations in Nigeria. This is because, digital transmission enhances limited spectrum use, however others argue that if broadcasters opt to devote their entire spectrum space, as technologically required, to the transmission of high definition images, they will lose audience share to cable, the internet and DBS, all of which offer multiple channels of programming and data.

g/CONTENT

Storytelling in a digitized era brings stories to the moment. It combines traditional narratives with new technology. The story is told through text, pictures, voice, music and different kinds of transitions. Interactive elements may also be included. We no longer sit around the campfire to listen to legends of old. We are connected by the glow of screens. Digital storytelling will provide something bigger than an individual viewing experience, in corporate presentations, ad spots or descriptions of the lives of individuals. The community aspect of this lies in the shared reality, in the momentary loss of the sense of time. For a while, the viewer is part of a bigger unit; the world of a company, or a specific atmosphere.

The rest of the world stops. There is the moment, the emotion and the illusion. The digital reality. In digital storytelling, the voice of the narrator is heard in the selected materials, the narrative logic and the method of progress. These elements come together to form an ensemble with its own rules. The story gets a unique feel. Digital storytelling combines emotions with technology. It is not just technical solutions, a set of pictures or narrated text. It appeals to the senses and requires presence.

h/EDUCATION AND RESEARCH

It is almost a cliché now that digitization era will demand more contents from the content producers. This simply means that they must become more creative in their source of resources for content creation and generation. The most popular genre of contents in Africa that has been well received everywhere is telling African stories either as drama and or as documentaries. The popular Nollywood is founded on telling simple Nigerian stories. Therefore in-house sourcing of materials; human and otherwise will be prevalent in a fully digitized Nigerian Broadcasting society. This in-house sourcing of materials are not new in Nigerian broadcasting circle. We have seen the instances where Scriptwriters, Actors, Directors, Camera Operators etc. are sourced from staff of a broadcasting organizations when there is need. The good thing is that such staff were not original hired to do that task which they performed and saved so much money for the project. Again, we are told that in the digitization era, that multi-tasking among staff will become one of the criteria for retaining jobs. Workers in the broadcasting and other media will be required to have multiple skills that can make them resourceful and economical for their employees to continue to need their services. Synergy with education institutions in the creation of contents is recommended as a way of managing and optimizing resources.

i/MARKETING

At a rapidly increasing rate, the consumers today will be looking to digital channels for content. As the prevalence of on-demand distribution services grows, consumers services will grow, consumer's use of an ever-expanding set of devices, including phones, computers, tablets, and game consoles, to access those channels will also grow tremendously. Much of this growth will involve video and animations; and video usage will expand rapidly. The average U.S. consumer spends more than 158 hours each month watching television at home and it is expected that as much percentage of Nigerian consumers will be doing so in a digitized Nigerian media era. Meanwhile, content consumption via other devices is also expected to rise. This development will create a strong demand for new and backlist titles in digital formats. Finally, users will no longer be satisfied with passively watching video or reading printed news and books. They will want to be active and engaged, participating in communities, interacting with media, building relationships with one another, and using traditional media as their own entry points to the public sphere, showing off their ideas and creations.

Evolving consumer demand and the increased accessibility of content will change the playing field for traditional media companies; to compete, they need to build or expand their capabilities. This will mean transforming their content management and workflow platforms, processes, and distinct organizational structures that support legacy and emerging channels. But implementing these changes will mean no small task. It is envisaged that some major transformations from traditional media to emerging digital tools are going to create technology and operational challenges for media companies. The change from traditional to digital tools will affect the production of video content specifically. First, the number and type of content sources will mushroom - for example, from a relatively small group of film and video production companies to a seemingly infinite number of them. These new producers will use a variety of

devices to capture image and sound, including mobile phone cameras, consumer video recorders, Webcams, and smartphones.

The capacity and efficiency of digital storage mediums will far outstrip what was previously available. In addition, cloud computing and generic hardware- software combinations will begin to replace older information processing methods, even those within the walls of an enterprise. Dedicated, purpose-built hardware infrastructures will then shift into the software layer. Next, automated workflow technologies will replace more labor intensive manual processes for editing and cataloguing content, thus streamlining production.

In addition, the number of distribution channels will increase exponentially with Web-based services such as iTunes, YouTube and others. Finally, consumer platforms for viewing content such as television and film would have gone from few to many with the emergence of mobile devices such as tablets and smartphones. This shift from traditional media to emerging models is going to present challenges for media companies and create opportunities to cut costs while growing stronger and more competitive.

Again, the traditional marketers have long championed the idea that content is king, and for most content makers, it seems logical that if you create relevant and valuable content, you are better positioned to engage customers and increase leads. But how will this concept change in a digital era in Nigeria which is going to move and churn out information at a pace that no one could have ever conceived? How can companies continue to communicate in a way that is both impactful and persuasive? These are questions begging for answers.

In the United Kingdom, the print business in particular is an example of a mammoth industry which has had to dramatically adapt more than any other to changes in how people search for and interact with content on a daily basis in a digitized society. UK national newspaper the Daily Mail has always had a high circulation on UK soil, but it has been with the Mail Online that the publisher has been able to make its mark on a global scale. Last year, it was announced that the Mail Online receives more traffic than any other news site in the world, and with recent plans announced for digital expansion in the UK, it's difficult to imagine its digital following wavering any time soon. Meanwhile, Nigerian newspapers have begun online publication and have had an enormous impact on the way we view news without ever having a hard printed copies.

It is undoubtable using examples from climes where digitization had taken place, that digital spending looks unstoppable and is expected to increase tremendously in the coming years not only in the UK but in Nigeria. With envisaged increasing social media referrals, social media and web content will be recognized as moving beyond being considered a fad to a serious opportunity.

With social media like Facebook or Twitter, media content consumers in a digitized era is faced with hundreds of messages and avalanche of news stories every day. This means that media content in a digitized era in Nigeria will get strong attention not just in Nigeria but around the globe. All it will take is to have a unique content. Drawing from the experience of the Mail Online in the UK, there will be a market for Nigerian journalism overseas. In a digitized era, all that matters is the good quality journalism. Good quality anything which is a relative term will have a market in a digitized era.

Digitization and digital tools will change how we write, package and deliver our contents. For instances, digital advances mean that we email, text, blog and chat on social media on a regular basis throughout

the day, demanding in fact that we communicate via the written word more now than in any other point in human history. As businesses and news outlets in particular try to create stories that get shared around, the ones who produce the best content continue to come up trumps. So digitization instead of changing the concept that content is the king will only re-emphasize it.

But as the internet continuously pumps out more unfiltered digital content, it is important to point out the significance and how important clear and engaging messages can be in successful marketing. With digital spending growth already representing a quarter of the entire UK marketing economy, the power of good content has never been more important. Good content is credibility, especially on the internet. So whilst the world of communication moves at an incredible pace, it will never race beyond its own reliance on perfectly chosen content.

As we await the full coming of digitization, content marketing in digitized era keeps growing more popular, but there's one question we keep hearing from the people: *"What's so new about content marketing in a digitized era? If you want the answer urgently, I will tell you that it is just what good marketers have always done.* So there is nothing new here. Content has always been an important part of many marketing plans (generally the better ones). But clearly, in a digital era as we find ourselves today, something unique is going on along the line. This same something has changed those little things we've always done in marketing into the big, voracious thing that's eating up every budget. This thing that has happened to release the beast we now know as content marketing is the internet.

Just as the internet changed old-school marketing into the data-devouring digital discipline we all practice today, it also has transformed old-school content marketing into a completely new animal. And it's this new species that everyone is getting so excited about. Content marketing in the digital era therefore still deals with packaging up your expertise to help your prospects do their jobs more successfully, suppressing the product-flogging urge so you can talk with prospects about things they care about and ultimately, putting buyers and their needs first, above the needs of the brand and its marketers.

So if the internet didn't change the fundamental aspects of content marketing, what did it change? Internet changed pretty much everything else. Before the internet, content was one of marketers' sharpest arrows. Now, in the digital era i.e. the era of the self-educating buyer, it's got the precision and power of a nuclear weapon. So content marketing in a digital era has become next-generation content marketing.

j/NEWS AND FEATURES

Digital era has changed the way we research, create, target, distribute, promote, and measure our content marketing efforts in many ways. This is going to affect the news features, human angle stories and other contents.

So the question is in the digitized era, how can we produce and market human angle stories so that we can reach the envisaged vast audience of the time?

Research: We should use search and social media to instantly research topics, as well as to survey what's already out there. The digital era will provide content makers instant tools to research and determine contents that can have tremendous impact on any target audience.

Creation: Content in the analogue era used to be all print-based other than what was created for in-person events. In the digital era, most of the action will be centered on digital content - like eBooks, blog posts, videos, graphics, Slide Shares, Prezis, and podcasts. With this potentials for unique content creation potentials, digital era offers more access to more audience anytime and anywhere simultaneously.

Targeting: Unlike analogue contents digital tools and insights can be used to segment our messaging by categories like products, personas, buying stages, and interests. With digital technology, we can even narrow the audience field down to a segment of one, if we so choose. The potentials of digital technology can track, create and target content even down to one consumer.

K/DISTRIBUTION

Unlike the analogue era where distribution is limited to a limited audience, the digital era will offer and has started offering potentials to link numerous audiences through, emailing, uploading, embedding, and streaming our brand stories. In the digital era, we shall no longer solely be in charge of who receives our messages or when and how they find them: Our content is being discovered via highly specific searches conducted by people we've never even thought about targeting. These contents will be consumed on laptops, smartphones, tablets, and even on the inside of eyeglass lenses.

Promotion: As marketers, we shall go far beyond broadcast mode: We shall be sharing content on Twitter, in LinkedIn groups, in Google+ circles, and on Facebook pages. We shall be using it in lead nurturing flows, drip campaigns, in triggered behavioral shots, and in dozens of other innovative ways.

Measurement: We shall immerse ourselves in the data produced in Google Analytics, marketing automation tools, and other search engine dashboards. We shall be able to measure everything that can be measured and then some, and use the insight we receive to sharpen our strategies and tighten our tactics for our next efforts.

The bottom line here is that what everybody will be doing during the full digital era of broadcasting will not our grandmother's content marketing, it will be fast, fluid, targeted, transparent, interactive, intelligent, visual, visceral, and *virtual* content marketing.

Before the internet, it takes months to research and produce contents and when we eventually produce, they come out expensive and reached only people we know. It took weeks to get our contents to people who need them and we cannot track and say for sure if the content reached the target audience nor how the audience used it. More importantly, we didn't have any way to quantify what impact our content makes or whether it was worth the investment. The result was that content efforts were given little or no budget.

In the digitized era, content marketing can be instant, low-cost, highly targeted, easily discovered, cheaply distributed, widely promoted, and tracked to within an inch of its life. We can monitor each piece from ideation all the way to revenue, and quantify the returns with a measure of certainty. What used to seem like a pretty good idea is now being recognized as the indispensable core of most marketing programs. The internet made that happen, and now it's up to us to keep it moving forward. Internet is the only thing new about content marketing in the era of digitization.

Digitag (2012) in DTT Service Offerings, note that the migration from analogue to digital technology on the terrestrial television platform makes it possible for broadcasters and operators to offer viewers services that had not been possible in an analogue environment. Countries have launched different types of services depending on the needs of their market. In general, countries with a high penetration of terrestrial broadcast services have replicated and improved the existing offer on the analogue platform. As a result, viewers have a much wider choice in the number of television channels available, whether for free or as part of a pay platform. This has been the case in most parts of Europe, Africa and Asia. In other countries, such as the United States and Australia, broadcasters have made their channels available in high-definition (HDTV) and introduced multichannel sound to accompany the improved video quality. The DTT platform has also made possible the launch of new ancillary services such as electronic programme guides (EPG), personal video recorders (PVRs), interactivity, and enhanced Teletext. The adoption of interactive standards, such as HbbTV, allows for a combination of broadcasting and broadband technologies to expand service offerings. In Kenya, the telecom operator Safaricom has launched a DTT receiver that also provides an Internet connection.

The DTT platform provides flexibility in the robustness of reception of television services. Depending on the reception mode selected by DTT planners, it is possible for viewers to watch television from a portable, handheld device or using a small indoor antenna. In some countries, the penetration of smartphones and tablets is increasing rapidly. These devices can be used as a means for users to access television services so long as providers offer handheld reception.

In Africa, national administrations can try to leverage regional coordination in the development of content. As a leading content producer in the world, Nigeria can help develop pan-African content that can be used by other countries, especially in English-speaking countries where content is lacking on the DTT platform. The pan-African pay-DTT operators Star Times and Multi Choice have successfully benefited from regional harmonization to implement their turn-key DTT service solutions in many countries.

CHAPTER 2

EVOLVING THE DIGITAL SWITCHOVER: BROADCASTING POLICY AND LAW IN NIGERIA

DIGITAL SWITCH OVER IN NIGERIA

In recognition of the urgent need to set a transition date, the former President of the Federal Republic of Nigeria, His Excellency, Late Alhaji Umaru Musa Yar'Adua approved 17 June 2012 as the switchover date or deadline in Nigeria. He followed up this action by setting up a Presidential Advisory Committee (PAC) on the transition from analogue to digital broadcasting in Nigeria. The Committee was set up to provide advice on the implementation of the digital transition. The Committee later submitted its report with laudable recommendations. Amana (2014) at a retreat in Enugu recounts that this committee submitted its report in 2008 with a well-defined road map that would have seen Nigeria completing the Digital Switch over by June 2012. He however notes that unfortunately because of political problems, the government of Nigeria could not address the implementation of the recommendations of PAC Report till 2012.

The recommendations of the PAC report formed part of the Government White Paper on the Transition from Analogue to Digital Terrestrial Television (DTT) Broadcasting. Some of the important recommendations cover the following-

- (i) adoption of new broadcasting model which involves the splitting of broadcasting services into Broadcast Content Provision and Broadcasting Signal Distribution; This is radically different from the current trend where the broadcaster does programmes production and transmission.
- (ii) restructuring of the licensing framework in the broadcasting sector; to reflect the structure above.
- (iii) management of digital dividend spectrum (DDS); (that is money that will come to government from the lease or sale of the broadcast spectrum which may be freed up and become available for telecommunication arising from the digital compression of spectrum).
- (iv) technical standards to be maintained in the transition.

It also recommended the use of local manufacturing companies to produce set-top-boxes (STB) for the transition among others; In Nigeria, the earlier switch over date of 12th June 2012 was not achieved due to a combination of militating factors -First the white paper itself was not released until May 2012, the year that was set date for the transition. This was due largely to unforeseen bureaucratic delays which made it impossible for the Federal Executive Council to consider and approve the white paper.

DigiTeam which was established to drive the implementation of the white paper could not hit the ground running, they couldn't raise the needed funds which would have enabled them to operate effectively and efficiently. Secondly, conversion from analogue to digital requires infrastructure to broadcast the signals and for each home to have a digital set top box (STB) which converts their TV from analogue to digital. This again requires a lot of funding. According to a survey conducted by the NBC

Nigeria requires about 22 million Set-top boxes to meet the requirements of reaching analogue TV set owners that will transit to Digital TV.

The White paper states that -an approximate seed funding of 60 billion Naira was required to navigate Nigeria's DSO, this will include cost of infrastructure, subsidy for STBs, software, training and publicity.

It is perhaps necessary to mention the consequences for Nigeria not transiting from analogue to broadcasting as the rest of the world is doing Firstly, the ITU treaty governs the use of spectrum in each country to avoid neighbouring countries from interfering with each other's signals. Failure to follow this treaty leaves a country's TV, radio and mobile signals open to interference and obstruction. In addition non- conforming countries will have limited capacity available for mobile telephony and broadband.

But the benefits of the Digital Switch over are very compelling. The Federal governments idea of Digital Terrestrial Television is one which there is free digital TV service called Free TV - based on Free view rather than requiring pay TV subscriptions. Therefore the government is providing support for the Free TV Set -Top Boxes also called decoders down to an affordable retail price of N1500 (\$7.50).

- i) Nigerian viewers will get a great free TV service with up to 30 channels laden with sports -News -documentaries and other programme types for only N1500.
- ii) Viewers should also be able to receive all pay TV content through the one STB, if they so desire.
- iii) Governments (Federal, State and local) will have an information outlet to every home through the interactive news and information service.
- iv) Nollywood will have a safe and profitable distribution channel direct to 20m+ homes through the STB with no piracy risk. This will generate what (Naira 112,500,000,000) or \$250m pa of extra income for Nollywood.
- v) The broadcasting industry and digital economy will grow by (Naira 450,000,000,000) or \$1bn per annum through increases in advertising, Nollywood income and value added services. It will offer uncountable opportunities for jobs in the broadcast industry and other ancillary industries.
- vi) The prevention of grey STB imports will enable Nigerian STB manufacturers to build a thriving industry.
- vii) The Nigerian Government can potentially raise a digital dividend of N450,000,000,000 (c.\$1bn) from the sale of spectrum thereby ensuring that the whole DSO programme is self-funding.
- viii) A free press and open democracy underpinned by local content channels especially and some international channels.

POLICY THRUST

The principal law in Nigeria the Constitution of the Federal Republic of Nigeria (1999) states in chapter 39 that – Every person shall be entitled to freedom of expression including freedom to hold opinions and to receive and impart ideas and information without interference.

It is perhaps In fulfillment of this constitutional imperative that the Nigeria Information Policy (2014) stipulates in chapter 4 among policy objectives that the broadcast media shall support the growth and development of broadband and multi-media platforms and ensure Digitization.

Digitization of broadcasting is a major policy initiative of most countries. Pertti Naranen (2003) in his article European Regulation of Digital Television published in Broadcasting and convergence, states that the primary question to be addressed is what kind of digital broadcasting is needed to best benefit European (African) audiences. He believes that the role of DTV should be considered in the context of information society development as well as focusing on the importance of open access to free public services that are platforms for democratic debate.

Perhaps the most important policy document for Nigeria's DSO project is the government White paper on the Transition from analogue to digital Switch over, here reproduced.

GOVERNMENT WHITE PAPER ON TRANSITION FROM ANALOGUE TO DIGITAL TERRESTRIAL BROADCASTING IN NIGERIA.

PREAMBLE

The transition from Analogue to Digital Broadcasting in Nigeria is part of a global initiative driven by the International Telecommunication Union (ITU). The Geneva 2006 Agreement had set 17th June, 2015 for UHF and 17th June, 2020 for VHF as the dates after which countries may use those frequencies currently assigned for analogue television transmission for digital services, without being required to protect the analogue services of neighbouring countries against interference. These dates are generally viewed as internationally mandated analogue switch off dates, at least along national borders.

2. Consequently, in 2007, late President, Alhaji Umaru Musa Yar'Adua approved the transition from Analogue to Digital Terrestrial Broadcasting in Nigeria, effective 17th June 2012, in line with the ITU resolutions. On 13th October, 2008 the then President inaugurated the Presidential Advisory Committee (PAC) on Transition from Analogue to Digital Terrestrial Broadcasting in Nigeria, with the following Terms of Reference:

- i) Recommend a policy on digital terrestrial broadcast transition using global best practices.
- ii) Recommend appropriate regulatory framework.
- iii) Recommend a National Broadcasting Model.
- iv) Assess impact of the digitization on the consumers and recommend possible government intervention.
- v) Determine the quantum of expected digital dividend.
- vi) Assess environmental impact of digitization, if any, and recommend steps to be taken.
- vii) Advise government on any action relevant to smooth transition in Nigeria.

3. The membership of the committee comprised:

i) Engr. Isaac Wakombo	Chairman
ii) Ministry of Information and Communications	Member
iii) National Broadcasting Commission (Broadcast Regulator)	Member
iv) Nigeria Television Authority (NTA)- Government owned National TV Broadcaster	Member
v) Federal Radio Corporation of Nigeria (FRCN)) – Government-owned National Radio Broadcaster	Member
vi) National Film & Video Censorship Board (NFVCB)	Member
vii) Federal Ministry of Science & Technology	Member
viii) Federal Ministry of Environment	Member
ix) Consumer Protection Council (CPC)	Member
x) New Age Network, Kaduna	Member
xi) Nigeria Customs Service	Member
xii) SPEX Nig. Ltd.	Member
xiii) Delta Cables (ACON)	Member
xiv) Silverbird Communications Plc	Member
xv) DAAR Communications	Member
xvi) Nigeria Film Corporation	Member
xvii) Nigeria Communications Commission	Member
xviii) Nigeria Copyright Commission	Member
xix) The Guardian	Member
xx) Kemilinks international	Consultant

4. The Committee held a number of meetings and submitted its Final Report to Government on 20th June, 2009. In addition, the summary of the recommendations was presented in the Executive Report also submitted to Government. Following the approval of the President, the Secretary to the Government of the Federal (SGF) vide letter Ref. C0.59515/S.22/C.1 /200 of 11th July, 2011 constituted the White Paper Drafting Committee on Transition from Analogue to Digital Terrestrial Broadcasting in Nigeria. The Committee was given three 3 weeks to submit its Report.

5. The composition of the White Paper Drafting Committee was as follows:

(i) Amb. S. o. Willoughby Permanent Secretary, Ministry of Information	Chairman
(ii) Alhaji S.B. Ozigis, OON, mni Permanent Secretary, Ministry of Interior	Member
(iii) Abdullahi Ahmed Yola, OON Permanent Secretary, Ministry of Justice	Member

(iv)	Mr. PiusJ. Major Permanent Secretary Ministry of Transport	Member
(v)	Dr. (Mrs) Dere A wosika, MFR, mni Permanent Secretary Ministry of Science & Technology	Member
(vi)	M. s. Bashar, mni Permanent Secretary Ministry of Environment	Member
(vii)	Engr. Y omi Bolarinwa Director-General, National Broadcasting Commission	Member
(viii)	Dr. Eugene Juwah Executive Vice Chairman Nigeria Communications Commission	Member
(ix)	Prof. Cleopas O. Angaye Director-General National Information Technology Development Agency	Member
(x)	Loto. G. O. Deputy Director General Service Office, OSGF	Secretary

6. The White Paper Drafting Committee, in the course of its assignment, noted that the membership of the Presidential Advisory Committee (PAC on Transition from Analogue to Digital Terrestrial Broadcasting included veterans and serving broadcast engineers, professionals in broadcasting, telecommunications and allied fields. The PAC was supported by the National Broadcasting Commission (NBC), acting as the coordinating agency, and assisted by Kemilinks International the consultant to the project. The first post-inauguration meeting/ retreat was held at Ada, Osun State, from 27th – 31st October, 2008 and the second was held at the same venue from 23rd – 27th March, 2009.

7. At the inaugural meeting of the White Paper Drafting Committee, in a Plenary Session, it was observed that the Executive Report of the PAC contained a detailed summary of recommendations which were in tandem with the proceedings, findings and recommendations in the Final Report. The Committee, therefore, resolved to address the recommendations contained in the Executive Report chapter by chapter.

8. The White Paper Drafting Committee studied and analysed the observations/findings contained in the Final Report and the Executive Report and submitted suggested Government views on the Report as follows:

9.0 Adoption of a New Policy and Regulatory Framework in the Broadcasting Sector

Government accepts the recommendation for the formulation of a new policy and regulatory framework in the Broadcasting Sector.

10.0 Splitting of Broadcasting Services into Broadcast Content Provision and Broadcasting Signal Distribution

- 10.1 Government accepts that to maximize the utilization of broadcast infrastructure and improve on the quality of content creation, a new broadcast model which separates the functions of the Broadcast Content Provider, and the Broadcasting Signal Distributor be adopted.
- 10.2 Government notes the recommendation that the new Broadcasting Signal Distributor will, inter-alia, have the following responsibilities.
 - I. To ensure better transmission coverage of signal and quality delivery of broadcasting services;
 - II. To ensure that services to broadcasters are provided on an equitable, reasonable, non-preferential and non-discriminatory basis;
 - III. To adhere strictly to license conditions as may be stipulated by the regulator.

11.0 Single vs Multiple Broadcasting Signal distributors

11.1 Government notes the three under-listed basic options of licensing signal distributors:

- i. Each broadcaster implements its own signal distribution network as is currently the case, thus creating a multiple broadcasting signal distribution regime;
- ii. A number of multiple operators are licensed, each of which will provide the broadcasting signal distribution for a limited number of broadcasters;
- iii. A single broadcasting signal distributor is licensed to provide the signal distribution network for all broadcasters in the country.

11.2 Government

(a) Approved that more than one signal distributor be licensed in addition to the Nigeria Television Authority (NTA), the public licensed signal distributor; another signal distributor should be licensed immediately while others could come on stream as market exigencies dictate;

(b) Noted that NTA with 157 transmission sites spread across the country, as a potential signal distributor, has a significant advantage over new entrants. The licensing conditions of signal distributors and the manner in which licenses will be awarded are therefore critical to the success of the migration process. Consequently, Government directed that the National Broadcasting Commission (NBC) should put in place necessary conditions and ensure that close to a level playing field is achieved;

(c) Agreed that given the importance of reducing interference, post-July 2015 analogue switch-off deadline, the deployment of digital signal infrastructure in towns and villages along Nigeria's borders should be prioritized;

(d) Government accepts the recommendation to establish a minimum of 2 and maximum of 3 Broadcasting Signal Distributors for a transitional period to take effect from 1st January, 2012 - 1st January 2015.

11.3 Government accepts that the operations of the Broadcast Signal Distributor should not have political, religious or ethnic bias and should be strictly monitored by the regulator. Other existing technical regulations applicable to the present broadcasters as appropriate should be binding on the Broadcasting Signal Distributor.

12.0 **Backbone of the Broadcasting Signal Distributor**

12.1 Government accepts that it would be most efficient if the infrastructure of the Broadcasting Signal Distributor be established as soon as possible and at the least cost.

12.2 Government approved that the satellite signal distribution infrastructure of Nigcomsat should be excluded from the arrangement, so as to maximize the benefits and profitability of the country's satellite resources. Government further agreed that Nigcomsat's resources be available to all signal distributors on a commercial basis rather than being exclusively subsumed as part of the infrastructure of one of the signal distributors. Hence, it agreed not to limit satellite signal distribution infrastructure to Nigcomsat alone, but to include others, such as NTA VON and FRCN.

13.0 **Ownership Structure of the Broadcasting Signal Distributor**

13.1 In light of the need to establish the Broadcasting Signal Distributor expediently, efficiently and reliably, Government noted the three under-listed options of ownership structure as follows:

i. **Option A:** (Public/Private Sector Partnership) provides for the establishment of a new Broadcasting Signal Distributor in which the Federal Government will own a majority stake (a minimum of 51 % stake); the equity participation of the private sector portion of this new signal distributor should be offered through a bid process; this option will allow a buy-in for all the industry stakeholders and also gives government a controlling influence to ensure neutrality in the operations of this distributor;

ii. **Option B:** provides for establishing a Broadcasting Signal Distributor that is wholly owned by the Federal Government, but commercially operated; this option takes advantage of the huge investments government has made over the years in both the NTA, FRCN, and Voice of Nigeria;

iii. **Option C:** provides for establishing a Broadcasting Signal Distributor that is 100% privately owned; the option will promote further deregulation in the industry and inject substantial private sector funds into the industry.

13.2 Government accepts the under-listed, but for a transitional period of three (3) years;

- i. The Broadcasting Signal Distributor should be wholly owned by the Federal Government and operated on a commercial basis;
- ii. Seed grant should be provided by the Federal Government for the Broadcasting Signal Distributor for the establishment of the new company and acquisition of all digitally compliant broadcast equipment, and for human capital development.

14.0 Obligations of the Broadcasting Signal Distributor

14.1 Given the critical role that the Broadcasting Signal Distributor will play in the new environment, Government noted the following obligations:

- i. Provide services to broadcasters on an equitable, reasonable, non-preferential and non-discriminatory basis;
- ii. Adhere to licence conditions as stipulated by the Regulator;
- iii. Provide quality delivery of broadcasting services as per contract between the Broadcasting Signal Distributor and the Broadcast Content Provider; such contracts should be approved by the regulator;
- iv. Ensure that it provides National coverage whilst ensuring that each Broadcast Content Provider keeps to its assigned coverage area;
- v. Provide the regulator on a regular basis with information on the utilization of frequency channels;
- vi. In determining its tariffs, which should be subject to oversight by the regulator, the Broadcasting Signal Distributor will be required to take into account the different categories of broadcasting licences and the nature and technical parameters of the service provided to each licensee. This is to ensure that the different tariffs are appropriate to and commensurate with the various broadcasting services.

15.0 Restructuring of the Licencing Framework in the Broadcasting Sector

15.1 In order to respond to the challenges of the transition programme, Government notes that:

The licencing framework in the broadcasting sector should be restructured along the following lines:

- i. There should be 2 categories of licence, namely, a broadcasting content licence with the authority to produce content, and a broadcasting signal distribution licence with the authority to provide the transmission platform for all broadcasters;
- ii. The duration for a broadcasting content licence should be five (5) years as currently being practice, for all existing broadcasting.
- iii. The duration for a broadcasting signal distribution licence, bearing in mind the heavy investment and highly capital intensive nature of such infrastructure projects, should be fifteen (15) years;

- iv. All existing licences should be unbundled so as to separate the broadcaster's function from the signal distribution function; the latter will be provided by a separate company;
- v. The current 5 year licence duration of all broadcasters should terminate with the unbundling;
- vi. All current licences should be converted to the new broadcasting content licence;
- vii. Each of the new broadcast content licences should specify its coverage target within the following framework:
 - a) Community Content Broadcasters - a licence for members of a community aspiring to project the cultural aspirations of the community and with a coverage target within the geographical boundary of the specific community;
 - b) City Content Broadcasters - a licence with a coverage target within the geographical boundary of a specific city;
 - c) State Content Broadcasters - a licence granted to a State Government with a coverage target within the geographical boundary of the specific State;
 - d) Regional Content Broadcasters - a licence with a coverage target within the geographical boundary of a specific region (geo-political zones);
 - e) National Content Broadcasters - a licence with a coverage target within the geographical boundary of the country.

16.0 Regulatory Frameworks to Guide Licencing of DTT Services

16.1 Government notes that with the commencement of digital broadcasting, there will be new challenges, which will require specific regulatory interventions.

16.2 In order to ensure a clear regulatory environment for the smooth execution of the transition, Government noted the recommendation that:

- i. The regulator should develop standard regulatory documentation such as licences, licence fee structure and other regulations to guide the transition and publish comprehensive guidelines for the industry;
- ii. In formulation of the guidelines, the regulator shall determine the conditions under which analogue transmissions may continue after the switchover date taking into consideration areas that the broadcasting signal distributor may not cover.

16.3 Government notes the recommendation that the regulatory guidelines should include the following:

- i. Degree of flexibility afforded to DTT broadcasters - Broadcasters will be given enough flexibility in the services that are offered over the digital channel. They will be required to offer at least one free-to-air programme service;
- ii. Requirements for high-definition or other types of services - During the transition period, the regulator will not impose any requirement that broadcasters offer HDTV;
- iii. Pay Services - Introduction of pay services in the digital environment will only be permitted by the regulator after the transition has kicked off, but preferably at the end of the transition period and after analogue switch-off has occurred. The regulator will determine the licence fee structure for those offering pay services on the DTT platform.
- iv. Dual illumination - Requirements to carry the existing analogue TV programming on digital channels;

- v. Transition plans and timetables - the basic transition plan to be following should require stations to transit their analogue services to digital as soon as the Broadcasting Signal Distributor is in place. A deadline will be set by which all analogue channels will be required to have transited to digital;
- vi. Goals and/ or deadlines for cessation of analogue TV broadcasters;
- vii. Mechanisms for effective monitoring and to enforce the licence conditions.

17. 0 Re-establishment of Public Broadcasting

17.1 Government agrees with the observation that public broadcasting (fully/mostly funded by the public) no longer exists in Nigeria with the partial commercialization of NTA, FRCN, and others State broadcasting stations. Given the benefits of public broadcasting for effective National development, Government accepts as follows:

- i. The re-establish public broadcasting in Nigeria;
- ii. The planned commercialization of NTA and FRCN should be reviewed;
- iii. The FRCN and NTA should each be restructured into two separate self- accounting units;
- iv. One unit, which would be publicly funded, will manage channels that are dedicated to public broadcasting;
- v. The second unit would operate the other channels as a commercial broadcaster;
- vi. The two units should provide separate accounts to the regulator to avoid anti-competitive practices;
- vii. The State owned broadcasting Stations should also be restructured in a similar manner.

18.0 Management of the Spectrum Dividend

18.1 Government agrees with the observation that the transition from analogue to digital broadcasting will result in the ceding of the 790-862MHz currently being utilized by the existing analogue broadcasters and a spectrum dividend of 72 MHz to the Government. In order to achieve this, Government accepts that:

Nigeria should revisit its assignments in the ITU GE-06 Plan and optimize the assignments using a range of frequency planning tools and the latest propagation techniques.

18.2 Government notes the observation that once the plan is revisited, it will affect the National radio-frequency band plan and such plan will have to be revised and republished. Government also notes that the spectrum dividend that will accrue to the government is a total of 72 MHz and recommends that:

- i. The spectrum dividend of 72 MHz arising from the ceding of the 790- 862MHz currently being utilized by existing broadcasters should be available for a variety of competing new services including telecommunications, public safety and new broadcasting services;
- ii. The additional spectrum dividend that will arise from the vacation of the VHF band by current analogue TV services should be used for new broadcasting services;

- iii. The fund arising from the sale of the 72 MHz from the ceding of the 790-862 MHz currently being utilized by existing broadcaster should be used to contribute to the funding of the transition programme;

18.3 Government agreed that the Sub- Committee being proposed was a duplication of roles and responsibilities of the National Frequency Management Council and that the Council should be left to determine the actual spectrum dividend. Government directed that the Spectrum Sub-Committee be deleted from the arrangement and that the implementation Committee for the digital transition should work in close collaboration with the National Frequency Management Council (the National Spectrum Manager) to provide relevant advice, on the management of the spectrum dividend.

18.4 Government notes that a part of this spectrum dividend could be auctioned for some of the new services, and going by recent auctions of spectrum for telecom services, a revenue of about N10bn would accrue to the Government. Government also notes the recommendation that:

In recognition of the huge revenue arising from the transition process, government should consider allocating necessary funds for the implementation of the transition programme.

19.0 Single Frequency Network vs Multiple Frequency Network

19.1 Government agrees that there are two basic methods of achieving the signal distribution network, namely:

- i. Multiple Frequency Network (MFN) - which is the method used in the current analogue system to achieve a particular coverage area and
- ii. Single Frequency Network (SFN) - where a single frequency can be used to provide the same coverage.

Government, therefore, accepts that:

A Single Frequency Network, (a broadcast network where several transmitters simultaneously send the same signal over the same frequency channel) be adopted as it offers more advantages than Multiple Frequency Network.

20.0 Convergence

20.1 Government notes the recommendation that efforts should be accelerated on the consideration of issues relating to Convergence with a view to taking a final decision as soon as possible in the interest of the industry and the national economy.

20.2 Government agrees with the observation that in order to ensure compatibility, it is important to define the appropriate standards for digital broadcasting in Nigeria. Government accepts to adopt the following standards:

- a) DVB-T (EN 300 744) as the national standard for terrestrial digital television in line with the resolution which was made at ITU RRC-06;

- b) The MPEG-4 AVCj264 as standard format for digital terrestrial television broadcasting standard in Nigeria;
- c) DVB-S (EN 300 421) for satellite broadcasting is recommended broadcasting in Nigeria, with transition to DVB-S2 as compatible decoders become available and operators are ready to transmit;
- d) DVB-H mobile TV standard for mobile TV in Nigeria, more so that it is already successfully operational in Nigeria.
- e) IBOC system for use as the FM digital sound broadcast format for Nigeria, while the DRM standard is adopted for Medium and Shortwave radio broadcast standards.

21.2 Government notes the observation that currently there is no global standard for digital satellite sound broadcasting, and that digital satellite sound broadcasting can be considered a complementary broadcasting service. Government also notes the recommendation that the take-off digital satellite sound broadcasting in Nigeria be informed by market forces.

22.0 Set Top Boxes

22.1 Given that DVB has been recommended as a standard on the transmission network side, it is advisable that Set Top Boxes comply with the DVB family of standards. The specification (e.g free-to-air, condition access, low-level entry, etc) needs to be determined as part of a broader policy decision.

22.2 Government agrees with the observation that with a guaranteed market of over 40 million television sets requiring Set top Boxes, it is good enough incentive for local manufacturing of Set Top Boxes and therefore accepts that Government should provide appropriate incentives so as to attract potential manufacturers but that the number of manufacturers of STB be limited to a few.

22.3 Government accepts that the regulator manages the process of selecting the few manufacturers of STB.

22.4 Government observed that attaching a price tag of N2,000 to a Basic Set Top Box, and asking for any kind of subsidy at this time may not be in the best interest of Government, as the policy would be self-sustaining. It therefore directed that the end user price of a Basic Set Top Box, should be determined by the DigiTeam Nigeria from time to time, using economic indices.

23.0 Development of the Content Industry in Nigeria

23.1 Intellectual Property Rights

23.2 Government agrees that there is currently a very serious problem of piracy afflicting the home movie industry which is a disincentive to potential content providers. When intellectual property rights are enforced, the revenue accruable from the sale of content will become more significant, encouraging investment. Consequently, Government accepts the recommendation that respect for Intellectual Property Rights (IPR) should be increased by the enforcement of the copyright and related laws.

23.3 Awareness Programmes for the Respect of Intellectual Property

23.4 Government notes the observation that a substantial number of people do not know the difference between an original copy and a pirated copy of an intellectual property or may not know the implications of purchasing pirated materials. Increased awareness and easier access to the original works will encourage people to purchase originals rather than pirated copies. Accordingly, Government notes the recommendation that awareness programme for the respect of intellectual Property should be increased.

23.5 Collaboration between Agencies

23.6 Government notes the observation that improved cooperation and regular exchange of information amongst the agencies responsible for various aspects of content development can lead to a multi- pronged approach to tackling piracy in the various outlets for the exploitation of these works. Government also notes the recommendation that:

- i. Collaboration between the relevant agencies involved in content creation and production (such as the National Broadcasting Commission (NBC), Nigerian Copyright Commission (NCC), the National Film and Video Censors Board, the Nigerian Film Corporation(NFC) and the Trademarks and Patents Registry, etc) should be increased.
- ii. The above agencies should increase their public enlightenment budget.

23.7 Creative Works at Tertiary Institutions

23.8 Government notes the recognition that instituting a reward scheme for the creative arts will spur writers and theatre arts students to produce materials that may be developed into plays, movies and shows consumed by the broadcast industry. Government also notes the recommendation that the creative arts units/ departments of Nigeria tertiary institutions should be recognized as a major source of local content.

23.9 Establishment and Recognition of an Awards System

23.10 Government notes the observation that a credible awards system initiated by the regulator, in partnership with the private sector, that identifies producers/content creators who have excelled, is likely to serve as incentives to the continuous production of great content. These award recipients are then more likely able to attract investments for planned work. Government also notes the recommendation that an award system should be set up to reward producers and broadcast content providers of outstanding/ compelling content which will enable easier access to funds for such award-winning producers and broadcast content providers.

23.11 Review of the Process of New Movies

23.12 Government notes the observation that investment in the broadcast and content creation industry can be improved if there is a visible return on investments made in this

industry. As a means of guaranteeing a reasonable return on investment, Government notes the recommendations that:

- i. stakeholders in the broadcasting sector should be encouraged by the regulator, in collaboration with the National Film and Video Censors Board (NFVCB) to review the process of release of new movies;
- ii. new movies should in the first instance be screened in theatres, then offered to Pay TV operators, released as home videos and finally made available to Free- To-Air (FTA) broadcasters.

23.13 Audience Rating

23.14 Government notes the observation that there is currently no well-established nationwide audience rating system in Nigeria and also notes the recommendation that the regulator should create an enabling environment that will encourage the emergence of reliable and credible audience rating agencies.

24.0 Training and Capacity Development

24.1 Merging of Institutions

24.2 Government notes the need to harmonize the public training schools within the broadcast and film industry for better efficiency and to encourage increase specialized courses for the industry. Accordingly, Government also notes the recommendations as follows, provided that "nothing" under this does not prevent anyone from training in any other training Institutions of commensurate mandate.

- i. The NTA TV College in Jos, the FRCN Training School, Lagos, and the National Film Institute in Jos, should be merged under a National Broadcast and Film Institute, a multi-campus institution, working in collaboration with the NUC and the NBTE;
- ii. The new institute should be dedicated to hands-on professional training and retraining for broadcasters and film makers, under a Governing Board, appointed by the Federal Government, and adequately funded from the proceeds of the digital dividend;
- iii. The new Institute should get its recognition from the National Board for Technical Education (NBTE);
- iv. The members of the Board should be professionals in the industry;
- v. The Board should establish appropriate curriculum for the industry;
- vi. The regulator should have a seat on the Governing Board.

24.3 Establishment of a Council for Registration of Broadcasters

24.4 In order to promote professionalism amongst broadcasters and to encourage high standards, Government notes the recommendation for the creation of a Council for the Registration of Broadcasters and Film practitioners with the responsibility to admit practitioners and maintain ethics and standards among broadcasters.

24.5 Manpower Development Fund

24.6 In order to attract funding for the broadcast industry, Government notes the recommendations blow, and identifies other sources of funding that the industry can explore as Government Education Grants; ETF (Educational Trust Funds); Donor Agencies - UNESCO, Goethe Institute, UNDP, World Bank; Private donations from foreign and local organizations as well as corporate organizations.

- i. A Manpower Development Fund, managed by a Board of Trustees, such as the Universal Service Provision Fund in the telecom sector, should be created by government, from a percentage of the income of broadcast stations;
- ii. The secretariat of the Fund should be domiciled at the regulator.

25.0 Consumer Awareness Programme

25.1 The success of the transition programme will be determined largely by the extent to which the Nigerian consumer is well informed on the key issues of the programme.

Accordingly, Government notes the recommendations as follows:

- i. The Regulator should embark on continuous sensitization of the general public on the digital switchover as approved by the Federal Government;
- ii. All national and international events should be encouraged to buy into this awareness programme;
- iii. The sensitization programme should adequately inform all stakeholders (BON, Nigeria Customs Service, Federal Inland Revenue Service [FIRS], Electronic Market Groups such as Alaba International Market) on the various aspects of digitization.

25.3 Government notes the recommendations that some ground rules should be established for the consumer awareness program as follows:

- i. All Stations should be required to implement a consumer programme, with materials furnished by the regulator as their own contribution to the programme;
- ii. All broadcasting stations have to include information about the use of antennae as part of their DTV education awareness programme;
- iii. Every Station should air viewer notifications for at least 180 days before the switchoff of the analogue transmission of that station; and
- iv. Exploit other media to create public awareness.

26.0 Consumer Protection

26.1 Government agrees that it is important to ensure that consumers have a simplified means of recognizing the type of TV receiver they should buy, with the adjustment on the date that vendors of Analogue TV Sets to sell STBs should not be later than 31st December, 2014 as against June, 2014.

27.0 Environmental Issues

27.1 Digitization will inevitably result in generation of additional e-waste; which is a serious concern that should be addressed. Government notes the following recommendations:

- i. Nigeria should adopt the Switzerland model of e-waste disposal whereby all actors (manufacturers, wholesalers and retailers) are licensed;
- ii. A token amount (an advance recycling fee) should be charged at points of purchase of every electronic equipment, while disassembling centres are established in order to achieve an organized retrieval and safe disposal of e-waste arising from digitization;
- iii. The agencies responsible for e-waste should make provisions to contain issues on e-waste arising from digitization;
- iv. They should also ensure adequate public awareness;
- v. All importers of transmit and receive broadcast equipment should be licensed by the Regulator as Broadcast Equipment Dealers.

28.0 Regional Coordination

28.1 Government notes that Nigeria should take lead in encouraging a coordinated regional policy for the introduction of digital broadcasting, and that the regulator should initiate a spectrum coordination meeting with the neighbouring countries in order to re-plan the GE06 plan.

29.0 New legislation

29.1 Government notes that in order to ensure effective implementation of the digital transition project, there is need to incorporate the policy recommendations put forward in this report in an enabling Act, effect amendments to existing legislations and enactment of new legislations.

29.2 In view of the proposed new policy framework for digital broadcasting in Nigeria, Government Act No. 38, 1992 (as amended) be further amended to support this policy framework.

30.0 Strategy

30.1 Government notes that several strategies for the introduction of digital sound and television broadcasting are possible. The successful implementation of the transition programme will depend on the strategy adopted.

30.2 Phased Strategy

30.3 Government notes that a phased transition strategy that will allow a focused implementation from region to region would be appropriate and that a schedule detailed when analogue transmitters will be shut off in the different regions of the country be formulated.

30.4 Optimization of existing infrastructure

30.5 In order to ensure the optimization of existing infrastructure, Government notes the followings:

- i. Existing broadcasters should be allowed to enter into commercial arrangements with the Broadcasting Signal Distributor on how to dispose of their broadcasting infrastructure;
- ii. In order to reduce the cost of digitization, the existing designated transmitting analogue sites and infrastructure will be used for digital transmission.

30.6 Funding Strategy

30.7 The transition programme requires substantial funding for successful implementation. Within the telecommunication sector, a Universal Service Provision Fund (USPF) has been established to support the sector's non-viable areas. Given that the telecom sector will benefit from the transition programme (spectrum dividend, provision of IP broadcasting (IPTV), Mobile TV services etc.), Government notes that a budget of approximately N82 billion was projected in the Final Report of the Presidential Advisory Committee on Digital Broadcasting, which includes support for the purchase of Set Top Boxes and excludes the costs associated with setting up a Public Broadcaster.

Given current pressures on Government resources, alternative funding models for accomplishing the migration that place the minimum financial obligation on Government was considered. Government directed that DigiTeam working with relevant MDAs and the private sector has an accurate picture of how much the migration to digital transmission will cost and should develop a realistic and robust investment and funding strategies that significantly reduce the financial contribution of the Government to the process. Government observed that the licensed NTA would not require funding for its take-off as it had committed a lot of fund in the last 2 years to upgrade its facilities from Analogue to Digital. Government accepts to explore other potential sources of funding as indicated below:

- (a) Promoting the manufacture of Set Top Boxes whereby Government puts in place incentives to encourage local manufacture of end-user devices. The aim would be to attract both local and international companies and, in addition to offering trade incentives, also provide 'protection' from illegal/informal extortion from other entities and
- (b) Increasing the commercial viability of signal distributors by creating an enabling environment for the rapid roll-out of the distribution network, and also for the content industry.

30.8 Switch-on date

30.9 "Government reserves the responsibility to decide and announce the switch-off and switch-on dates to the DigiTeam Nigeria, provided that the switch-on date must be before 11th June, 2014".

31.1 The decision to transit from analogue to digital broadcasting requires strong political will and commitment to support and affirm when and how analogue switch off will take place. This will provide the necessary credibility to the process and help avoid unnecessary delays.

31.2 In order to ensure that the implementation of the transition is successful, Government accepts the recommendations that:

- i. A digital Transition Implementation Team to be known as “DigiTeam Nigeria”, be set up with the secretariat and leadership provided by the regulator. The team should be responsible for implementing the programme;
- ii. DigiTeam Nigeria, should be made up of industry and Government representatives to manage the transition, ensure adequate and proper public information, and address issues of consumer interests before the final switch-off;
- iii. Develop the specifications of the STB, taking into consideration the need, or otherwise, for establishing a minimum specification for an STB.

31.3 Government accepts that the terms of reference of the proposed DigiTeam Nigeria should include the following with the inclusion that the DigiTeam Nigeria should have oversight over the determination of tariffs to be charged by the Broadcasting Signal Distributor and responsibility for the valuation of the transmission infrastructure of other existing broadcasters (State and Private Broadcasters) that were to be absorbed by the pioneer Broadcasting Signal Distributor.

- i. Establish and implement a comprehensive public awareness programme in consultation with stakeholders and the regulator;
- ii. Follow up the process towards the enactment of all the enabling laws and necessary amendments to existing legislations;
- iii. Implement the process for the establishment of the Broadcasting Signal Distributor;
- iv. Implement the process for the selection of the STB manufacturers;
- v. Ensure appropriate coordination with other African countries at The sub-regional (ECOWAS) and continental (African Union) levels, as well as with NEPAD programme as may be required;
- vi. Ensure that the Hon Minister of Information and Communications Technology and the National Assembly are regularly updated on the implementation of the programme;
- vii. Seek for additional funding to support the implementation of the programme;
- viii. Carry out all relevant activities related to the success of the Transition programme.

32.0 Funding

32.1 In arriving at the estimated budget for the transition programme, many factors such as cost of procuring a digital TV Transmitter and cost of transition in other countries were considered by the Committee. The Committee estimated that a total of N32bn (thirty two billion Naira) would be required to fund the transition programme excluding any subsidy on Set Top Boxes.

32.2 Government notes the recommendation that Government should provide a seed grant of N25bn over the period 2009 - 2011.

32.3 Government notes the recommendation that the seed grant should be supplemented by Funds accruable from the ceding of 72MHz spectrum 790- 862MHz should be utilized in the funding of the transition programme.

32.4 Government notes the recommendation that the current domestic Radio and TV licence laws should be reviewed to enable a central collection by the Federal Government to fund public broadcasting in Nigeria.

32.5 In the new world of digital terrestrial transmission, there will be an increased demand for content and government can aid job creation by providing soft loans (at more affordable interest rates) to industry practitioners. Government notes the recommendation that a portion of the Radio and TV licence fees should be used to create a fund that will offer soft loans to content creators.

32.6 A major problem that plagues the broadcast industry today is the dearth of service centre for the maintenance of broadcast equipment. Currently, access to spare parts and consumables is through the UK, South Africa, the Middle East or Asia, none of which locations is less than a 5 hour flight away. Government notes the recommendation that a tax holiday should be offered to companies which establish broadcast equipment services centres.

32.7 Customs duties for broadcast equipment are currently evaluated differently depending on which item is involved. A harmonization of the duty will encourage investment in the industry. Government notes the recommendation that the customs duties for content production equipment and consumables should be reviewed downwards for a 5-year period from 2010 to encourage investment in equipment.

32.8 The sale and assembly of broadcast and content creation equipment should be encouraged along with technology parks which should be located in free trade zones (FTZ).

There are very few movie houses in existence today and one way of encouraging investments and creating jobs in this sector is to reduce the entry requirements for importation of the required equipment for establishing movie theatres. Accordingly, Government notes the following recommendations:

- i. Funding incentives to guarantee the manufacturers of Set Top Boxes to site their companies in Nigeria;
- ii. The cost of a basic Set Top Box should not be more than N2,000 at today's value;
- iii. Importation of Set Top Boxes should be discouraged completely;
- iv. Seed grant should be provided for the broadcasting signal distributor for the establishment of the new company and acquisition of all digitally compliant broadcast equipment, and for human capital development.

32.9 The existing broadcasting training institutes have not been as efficient as they should be as a result of inadequate funding for the provision of training, facilities. Accordingly, Government notes the need for adequate funding for the merged broadcast and film training institute.

33.0 Jump-Starting and Transition Process

To jump-start the transition process, Government notes the following recommended activities:

- i. Development of the specifications for the STB;
- ii. Preparation of the legislative documentation required to support the transition process;
- iii. Establishment of a process for the replanning of the spectrum;
- iv. Preparation of documentation on the expression of interest to qualify for the bidding process to select the manufacturers of the STB:
- v. Preparation of documentation for the awareness programme and the associated website;
- vi. Preparation of draft licenses for the broadcasting signal distributor, the broadcast content provider and the broadcast equipment dealers.

THE DIGITAL TERRESTRIAL TELEVISION (DTT) POLICY

Arising from the federal government's white paper above, the NBC fashioned a DTT policy that will provide the necessary guidelines and frame work for the DSO implementation. The policy document is also here reproduced.

CHAPTER 3

DIGITAL TERRESTRIAL TELEVISION (DTT) POLICY

Nigeria is a signatory to the Geneva 2006 (GE 06) Agreement by the International Telecommunications Union (ITU) setting 17 June, 2015 as the deadline for the transition from analogue to digital broadcasting in the ultra High frequency (UHF) bands iv and v.

In furtherance thereof, the Federal Government of Nigeria set up the Presidential Advisory Committee (PAC) on transition from analogue to digital terrestrial broadcasting in 2007. The recommendations of the committee were largely approved and a draft white paper released by the Government leading to the setting up of DIGITEAM NIGERIA under the supervision of the Commission to implement the transition from analogue to digital terrestrial broadcasting.

Consequently, pursuant to its statutory powers and having given due consideration to the principles of transparency, fairness and non -discrimination, the Commission hereby issues the policy guidelines for Digital Terrestrial Television (DTT) Service Licences and Authorisations.

1.1 Legal, Regulatory and Policy Environment

Presently, the principal statutes governing broadcasting in Nigeria are the 1999 Constitution and the National Broadcasting Commission Act, Cap. NII, laws of the Federation of Nigeria, 2004.

1.1.1. POLICIES.

This policy document is guided by:

- (a) The Mass Communication policy as it relates to broadcasting
- (b) The Nigeria Broadcasting Code
- (c) Regulations made pursuant to section 23 of the NBC Act
- (d) Final report of the Presidential Advisory Committee and draft white paper of the report.

This document, along with the terms and conditions of the DTT Licence, should be read in conjunction with the NBC Act and other rules, regulations, guidelines and directives issued by the Federal Government of Nigeria or the Commission.

1.1.2 AMENDMENT OF THE NBC ACT.

A bill to amend portions of the NBC Act to bring same in conformity with the objectives of the transition from analogue to digital terrestrial broadcasting has reached advanced stage and would soon be submitted to the National Assembly for enactment into law.

1.1.3. POLICY FOR THE TRANSITION FROM ANALOGUE TO DIGITAL BROADCASTING.

The Federal Government of Nigeria in 2013 approved most of the recommendations contained in the report of the Presidential Advisory Committee (PAC) on the transition from analogue to Digital broadcasting.

These include the proposal for the formulation of a new policy and regulatory framework with far reaching consequences for the positive development of the broadcast sector in Nigeria, taking into

consideration international best practices in general, and local conditions in particular; in order to establish a solid foundation for the implementation of the transition programme.

1.1.4 SPLITTING OF BROADCASTING SERVICES.

The Commission shall receive, process and consider applications for broadcast licences in the following categories on the Digital Terrestrial Television (DTT) platform

- i. free view terrestrial television Services
- ii. Pay Terrestrial television services
- iii. Signal Distribution services.

1.1.5. COVERAGE

The coverage areas for these categories of licences shall be National, Geo- political Regions, State or City.

1.1.6. DURATION

The duration of the licences shall be 5years in the first instance, subject to renewal

2. LICENSING

In the area of licensing, the Commission would consider the grant of licenses along the following lines:

- i. Switch off analogue in phases commencing from Jos, Plateau state, and achieve reasonable coverage within the Country by January 31, 2015.
- ii. Relinquish all VHF/UHF TV frequencies assigned by the Commission upon analogue switch-off.
- iii. Digital Television Service Authorisations for new commercial broadcasters seeking to provide digital television programme content after they have negotiated carriage with the Signal Distributor
- iv. Three signal distributors would be licensed by the Commission to distribute signals on an equitable, reasonable, non-preferential and non- discriminatory basis for all free to air (FTA) services subject to the following:
 - (a) The Commission would allow public and private broadcasting organizations, through the Broadcasting Organisation of Nigeria, (BON) to accomplish more in concert than they could separately.
 - (b) Free to air Services would have to certify on capacity for improved infrastructure and service delivery efficiency. c. The Commission would emphasise on local content and not coverage which in the case of free-to-air broadcasting would be before the public good.

3. TERRESTRIAL PAY TELEVISION SERVICES

The issue of Terrestrial pay Television has become controversial in the process of the implementation of the DSO especially on the question of self-carry and the unbundling of the structure of the Industry.

- (a) That the White paper on the DSO expressly states that the structure of broadcasting Services shall be broken in two - Broadcast Content Provision and Broadcast Signal Distribution. Section

16.3(iii) also states that -Introduction to Pay Services in the digital environment will only be permitted by the regulator after the transition has kicked off but preferably at the end of the transition period and after analogue switch off has occurred.

- (b) I believe that the NBC will review the current policy in line with the White paper and come out with a very clear regulatory position.
- (c) It is also important that specific regulatory provisions are made on the question of the use of indigenous Set Top Boxes. All operators pay or free should be required to adopt and use the Nigerian Set top boxes manufactured in country.

4. EXISTING TERRESTRIAL TV BROADCASTING LICENSEES

The existing holders of free-to-air TV broadcasting licenses are expected to be carried as Free to Air (FTA) Digital Programme Services on the signal distributor subject to mutually agreed commercial terms as well as prevailing licence conditions.

4.1 DTH SATELLITE SERVICES

Direct to Home (DTH) Satellite Television operators already transmitting digital form using the DVB-S standard. These entities are not affected by the migration from analogue to digital broadcasting.

4.2 MOBILE TELEVISION OPERATORS

The Commission has adopted a technology neutral approach to mobile television operations.

5. EXISTING INFRASTRUCTURE OF THE NIGERIAN TELEVISION AUTHORITY (NTA)

- i. The existing and massive broadcast transmission infrastructures owned by the Nigerian Television Authority (NTA) should form the backbone of one or more of the signal distributors, which must be able to absorb the transmission infrastructure of other existing broadcasting stations.
- ii. One of the signal distributors to be licensed shall be a limited liability Company owned by the Nigerian Television Authority on its own or in partnership with other licensees.

6. SET TOP BOX (STB) CONFORMANCE

The Commission considers that the majority of Nigerians would convert their existing analogue TV sets to receive digital television transmissions through the use of set top boxes (STBs). To protect consumers from sub-standard products, all STBs sold in the Nigerian market must conform to the west Arica sub region's minimum technical specification for DTT receivers adopted by Nigeria which is

7. TRANSMISSION STANDARDS

All licensees shall be required to transmit in accordance with standards published by the National Broadcasting Commission.

In general, Licensees shall be required to implement the following standards:

- (a) Transmission standard-ETSI EN 302 755 popularly called DVB- T2
- (b) Compression technology -ISO/IEC 14496 Advanced Video' Coding (AVC)/MPEG-4 (part10), High Efficiency Advanced Audio Coding (HE-AAC)

- (c) Format: Standard Definition (SD). High Definition (HD) is optional.
- (d) Optional Application Programming Interface (API) for additional and interactive services- ETSITS102796, Hybrid Broadcast Broadband TV (Hbb TV).

The commission has adopted these standards to ensure that the most spectrum efficient DTT standard available that conforms to the GE06 Agreement is employed in Nigeria.

THE AUTHORISATION

A. RATIONALE FOR THE AUTHORISATIONS

Section 39(1) of the 1999 constitution grants to every person the right to freedom of expression, including freedom to hold opinions and to receive and impart ideas and information.., digital broadcasting presents a number of benefits include better quality pictures and sound; more interactivity and the opportunity to expand viewers' choice through the transmission of more programme channels with less frequency compared to analogue broadcasting.

Section 2 (1) (I) of the NBC Act empowers the commission to 'regulate ethical standards and technical excellence in public, private and commercial broadcast stations in Nigeria'. It is with this mandate that the Commission intends to issue this authorization for broadcasting in digital form to promote efficient use of spectrum.

In summary, the grant of DTT licenses is being undertaken for the following reasons:

To comply with and adopt the tenets of the Ge-06

Agreement.

- To rapidly adopt spectrum efficient methods in the management of the scarce RF spectrum to broaden its utility as are source in the interest and benefit of stakeholders.
- To enhance the quality and experience of TV viewers in Nigeria by improving terrestrial TV transmission and reception.
- To promote environmental utility through a location of broadcast transmission infrastructure.

B. CATEGORY OF DTT LICENCES

Licenses for Digital Terrestrial television Services have been categorized according to the following:

Digital Television Programme Channel Service: a service consisting of the provision by any person of television programmes (together with any ancillary services) with a view to their being broadcast in digital form for general reception, whether by him or by some other person. "Ancillary service" means any service which consists in the provision of subtitling for the deaf in connection with programmes included in a digital programme service provided by the holder of a digital television programme channel service authorization or other services (apart from advertising) which are ancillary to such programmes and directly related to their contents, or relate to the promotion or listing of such programmes.

There are basically two main business models for digital terrestrial television programme services:

(a) Free to Air (FTA): television viewers do not have to pay to watch the television service. The TV station depends mainly on advertising and sponsorship to generate its revenues. Entities that seek to provide FTA services would be required to obtain an authorization for each digital programme service. All FTA channels shall be further classified as Public, Commercial or Community. According to the Policy of the Government of Nigeria, all FTA channels shall be carried by the common carrier

(b) Pay /Subscription based: television viewers have to pay a subscription fee to watch the television service. This model requires the television service to be encrypted and subscribers have to obtain a module that decrypts the service in their service (often called conditional access (CA) module). Most Pay TV operators often provide a bouquet of channels to their subscribers. Therefore entities that seek to provide Pay TV services shall be authorized to provide a collection of programme services which shall be stated in the Pay TV Authorisation. Any additional channel to the Pay TV programme bouquet shall be with the approval of the Commission. Terrestrial Pay TV entities would have the option to request the signal distributor to carry its programmes or to self-provide if it fulfills the conditions.

ii. SIGNAL DISTRIBUTION SERVICES.-

The broadcast Signal Distributor shall have the following obligations:

- a) Provide services to Digital Terrestrial Television Services on an equitable, reasonable, non-discriminatory basis
- b. Adhere to licence conditions stipulated by the Commission
- b) Provide quality delivery of broadcasting services as contained in its contract with the Digital Terrestrial Television service licensees.
- d. Ensure that its provides National coverage whilst ensuring that each licensee keeps to its assigned coverage area. Provide the Commission on regular basis with information on the utilization of frequency channels.
- f. In determining its tariff, the signal distributor shall take into account the different categories of Digital terrestrial Television broadcasting Services provided by licensees. This is to ensure that the different tariffs are appropriate to and commensurate with the various broadcasting services.

C. Authorisation Period

The initial authorisation period for a Digital Terrestrial TV Service in the Era-

Authorisation shall be Five (5) years. However, the authorization holder shall commence operations not later than two (2) years from the date of the authorization or the authorization shall be withdrawn.

D. Authorised Area

There shall be no minimum coverage area requirements imposed on a Digital Terrestrial TV Service. However, applicants for Digital Terrestrial Television Service Authorisation shall indicate where it is City/Region or National coverage and the authorization shall indicate the coverage area approved by the Commission.

E. Fees:

The consideration for a Digital Terrestrial TV Service Authorisation shall be as follows:

i. Free to Air (FT A) Authorisations: the scheduled as contained in 1.1.7 shall apply.

ii. Pay/Subscription based Authorisations: All the fees in 1.1.7 shall also apply.

iii. SIGNAL DISTRIBUTORS - In addition to the fees in 1.1.7, applicant shall be required to pay:

- a) A non-refundable application fee of One Million naira (N1,000,000) in the form of a Bankers Draft draw able on a Bank in Nigeria.
- b) Annual statutory of one and half per cent on turnover (subject to periodic review by the Commission) shall be paid annually.

F. AUTHORISATION SELECTION PROCESS FOR SIGNAL DISTRIBUTORS

General Requirements

Applicant(s) shall be disqualified from obtaining a Licence if any provision listed in sub- clauses (i) to (vii) below, applies to its owner(s) or to any of its director(s) or partner(s) or to the Applicant(s). The provisions are, if the applicant has / or has been:

- i. Declared medically insane;
- ii. Sentenced by a Court under any law to imprisonment for a term of two (2) years or more, and a period of five (5) years has not elapsed since his release from such imprisonment;
- iii. Sentenced by a Court of law for committing any offence and a period of five(5) years has not elapsed since his release from such imprisonment;
- iv. Declared bankrupt by a Court of law and has not been discharged from the liability of bankruptcy;
- v. Identified or declared by a Court of law or by a bank or financial institution as a defaulter loane of that bank or institution;
- vi. Its licence revoked by the Commission at any time during the last 5 (five)years;
- vii. An on-going prosecution against the applicant(s) or its owner(s) or share holder(s) or any of its director(s) or partner(s) for any violation of any statutory law and/ or license condition(s) or any other illegal activities.

3.1 Eligibility Criteria

3.1.1. All applicants shall be incorporated in Nigeria.

3.1.2. The Entity must be registered under the laws of Nigeria, and duly certified to operate in Nigeria, by the deadline for submission of applications.

3.1.3. There shall be a minimum of 50% Nigerian ownership in the applying Entity; be it a company, a joint venture or consortium.

3.1.3.1 The said minimum 50% Nigerian ownership shall be in place by the deadline for submission of applications.

3.1.3.2 A minimum 50% Nigerian ownership shall be maintained throughout the duration of the Authorisation.

3.2.1 Selection Process

The Commission shall employ a "beauty contest" to select prospective applicants for the award of a Signal Distributor Service License. This procedure requires that successful applicants meet and satisfy a Two Stage process:

Stage One: Pre-Qualification (Administrative)

Stage Two: Evaluation of Technical-Operational - Management Competence ("Beauty Contest")

- Evaluation of Business & Technical Submissions
- Evaluation of Oral Presentations of Applications

3.3 Stage One: Pre - Qualification (Administrative)

3.3.1 All applicants must be fully compliant with the requirements stated above. There shall absolutely be no consideration for failing to satisfy these requirements.

3.3.2 Proof of Payment of Application Fee.

3.3.3 Compliance with requirements and criteria set forth in Chapter 4.

3.3.4 Subsequent to meeting the said requirements, successful applicants shall be invited to participate in the Stage - Two exercise; that is the "Beauty Contest".

3.4 Stage Two: Technical-Operational-Managerial Assessment

This segment is open to only successful Stage One applicants. It is composed of two parts as follows:

- Evaluation of the Strategic, Operational and Technical submission.
- Evaluation of the applicant's Business Plan Presentation.

3.4.2 Business Plan Applications of successful Stage- One applicants shall be evaluated by a team of competent analysts empanelled by the Commission.

3.4.3 After the evaluation of these applications, applicants shall be required to make an oral presentation of their application to the same analysts in 3.4.2 above. The Evaluation Panel may seek clarifications or request additional documents from applicants.

3.4.4 Successful applicants shall be eligible for the award of Provisional Authorisations.

3.4.5 Authorisations shall only be awarded after successful applicant shall fulfilled the conditions of the Provisional Authorisation which shall include the payment of the Authorisation fees.

3.5 Further Rules

3.5.1. Applicable Legal Norms. The Process shall be conducted in accordance with, and shall be governed by, the laws of Nigeria and this policy document.

3.5.2. Supremacy of the Laws of Nigeria

Where a conflict arises between the laws of Nigeria and any provision of this Procedure document and/ or the Authorisation, the law takes precedence.

3.5.3. Calculation of Time Periods. Unless otherwise specified, the time periods provided herein shall be calculated in calendar days.

3.5.4 **SUBMISSION:** Unless otherwise provided herein, all submissions and receipt of payments should be made to the Director General, National Broadcasting Commission and be marked "Application for SIGNAL DISTRIBUTOR Service Authorisations" .

3.5.5. Acceptance of Terms and Conditions. The submission implies full knowledge and acceptance of, all the terms and conditions set forth herein and under the applicable laws of Nigeria

3.5.6. Notices. Applicants shall designate in writing a person or entity for receipt of any notices in connection with this Selection Procedure. The contact information: full office/residential address, email address, fax numbers, mobile and fixed telephone numbers shall also be provided in the statement designating the person. All notices from the Authority in connection with the application shall be valid when made to such designated person by hand, post, email or by telefax.

3.5.7. Inquiries/Circulars. Any inquiries with respect to this Selection Process should be submitted in writing to the Director General, National Broadcasting Commission with an electronic copy to the Commission's website. The Commission will provide responses to such inquiries and other clarifications through circulars, which shall be sent to the person designated by each Applicant. The circulars shall also be posted on the NBC website.

The Commission reserves the right to amend the above time table where necessary, through a publication on its website (i.e. prior to the deadline for receipt of applications) or through a letter to applicants (i.e. after the deadline for receipt of applications).

3.6 Time table for the Licensing Process

The Licensing Process shall take place in accordance with the following time table:

<i>SjN</i>	Activity Begins	Ends
1.	Press Release to invite applications	1 day
2.	Submission of Application & Proposals to the NBC	3 months
3.	Opening of Proposals by NBC/balloting for order of presentation	1 day
4.	Evaluation of submitted proposals by evaluation Committee	3 weeks
5.	Business presentations by qualified applicants to evaluation committee	2 weeks
6.	Completion of evaluation report	4 days

7.	Approval of evaluation report by NBC board	2 weeks
8.	Announcement of winners	1 day
9.	Payment of license fees	3months

3.7. Application Guidelines

3.7.1. Contents of the Application

The Application shall contain the following:

3.7.1 **Receipt.** Evidence of payment of the Application Fee of One Million Naira.

3.7.2 **Letter of Presentation.** A letter of presentation, signed by a duly authorized representative of the Applicant, which sets forth the Applicant's intention to participate in the Pre- Qualification Process and its acceptance of all the terms and conditions of this Procedure.

3.7.3 **Certificates.** Certificates issued by the relevant governmental authorities, and other competent authorities of the jurisdiction where the Applicant or its principals is incorporated, evidencing that the Applicant is a corporation duly recognised, validly existing and in good standing in such jurisdiction. All certificates must be in English. Certificates translated into English must be certified and notarized.

3.7.4 The above notwithstanding, all applicants shall submit certified true copies of their Certificate of Incorporation, Memorandum and Articles of Association of the Company

3.7.5 **Power of Attorney.** Each Applicant shall designate a representative pursuant to a Power of Attorney issued in accordance with the laws of Nigeria.

Letter of Undertaking. A letter of undertaking signed by its duly authorized representative, (in accordance with Section (1) (d) of the NBC Act) shall be submitted, with the following:

- i. Identification of all the shareholders of the applicants that control more than 5% of its capital and of the entities that directly or indirectly are the beneficial shareholders thereof. The beneficial shareholders of the applicant shall mean those who directly or indirectly own the majority of the shares or the voting rights or who otherwise control such applicant;
- ii. Identification of all the stock exchanges where the shares of the Applicant are traded;
- iii. Statement that all the information and documentation submitted in connection with the Application are true, accurate and complete;
- iv. Statement that the Applicant has not been the subject of any bankruptcy proceedings, reorganizations, or similar proceedings in the last 5years;
- v. Statement that, since the date of the Applicant's last audited reports and financial statements submitted, there has not been any material adverse changes thereto.

3.7.7 Audited Reports and Financial Statements

- (i) The audited reports and financial statements corresponding to the last three fiscal years of the Applicant and (if applicable) the consolidated group to which the Applicant belongs.

(ii) Financial projections and supporting market data shall be submitted both in printed tabular form as part of the main application document and as a series of Microsoft Excel worksheets within a single work book.

3.7.8 Appendices

Applicants are strongly encouraged to include all key information within the main body of the application and to place only supplementary information in appendices. Appendices should be clearly numbered, cross-referenced from the main application document and bound, preferably, in a single volume.

3.7.9 Additional Qualification Criteria:

(i) Information regarding the technical qualifications of the Applicant, which demonstrate its ability to roll out the Signal Distribution Service to improve the quality and enhance the efficiency of broadcasting services in Nigeria. Applicants should refer to networks and businesses where such experiences have been gained, indicating the number of subscribers of the services offered in other markets.

(ii) Information regarding the operational credentials of the Applicant, indicating the services that it is currently operating in Nigeria or other markets and demonstrating its ability to manage the business in an increasingly competitive market.

(iii) detailed resume of the proposed management of the Entity.

3.8 Submission of Proposals

3.8.2 Location and Deadline for Submissions

Proposals may be submitted during business days to the Director General, National Broadcasting Commission (NBC), 20, Ibrahim Taiwo Street, Asokoro, Abuja and be marked "Application for Signal Distribution Service Authorisations", between the hours of 9.00am to 5.00pm. The deadline for submission shall be 5.00pm on...

3.8.3 Originals and Copies

- i. All documents submitted by the Applicant shall be either originals or certified copies. The copies may be certified by the authorized officer of the Applicant.
- ii. The documentation of the Proposal shall be submitted in one(1) original hard copy and five (5) certified hard copies including six (6) copies of any appendices and/ or demonstration material and one (1) electronic copy, clearly marking each as such. In the event of any discrepancies, the original shall prevail.
- iii. The electronic copy shall be in PDF format, along with the completed Microsoft Excel worksheets
- iv. Every page of the Proposal shall be numbered (as a fraction of total number of pages e.g. 1 of 30, etc.)
- v. Proposals shall include a table of contents and a page setting forth the Applicant's name and legal domicile as well as the postal and e- mail address, telephone and facsimile numbers of a person designated to receive notices.

- vi. Proposals shall be submitted in a sealed envelope/box.

3.9 Updating

Each Applicant shall maintain current, the facts and information supplied in the Proposal, and shall communicate to the Director General of the Commission, all material changes that arise with regards thereto.

3.10 Modification

This Procedure does not constitute an offer to contract on the part of the National Broadcasting Commission and the Commission has the right to modify or amend any provision or condition hereof; provided however, that any such modification or amendment shall be valid only if it is in writing.

3.11 Disclaimer

The NBC shall not incur any liability whatsoever in exercising its rights in above or any other rights granted in this Process.

3.12 Additional Information

The Commission reserves the right to request, at any time, additional information or documentation from Applicants.

THE BROADCASTING CODE

The National Broadcasting Commission is empowered by Section 2(1) of the National Broadcasting Commission Act, Cap. NII, laws of the Federation of Nigeria, 2004 to amongst other things:

- a) Receiving, processing and considering applications for the establishment, ownership or operation of radio and television stations including-
 - i. Cable television service, direct satellite broadcast and any medium of broadcasting
 - ii. Radio and television stations owned, established or operated by the federal, state or local government
- b) Regulating and controlling the broadcasting industry
- c) **Establishing and disseminating a National Broadcasting Code and setting standards with regards to the contents and materials for broadcast etc.**

THE NB CODE

Pursuant to its mandate to produce a professional Code for the industry, the Commission produced a Code which captures the reality of the digital switch over project when it note in its preface the 5th edition of the Code, (2012)that -Nigeria has started the process of transiting from analogue to digital terrestrial transmission. This is to ensure that the country is not caught napping by 2015 when the whole world is expected to have gone digital.

The advent of digitization and with its emerging new media, according to the Code no doubt, poses a new set of challenges to the industry. Therefore, to meet up with the challenges of the emerging trend in the broadcast industry, there is the need to have a proper and workable regulatory framework that will guide the operators in the industry.

The fifth edition of the Nigeria Broadcasting Code, therefore updates the rules and regulations of broadcasting in the country to make operators responsive to the developments that are constantly affecting the industry.

For several months, veteran broadcasters from across the country, professionals in broadcast industry, scholars from tertiary institutions that offer Mass Communication and other interested members of the public met and deliberated on the provisions of The Code, especially the aspect of digitization and democratization of the airwaves.

This edition anticipates the emerging trend in the industry and the need for structured guidelines especially on the issuance of broadcast licence. It stipulates that-

2.0.1 LICENSING

Licensing is the process of conferring legal authority to operate broadcasting under specific conditions as set out by the Law.

2.0.2 It shall be illegal for any person to operate or use any apparatus or premises for transmission of sound or vision by cable, television, radio or satellite or other medium of broadcast from anywhere in Nigeria, unless licensed by the Commission.

2.1. TIERS OF BROADCASTING

- a) Public Broadcasting
- b) Commercial Broadcasting
 - i. Free to air
 - ii. Subscription broadcasting
- c) Community Broadcasting

2.2. TYPES OF BROADCASTING SERVICE

2.2.1. Terrestrial Radio and Television Coverage:

- a) National
- b) Regional
- c) Zonal
- d) State
- e) City

2.2.2 Terrestrial Radio - Mode:

- a) Amplitude Modulation (AM)
 - (i) Medium Wave (MW)
 - (ii) Short Wave (SW)
- b) Frequency Modulation (FM)
- c) Digital Audio Broadcast (DAB)
 - (i) Digital Radio Mundial (DRM)
 - (ii) In-Band On Channel (IBOC) Standard

2.2.3. Terrestrial Television - Mode: (PAL; B/G)

- a) Analogue Open Broadcast (Free-to-Air)
 - (i) Very High Frequency (VHF)
 - (ii) Ultra High Frequency (UHF)
- b) Open Digital Broadcast
 - (i) Digital Video Broadcast-Terrestrial (DVBT/DVB- T2)
 - (ii) Digital Video Broadcast-Cable (DVB- C/DVB-C2)
 - (iii) Digital Video Broadcast-Mobile (Technology Neutral)
 - (iv) And any other digital format
- c) Subscription Pay Television
 - (i) Multipoint Multimedia Distribution System (MMDS)
 - (ii) Digital Video Broadcast-Cable (DVB-C/DVB-C2)
 - (iii) Digital Video Broadcast-Terrestrial (DVB-T/DVB-T2)
 - (iv) Digital Video Broadcast-Mobile (Technology Neutral)
 - (v) And any other digital format

2.2.4 Satellite Radio - Mode:

- a) Open Broadcast (Free-to-air)
- b) Subscription Radio
- c) Temporary Uplink

2.2.5. Satellite Television - Mode:

- a) Open Broadcast (Free-to-air)
- b) Subscription Television
 - (i) Digital Satellite Broadcast (DSB)
 - (ii) Direct-to-Home (DTH)
- c) Temporary Uplink

2.2.6. Community Broadcast (Free-to-air)

- a) Community Radio/Television
- b) Community Wired Service (Sound and Video)

2.2.7. Internet Broadcasting

- a) Radio
- b) Television

2.3. CATEGORIES OF BROADCAST LICENCE

2.3.1 The Commission shall consider applications for the grant of broadcast licence in the following categories:

- a) Terrestrial Broadcast; Free-to-air (Audio and Video)
- b) Satellite Broadcast; Free-to-air (Audio and Video)
- c) Terrestrial Broadcast; Subscription (Audio and Video)
- d) Satellite Broadcast; Subscription DSB (Audio and Video)
- e) Satellite Broadcast; Subscription DTH (Audio and Video)
- f) Digital Terrestrial Television
- g) Cable Television Subscription
- h) Community (Radio and Television)
- i) Networking (Radio and Television)
- j) Content Distribution (syndication)
- k) Internet Broadcasting
- l) Signal Distributor
- m) Digital TV Content Aggregation Licence
- n) Broadcast Signal distribution Licence
- o) Digital Terrestrial (Free-To-View) TV licence
- p) Direct Satellite Broadcast Licence
- q) Direct to Home broadcast Licence
- r) Digital Subscription Television Licence

2.4. BROADCAST PERMIT

2.4.1. Persons or entities operating any of the services listed hereunder shall apply for, and obtain, a permit from the Commission:

- a) broadcast equipment dealership (wholesale or retail)
- b) broadcast equipment manufacture
- c) hotel signal redistribution (audio and video)
- d) research on and testing of broadcast facilities
- e) Set- Top-Box Manufacturers Authorization

2.4.2. Any of the above permits shall be valid for a period of one year in the first instance.

2.4.3. An application for the renewal of any of the above permit shall be made to the commission within a period of two months before the expiration of the permit.

2.4.4. The above listed permits shall be obtained on payment of a prescribed fee.

2.5. DIRECTIVE TO SIGNAL DISTRIBUTORS

Subject to the Provisions of the Act and the Nigeria Broadcasting Code, the Commission may give directives to the Signal Distributor/Content Aggregator to take off the signals of an offending stations who is guilty of Grade" A" breach if the station fails to remedy the breach after three written warnings. This will include failure to pay licence fees.

It shall be the duty of the Signal Distributor or Content Aggregator to comply with such directives.

2.6. LICENCE USAGE

A licensee shall ensure that broadcast operatives read and understand the provisions of the Nigeria Broadcasting Code before putting the licence to use.

- a) A licence shall only be put to use on payment of a prescribed fee.
- b) A licence shall be used only for the type of broadcast service approved and specified in the licence.
- c) A licence shall be withdrawn if for three consecutive months a licensee ceases to provide the service for which it was issued.
- d) A licence shall be subject to the provisions of the **NBC Act, The Code** and any other regulation made from time to time by the Commission.

Another vital regulatory and policy document is the Nigeria Broadcasting Code - The National Broadcasting Commission is the regulatory body for broadcasting in Nigeria.

5. FUNCTIONS OF NATIONAL BROADCASTING COMMISSION

The functions of the Commission shall be to –

- a) advise the Federal Government generally on the implementation of the National Mass Communication Policy, with particular reference to broadcasting;
- b) ensure that regulatory control is applied across the range of broadcasting services according to the degree of influence that different types of broadcasting services are able to exert in shaping community views in Nigeria;
- c) receive, process and consider applications for the establishment, ownership and operation of radio and television stations including-
 - i. Cable Television Services, Direct Satellite Broadcast, Direct-To-Home (DTH), IPTV, IP Radio, EPG, OTT
 - ii. Broadcast Signal Distribution; and
 - iii. any other medium of broadcasting;
- d) Recommending applications through the Minister to the President, for the grant of radio and television licences.
- e) regulating and controlling the broadcasting industry;
- f) conducting research and development in the broadcasting industry;
- g) receive, consider and investigate complaints from members of the public regarding the content of broadcast and the conduct of a broadcasting station;
- h) regulate ethical standards and technical excellence in the provision of broadcasting services, and for that purpose enforce a Code of conduct in conjunction with operators in the broadcast industry;
- i) allocate and regulate the use of broadcast frequencies In conformity with policies, treaties, protocols or conventions to which Nigeria is a signatory;
- j) set minimum standards for broadcast equipment in the broadcasting industry;
- k) provide guidelines on tariffs chargeable for the provision of broadcast services;
- l) promote Nigeria's indigenous cultures, morals and community life through broadcasting;
- m) promote authenticated radio and television audience measurements and penetration;

- n) initiate and harmonise Government policies on trans-border direct transmission and reception in Nigeria;
- o) ensure high quality manpower development in the broadcasting industry by accrediting curricular and programmes for all tertiary institutions that offers mass communication in relation to broadcasting;
- p) monitor broadcasting for harmful emissions, interference and illegal broadcast casting;
- q) approve the transmitter power, the location of stations, areas of coverage as well as regulate types of broadcast equipment used;
- r) regulate Internet (webcast) content hosted in Nigeria;
- s) publish newsletters and broadcast journals, organise conferences, workshops and seminars and prepare information programmes, for the purpose of raising public awareness about the broadcast industry;
- t) serve as national consultant on any legislative or regulatory issue on the broadcasting industry;
- u) intervening and arbitrating in broadcasting industry
- v) ensuring strict adherence to the national law, rules and regulations relating to the participation of foreign capital in relation to local capital in broadcasting
- w) guaranteeing and ensuring the liberty and protection of the broadcasting industry with due respect to the law; and

(2) The Commission shall ensure the –

- a) optimal use of broadcast spectrum;
- b) availability throughout Nigeria of a wide range of broadcast services;
- c) application, in the case of broadcast services, of standards that provide adequate protection to members of the public from the inclusion of offensive and harmful materials in such services;
- d) uphold the principles of equity and fairness in broadcasting;
- e) ensure that broadcasting services are operated in a manner that-
 - i. promotes public interest in a cost effective manner;
 - ii. readily accommodates changes in technology and;
 - iii. encourage the development of broadcasting technologies and the provision of services made practicable and affordable by those technologies.
- f) Regulate ethical standards and technical excellence in public, private and commercial and community broadcast stations in Nigeria to further the interests of –
 - i. Citizens in relation to communications matters; and
 - ii. Consumers in relevant markets, where appropriate by promoting competition;
- g) universalize access to broadcasting in Nigeria;
- h) maintain capacity for innovation and currency in broadcasting practice and technology;
- i) promote and project Nigeria's domestic and foreign policies internationally;
- j) enhance national capacity for producing high quality broadcast programmes in Nigeria;
- k) support the growth and development of broadband and multi- media platforms and ensure compliance with digitization;
- l) establish and disseminate a national Broadcasting Code and set standards with regard to the content and quality of materials for broadcast;

- m) propose and effect modification to licence where appropriate in accordance with the provisions of this Act;
- n) determine and apply sanctions including revocation of licences of defaulting stations which do not operate in accordance with the broadcast code and in the public interest.
- o) carry out such other activities as are necessary or expedient for the full discharge of all or any of the functions conferred on it, under or pursuant to this Act.

(3) The commission shall take such steps and enter into such arrangements, as appear to it to encourage the protection of children, persons with disabilities, the elderly, disadvantaged and those on low incomes.

6. POWERS OF THE COMMISSION

(1) The Commission shall have the following responsibilities pursuant to this Act-

- a) the formulation of policies, monitoring the broadcast sector , issue directions of a general character and matters of broad national policy consistent with the objects of national security and economic development
- b) the negotiation and execution of international broadcasting treaties and agreements, on behalf of Nigeria, between sovereign countries and international organizations and bodies; and
- c) The representation of Nigeria at proceedings of international organizations on matters relating to broadcasting.

CHAPTER 4

IMPLEMENTATION OF THE DSO IN NIGERIA

Before a DTT platform can be launched, national administrations should first put in place the necessary regulatory framework. Regulatory regimes must address the DTT service and frequency licensing issues, receiver specifications, and the management of analogue switch-off. However, they are also influenced by the international and regional agreements which have been signed by national administrations. In some countries, the launch of the pay DTT platform has enabled governments to put in place rules necessary to regulate the broadcasting sector which had been lacking in the analogue environment.

Walop (2016) in his Guidelines for the transition from analogue to digital broadcasting as provided by the ITU, lists the following as the vital agenda-functional frame-road map development -roadmap examples .The functional frame includes key issues and choices faced by the regulator when formulating DTTB,MTV or Analogue Switch Over policy objectives.

According to the ITU expert Walop implementation of policies is key to the DSO-by issuing information, funds, rights, licenses and permits to qualified market parties, compliance with relevant legislation, in compliance with the relevant legislation. Key objective is to ensure the process of turning off the analogue terrestrial television signal and replacing it with a digital signal, which will in turn bring about more services and new revenue streams as well as new business models.

The Road map according to Walop (2016) is a management forecasting tool which is directed to the implementation of strategy and related to project planning, also matching short term and long term goals. It also includes main activities needed to meet these goals. He notes that the road map ideally has three major uses

- helping to reach consensus about requirements and solutions
- providing a mechanism to help forecast the key milestones
- providing a frame work to help plan and coordinate the steps needed.

Walop recommends phase

1. development(DTT Policy development)
2. planning (Analogue Switch off planning)
3. implementation (licensing policy and regulation)
4. Finalisation/administration licence administration)

With regards to time, Walop states that:

preparation and planning time is 2-8 years. Implementation and Analogue Switch over time is 1-14 years

Countries starting later need in general less time.

He concludes that ITU guidelines focus on -regulator, broadcast network operator and service provider- DTTB and MTV specific activities.

In practice roadmaps may differ depending on - status of implementation -responsibilities and role of organisations of the NRT

It is important to adopt realistic time schedules- implementation of the whole process may take several years and will involve many people.

At the beginning of the DSO in Nigeria the NBC engaged Mediaator a company in the media consultancy business in the UK to assist in drawing up a frame work -after a period of intensive study and research the company came up with the following frame work for the DSO in Nigeria-

The Mediaaator (2015) notes that there are three main phases of the Digital switch over-the planning phase, Digital switch on and analogue switch off.

It further notes that six elements need to be in place in order to achieve a successful DSO.

1. Digital proposition that will ensure licensing of DTT channels,-that will offer powerful free to air TV proposition and new digital only channels with better reception, greater functionality and a managed EPG-which will drive digital take up.
2. Digital Network that will ensure emergence of National signal distributors, with capacity for sufficient spectrum gifted to channels within the free view proposition to encourage investment. Signal distributors must also strive to attain 100 percent digital coverage by prudent management of platforms.
3. Customer premises Equipment that will ensure standards for quality of services-there must be robust technical specifications for Customer premises equipment and compliance badging for compliant suppliers and retailers
4. Communication and Customer support which will ensure the right communications-this should be led by free view marketing in order to maximize take -up in the DSO phase-the communications should be coordinated by the regulator to ensure awareness of timings and actions required-should also provide support on subsidy support plan.
5. Project management group that will ensure project management -the group should be centralized, single purpose and within the regulator created to manage all aspects of the DSO.
6. Regulation and Funding-which government must put in place before the actual implementation of the DSO. This must be put in place within 3-12 months of implementation to ensure success.

To ensure a smooth digital transition, the Mediaator (2015) recommend the following principles

- a/ widest possible reach of digital services
- b/ a fully coordinated effort
- c/ stakeholder obligations balanced by clear benefits with full transparency
- d/ clearly understood roles for all stake holders
- e/ a clear ,attainable and secure time table

Digitag (2013) in Guide to Digital Switch Over: Africa and Asia, of Switzerland in DIGITAL SWITCHOVER STRATEGIES - notes that in switching off analogue terrestrial television services,

regulators must determine whether to use a phased approach or a national approach, the speed at which switchoff will proceed, and ensure against conflicts with other national activities.

Phased versus national approach

In a phased approach, analogue switch-off takes place in a given country region by region. DTT planners prepare a timetable detailing when analogue transmitters will be shut off throughout the country. With this approach, DTT planners can apply the lessons learned from one region to improve the process in another region. Should something go wrong, the 'damage' is limited to a single region. In addition, a phased approach allows DTT planners to spread the cost and effort of digitalization overtime. Most countries in the world have used the phased approach.

Determining where to begin the analogue switch-off process varies between countries. Some countries have begun the process in large urban areas with high population densities but few transmitters. This has often been the case in Africa where analogue transmitters are primarily located in urban centres. Other countries, especially in Europe, have opted to begin the process in areas with low population densities. In a national approach to analogue switch-off, analogue services are ended simultaneously across the whole country.

All viewers benefit from the advantages of digital switchover, as viewers are treated equally and given the same access to services but equally all suffer from the need to equip for digital. This approach has been adopted in Denmark, the Netherlands and the United States.

When a single date for analogue switch-off is selected, any subsequent delays can have negative consequences if not properly managed. It is for this reason that national administrations must strive to achieve a consensual analogue switch-off date with all industry stakeholders. The risk otherwise is to be caught in time-consuming legal disputes.

In situations when the analogue platforms is switched off and then subsequently switched back on, viewers will be confused and reluctant to purchase a DTT receiver.

Countries switching over must consider how much time it will take the broadcast community, including viewers, to prepare. In a phased approach, planners must consider the total number of phases necessary and the length of each phase. This will then determine how long it will take a given market to complete the process. For example, the analogue switch-off process in Tanzania took place across several phases from December 2012 until October 2014. In Rwanda, switch-off occurred very rapidly across 4 phases over a 6-month period between January and July 2014.

Analogue switch-off cannot advance too rapidly without the risk of disenfranchising viewers. The speed of the process will be determined by the time necessary to ensure that viewers no longer depend on the analogue terrestrial platform. It was for this reason that Namibia decided to delay the first phase of analogue switch-off in Windhoek, Okahandja and Rehoboth by 6 weeks to ensure that viewers were properly equipped. However, many viewers will wait until the last moment to purchase the necessary conversion equipment. In some countries, viewers did not purchase their receivers until after the switch-off was completed. It is estimated that 27% of television households lost their television services following switch-off in Rwanda.

DTT set-top box vendors need ensure that they have sufficient quantities of DTT receivers available for viewers to purchase. In Africa, the lack of accredited vendors and available set-top boxes has been an impediment to DTT household penetration.

Choosing the right time of the year

The date chosen for analogue switch-off can impact the success of the process. The time of the year, the day of the week and the events on the political and sporting agenda must be taken into consideration.

The calendar for political and sporting events will also need to be taken into consideration with major events, such as General Elections or the Olympic Games, to be avoided. In Kenya, plans for analogue switch-off were put on hold due to the Presidential election in March 2012. Switch-off should also be avoided during religious holidays.

NEEDS OF VIEWERS

A successful analogue switch-off process goes smoothly and largely unnoticed by the general public. However, an ill-planned process can have profoundly negative consequences where confused viewers can suddenly lose their television services. To help viewers prepare adequately, the broadcast community needs to address information to all television households relying on the analogue terrestrial platform using targeted communication tools that can reach out to diverse population segments.

Communications activities will generally take place at the national level with complementary efforts made at the regional level. It will also be important to target specific groups such as property managers and households that rely on communal antennas.

Communication tools

Communications is the key to providing the general public with information on the analogue switch-off process so that viewers can clearly understand what will happen and how they must prepare. Generally, communication campaign have included both national and regional activities. Information provided to third-parties, such as the media or retailers, can be a further means for reaching viewers. Tools used in communication campaigns have included websites, advertisements in national print and broadcast media, and call centres. In some countries, broadcasters and pay-DTT operators have participated in roadshows to promote information about the upcoming switchover.

Reaching out to targeted audiences

It is recognized that some households will require more support than others will to prepare for analogue switch-off. As a result, many communication activities have focused on helping the most vulnerable viewers. It has also been important to reach out to those responsible for communal antennas where the single antenna may provide signals for a large number of households.

In general, vulnerable viewers have been defined as those of a certain age, with physical disabilities or living alone and who may have difficulties knowing how to prepare for analogue

switch-off. Often, help schemes target these viewers and provide assistance that can include checking the existing antenna and installing the necessary equipment. Special focus has also been given to owners and managers of multiple dwellings and apartment blocks. Not only are they an important means for distributing information to the household level but they must often take responsibility for the work of upgrading antennas.

COST OF DIGITAL SWITCH OVER

The cost of digital switchover varies between countries. It can depend on the size of the country, the number of viewers that need to be informed about the switch-off as well as the policy tools that will be used to promote digital switchover.

Costs will also be borne by broadcasters who will need to launch new services on the DTT platform as well as simulcast analogue and digital television services. Broadcast network operators will need to roll-out a DTT network whose cost will vary depending on the number of transmission sites that need to be upgraded.

DTT Distribution

As with the introduction of any new technology, the launch of the DTT platform will require significant investments in the transmission network. The amount of the investment will depend upon the number of transmission sites that must be upgraded. In the Philippines, the commercial broadcaster GMA Network plans to invest PHP 3 billion (EURO 60 million) in its DTT network.

In the long-term, the conversion to digital technology will bring cost advantages. Digital networks are less expensive to operate than analogue networks and because spectrum is used more efficiently, more services can be delivered to viewers using the same frequency channels.

Reception equipment

In most countries, viewers will be responsible for purchasing the necessary equipment to allow for the reception of the DTT platform. This can include digital TV sets, set-top boxes as well as antennas. Many viewers may be prepared voluntarily to invest in new equipment or replace their existing TV set if the DTT platform is perceived to offer additional benefits compared with the analogue platform. The continued price decrease of DTT receivers has also aided in reducing the cost to viewers. The per-capita income in a given country can help determine whether viewers have sufficient resources to purchase a receiver.

In some countries, especially in Africa, government have helped reduce the price of DTT receivers by eliminating receiver import taxes as well as sales taxes. In Thailand, the government has given all households a voucher to be used towards the purchase of a DTT receiver.

DSO information campaigns

Communication activities costs will vary depending on the activities undertaken. For example, sending information brochures to all households will be much more costly than making the information available on a dedicated website. In Europe, the measured cost of communication activities has varied from €255 million budgeted in France to €3 millions pent in Ireland. The broadcasters may contribute to these activities indirectly by airing digital switchover advertisements but not charging for the cost of the air

time. Network operators may agree to operate a call-centre and provide information on web sites without charge. In many countries, pay television operators have provided information about analogue switchoff, which has often served to simultaneously attract new subscribers. In anticipation of analogue switch-off, some pay-DTT operators have also launched special promotional subscription offers.

In Tanzania, communication campaigns were tailored to target different audience groups based on age and social backgrounds.

Financial support for viewers

Support given to viewers can be made available to all households as part of a general subsidy or may be targeted to certain segments of the population.

Targeted assistance

Financial assistance can be used to help some households to purchase equipment directly; for other households, some practical assistance will be necessary to help set-up new digital equipment. Deciding who should benefit from this help has been addressed by many national governments. In the United Kingdom, the Digital Switchover Help Scheme provided assistance to an estimated 1.2 million eligible recipients which included households with at least one member aged 75 years or over or with significant disability. In Singapore, the government has announced that it would provide 170,000 low-income households with the necessary support to acquire and install a DTT set-top box and antenna. In Malaysia, two million DTT set-top boxes will be distributed to low-income households. Similarly, the South African government will make 5 million DTT set-top boxes available to eligible households. These set-top boxes are expected to be locally manufactured.

In other countries, target assistance programmes were not always put in place. Volunteer work was available in Ireland, while the government's social services help low-income families in Sweden acquire digital receivers.

General subsidies for all households

In some countries, financial support has been made available to households regardless of income levels, financial need or television delivery platform used. In the United States, all households could apply for up to two coupons worth USD \$40 each to use towards the purchase of digital set-top boxes. Similarly, the NBTC is currently in the process of distributing a THB 690 coupon to all 22 million households in Thailand. While this coupon should suffice for the purchase of a DTT set-top box and receiving antenna, it can also be used towards the purchase of a digital television set. The funding for this programme has been made possible through the revenue generated from the auction of broadcast licenses on the DTT platform. As of June 2015, 5 million coupons had already been redeemed.

Similarly, in Namibia, the government subsidised the cost of DTT receivers. As a result, all viewers could purchase a DTT set-top box for the price of NAD 199 (EUR015).

KEY FACTORS FOR SUCCESS

Several factors have been identified to help make analogue switch-off proceed smoothly in those markets that have begun the process. These general recommendations have been incorporated into the analogue switch-off plans of many countries.

All Actors On Board

Analogue switch-off will require the active participation of all stakeholders in the television industry. National administrations, broadcasters, network operators and manufacturers will need to support the initiative and take positive steps to allow for the completion of the analogue switch-off process. Court challenges will only cause delays, create animosity and politicise the process.

National administrations need to take political decisions, such as issuing a national DTT receiver specification and setting a firm analogue switch-off timetable, and ensure a sufficient supply of compliant DTT receivers. Broadcasters need to ensure that viewers are informed and continue receiving their television services. Network operators need to make necessary upgrades to their equipment to allow for digital broadcasting.

By working together, the broadcast industry can ensure a minimum amount of disruption for viewers.

Strong Leadership

The decision to cease broadcasting analogue television services needs strong leadership to affirm when and how analogue switch-off will take place and define a clear roadmap. This can provide the necessary credibility to the process and help avoid unnecessary delays. Generally, such leadership must come from the government, usually the upper echelons, to ensure that stakeholders will not cause unnecessary delays to the process.

Most countries have set-up an organisation to steer the analogue switch-off process. Such an organisation brings together members of the broadcast industry, as well as government representatives, and consumer groups. To succeed, the organization must be given a clear mandate and sufficient funding to carry out its work.

Effective Communications Strategy

In order to prepare for analogue switch-off, viewers will need to have access to adequate information in a timely fashion. They will need to be informed on the launch of DTT services, the availability of alternative television platforms available and the date when analogue terrestrial television will end.

It may also be useful to provide viewers with information about DTT receiver and antenna installation as well as the use of remote control functionalities.

Sufficient Financial Resources

While the cost of digital switchover will vary among countries, sufficient resources must be available to roll-out DTT networks, provide content on the platform, support communication and marketing activities, and assist viewers with the acquisition of DTT receivers. Resources may also be necessary to provide DTT receivers to low-income households.

Countries without sufficient resources to roll-out their DTT networks have relied upon foreign bank loans or the proceeds from the future sale of frequency licenses.

FUTURE ISSUES FOR CONSIDERATION

As countries complete digital switchover, questions have begun to emerge on the use of frequencies in the UHF band. The propagation characteristics of these frequencies are particularly appealing to telecom operators for the provision mobile broadband services. In Africa, the mobile telephony market is the fastest growing in the world and is currently expanding at twice the rate of the global market. It is for this reason that many national administrations have been considering allocation of frequencies for mobile telecom services.

However there is a major contrast and physical incompatibility between the network topologies of broadcasting (often high tower/high power networks) and mobile telecoms (dense lower power cellular networks), which may tend to make it difficult for broadcasters and mobile telecom operators to share spectrum access in the future. Technology innovations have also opened the possibility to make use of the so called white spaces between the frequency channels in use in a particular area by broadcasters.

DIGITAL DIVIDEND

The move from analogue to digital technology on the terrestrial television platform has allowed for the more efficient use of spectrum capacity. As a result, it is possible for some frequencies to be allocated to new uses.

800 MHz Band

The ITU Radio Regulations give mobile telecom operators co-primary allocation status in the 800 MHz band alongside broadcast services in all regions of the world as of 2015. Since 2007, mobile telecom services share co-primary allocation status with broadcast services in the Americas, parts of Asia and the Asia Pacific (ITU Regions 2 and 3). In Africa, parts of Asia and Europe (ITU Region 1), this allocation does not take effect until 2015 unless otherwise permitted by national administrations.

700 MHz Band

The Radio Regulations give mobile telecom services co-primary service allocation with broadcast service in the 700 MHz in the Americas, parts of Asia and the Asia Pacific (ITU Regions 2 and 3) since 2007. In Africa, Europe and parts of Asia (ITU Region 1), a similar allocation was discussed at the World Radio communications Conference (WRC) in 2012 and national administrations agreed to put this allocation into effect until at the next WRC in 2015.

In order to increase worldwide, harmonised use of this band for mobile services, countries in Europe, the Middle East, Africa and Latin America are planning to implement the APT700 band plan developed by Asian Pacific countries.

Further Frequency Allocations?

Proposals have been made to allow co-primary allocation to broadcast and mobile broadband services in the UHF band at the upcoming WRC in 2015. This would allow mobile broadband services to operate in the frequencies from 470 - 862 MHz in the ITU Region 1 countries.

However, many regional organisations have indicated their opposition to such an allocation and instead prefer to retain broadcasting services on a primary basis in the frequencies from 470 - 694 MHz. The CEPT (Europe) and the ATU (Africa) support a "no change" policy for these frequencies which denotes a

continued provision of broadcast services. ASEAN (Asia Pacific) has not yet issued its position regarding the allocation for these frequencies.

In the United States, the government has agreed to release further frequencies in the UHF band for mobile telecom operators through a process known as spectrum incentive auctions. Broadcasters are invited to voluntarily give up their UHF band frequencies in return for financial compensation. These frequencies will then be sold via auction to mobile broadband providers. The auction is expected to take place in 2016.

Revenue Generated From Spectrum Auctions

In countries where the auction of spectrum licenses in the UHF bands has taken place, national administrations have been able to generate significant funds.

Country	Date Auction Completed	Revenue Generated Licence	Frequency Bands
Denmark	June 2012	DKK 739 Million (€99 Million)	800MHz
France	Dec 2011	€2.6 Million	800 MHz, 2.6 GHz
Romania	Sept 2012	€682 Million	800 MHz, 900 MHz, 1.8 Ghz, 2.6 GHz
Spain	July 2012	€1.6 Billion	800 MHz, 900MHz, 2.6 GHz
Sweden	March 2011	SEK 2 Billion (€230 Million)	800 MHz
United States	March 2008	\$19 Billion	700 MHz

The table over the page details the amounts raised by various national administrations.

The telecommunications industry's lobby group, GSMA has estimated that the African continent could generate \$13 billion in the auction of frequency licenses in the 700 MHz and 800 MHz bands. Currently, the licensing of these frequencies has not yet taken place.

The National Communications Authority in Ghana opened a consultation on the licensing of frequencies in 800 MHz band which closed in June 2015. In Nigeria, some media outlets have reported that the previous President may have allocated frequency licenses in a process that contravened national legislation.

Consequences to the broadcast industry

The consequences of allocating frequencies in the UHF band will vary between regions of the world with the process easier in some parts of the world compared with others. In Europe, the decision to allocate the 800 MHz band for the provision of mobile telecom services (4th generation LTE services) using harmonized technical conditions has had significant repercussions for the DTT platform in terms of frequency migration, interference, and future planning considerations. The existing DTT services needed to migrate to new frequency locations which entailed changes at transmission sites and, in some cases, upgrades to reception antennas. In addition, DTT reception has been affected by interference caused by mobile broadband services. Using the 700 MHz band for mobile broadband services will not only result in a loss of 30% of the DTT platform's allocated capacity but results in similar problems associated with the migration, namely migration costs and interference to the DTT platform. In Africa, the situation is different given that the upper part of the UHF band is not used for the provision of DTT services. Instead, Band III has been used for analogue broadcasting and the DTT platform has not needed to use frequencies in the 700 MHz and 800 MHz bands. Already 47 nations in the sub-Saharan have begun frequency coordination. Allocating these frequencies to mobile broadband services will not present the difficulties for the DTT platform which have been present in Europe.

Digitag (2013) provides the following DTT coverage requirements-National administrations will need to decide how much of the population will be able to access the DTT platform. Because the DTT platform is traditionally the only platform to provide free television services, most administrations opt for near universal coverage. However, doing so is not always feasible.

The cost of providing universal coverage can be very high, especially for countries in Africa, which encompass large territorial areas. The cost of rolling out the DTT network to the last 10% of the population can be more costly than to the first 90% of the population.

Greater amounts of funding are needed to build a DTT network in a mountainous terrain compared with a flat terrain. In addition, countries with large territories may not find it cost-efficient to provide services in rural areas. It is for this reason that some opt to supplement their DTT coverage with other distribution platforms such as a satellite services. In South Africa, DTT coverage will reach 88% of the population while the remaining 12% will access digital television services via satellite. Similarly, DTT coverage in Kenya is only available to 58% of the population although plans are underway to expand the DTT network.

In countries where electricity is not universally available, governments may opt to limit DTT network roll-out. However, network operators have been adept in building transmission sites that are able to generate their own power supply, generally through the use of renewable energy sources. Similarly, manufacturers have also developed receivers that also make use of renewable energy sources. Viewers may also decide to use smaller receivers, such as tablets or smart phones, to access television services.

The National Broadcasting Telecommunications Commission (NBTC) licensed four public service broadcasters to serve as network operators for the commercial DTT platform. Each public broadcaster has been allocated one multiplex with the exception of the Royal Thai Army Radio and Television, which has been allocated two multiplexes.

The broadcast network operators are required to follow a timeline for the roll-out of the DTT network. Within the first year of launch, the DTT platform must reach 50% of the population until it progressively

reaches 95% of the population by the fourth year. In urban areas, the network must provide portable indoor reception. Broadcasters with service licenses on the DTT platform are able to select which DTT network operator will transmit their services. The four network operators have agreed to share common facilities including towers, antennas and combiners.

In Africa, the penetration of television sets is relatively low with most owned by urban dwellers. In Uganda, it is estimated that 60% of all television sets are located in the region of the capital city Kampala where digital switchover has been completed. It is for this reason that some governments have opted to roll-out DTT networks primarily in cities. For example in Zambia, the roll-out of the DTT platform has focused on the cities along the national railway line between Livingstone and Chililabombwe as well as the provincial capitals.

The table shows the coverage of the DTT platform in various countries.

Country	DTT Population Coverage
Germany	90%
Hong Kong	99%
Japan	95%
Kenya	58%
Malaysia	98%
Namibia	70%
Senegal	90%
South Africa	88%
Spain	98%
Tanzania	25%
Thailand	95%
United Kingdom	98.5%

Analogue Switch-off date

Many national administrations have been responsible for setting the deadline of when analogue switch-off must be completed in their country. Generally, the communications regulator, together with the broadcast industry, will determine and plan the process for doing so and ensure that switch-off is completed by the government-set deadline. Maintaining consensus between the various DTT stakeholders has been key in ensuring a successful digital switchover process and limiting confusion among viewers.

The table shows the analogue switch-off date in various countries.

Country	Date
Australia	2013
Finland	2007
France	2011
Germany	2008
Ghana	2017
Indonesia	2018
Italy	2012
Japan	2011
Kenya	2015
Malaysia	2020
Mauritius	2013
Namibia	2015
Netherlands	2006
Nigeria	2016
Poland	2013
Russia	2018
Rwanda	2014
South Africa	2017
South Korea	2012
Spain	2010
Taiwan	2012
Tanzania	2014
Thailand	2020
Uganda	2015
United Kingdom	2012
United States	2009
Vietnam	2020

Mandating the digital tuner

Some countries have opted to adopt national legislation requiring that consumer product manufacturers include a digital tuner in all television sets sold after a certain date. In the United States, the government made tuner mandation a cornerstone of its digital transition policy and required all television sets sold after March 2007 to include a digital tuner. However, a similar attempt to ban the import and sale of analogue television sets in the Ivory Coast met with resistance.

BUSINESS ISSUES

Digital switchover brings new opportunities to the broadcast industry as well as to viewers. Most notably, the launch of the DTT platform increases market competition, whether for the provision of broadcast services in a multi-channel environment or for the delivery of such services. This, in turn, translates into more efficient use of resources and lower costs. In many countries, the DTT platform has allowed new entrants, such as broadcasters and service operators, to enter the broadcast market while incumbent broadcasters have generally increased the number of programme services they offer. As a

result, viewers have benefited from wide-range of new services. Manufacturers have benefited from increased sale of the digital receivers to access the new television services. Broadcasters and service providers have been able to implement new business models for the delivery of their services. But the service offering varies between markets. Some markets have launched extensive pay-DTT platforms while other markets have replaced the existing free-to-air offering. The business model adopted will be influenced by such market drivers as the size of the terrestrial television market, consumer habits, and the funding available to launch news services. Business models will also be impacted by the technology adopted for digital switchover. For example, countries that have only recently begun digital switchover can benefit from such new technologies as DVB-T2 which, in turn, enables an efficient use of spectrum and allows providers to augment their service offering.

CHAPTER 5

PROJECT MANAGEMENT: ROLES AND RESPONSIBILITY OF CRITICAL KEY PLAYERS

HONOURABLE MINISTER FOR INFORMATION & CULTURE

Role:

Setting the DSO strategy for Nigeria and ensuring its success.

Responsibilities:

- Approving the DSO strategy
- Ensuring the NBC is appropriately empowered and directed to deliver DSO
- Liaising with the Minister of Communication to agree on spectrum usage and scale
- Liaising with the Finance Minister to ensure the required funding is available
- Leading government communication and awareness programme

DIGITEAM

Role:

Governance - Overseeing DSO strategy implementation

Responsibilities:

- Ensuring that the DSO Programme is delivered on time, on budget and with minimal disruption
- Making sure critical issues are passed to the Honourable Minister in a timely fashion
- Overseeing the role of the NBC running the Programme Management Office
- Monitoring the plans devised by the NBC
- Overseeing CCNL's role as DSO project manager
- Definition of transmission standards.

NATIONAL BROADCASTING COMMISSION

Role:

Directing and managing all aspects of DSO delivery

Responsibilities:

- Defining the timeline and regional roll out plan
- Issuing clear roles and responsibilities to all parties
- Setting-out the key financial framework and areas where each party generates revenue
- Arranging funding package for ASO under direction of Hon. Minister
- Providing STB subsidies and confirming required quantities and timing
- Regulating and licensing all broadcasters, signal distributors and STB manufacturers

* including monitoring of all TV and radio stations

Role:

Directing and managing all aspects of DSO delivery

Responsibilities:

- Issuing appropriate governance and guidelines
- Ensuring all Parties have the legal framework to deliver the Project Objectives in a timely manner.
- Running the Programme Management Office
- Managing all parties involved to ensure they deliver
- Managing effective ASO strategies with all relevant Analogue TV providers
- Developing and managing the 'GoING Digital Marketing Campaign
- Frequency planning spectrum allocation - in co- ordination with Spectrum Admin team

STB MANUFACTURERS**Role:**

Provision of all consumer equipment required to receive digital TV

Responsibilities:

- Producing required quantities of STBs to the agreed specification
- Ensuring all such STBs pass appropriate test and approvals
- Setting up in country manufacturing for all STBs
- Antenna and Dish sales and other accessories.

SIGNAL DISTRIBUTORS**Role:**

Ensuring that quality DTT signals reach the agreed proportion of the population at the agreed time.

Responsibilities:

- Ensuring the required DTT coverage on a regional basis as directed by the NBC
- Converting an agreed number of transmitters from analogue to digital as agreed with the NBC within agreed timescales
- Provision of signal distribution services including:
 - FT A TV and Radio for broadcast service providers
 - Pay TV content for licensed Pay TV providers
 - Data services such as EPG and advertising etc on behalf of the NBC
 - Network management and performance monitoring
 - Achieving Quality of Service targets to be agreed with the NBC
 - Finance the build out costs in return for a long term "lease type" contract

BROADCASTERS

Role:

Ensuring that quality TV channels are provided for digital distribution

Responsibilities:

- Provision of high quality TV channels
- Contribution of such TV channels to either the national or local heads ends for distribution
- Achieving quality broadcasting standards as defined by the NBC - e.g average time on air per month, actual viewer numbers
- Provision of advertising space for the communication to agreed DSO messages to the consumer
- Switching off analogue channels in accordance with NBC schedule

INVIEW NIGERIA

Role:

DTT and DSAT technical platform management including all technology and services required to deliver DSO.

Responsibilities:

- STB
- Provision of the STB software for approved STB manufacturers
- Issue of NBC acceptance certificate for approved STB manufacturers
- Management of a Free TV 'zoo' of STBs and an engineering channels for software upgrades
- STB security - management of the digital rights management provider
- Billing and subscriber management systems - management of Paywizard
- Collection of DCAF via STB and direct collection of DCAF from pay TV companies

Management of the Outsource call centres on behalf of the NBC

Role:

DTT and DSAT technical platform management including all technology and services required to deliver DSO-

- Services and Platform
- Delivery and management of the service platform
- Provision of all broadcast and IP based STB technology and services
- Provision of audience measurement technology
- Provision of cloud services to support service platform
- Support for all DSO parties
- ASO advisory services

CALL CENTER OPERATOR: THE OUTSOURCE COMPANY

Role:

- to receive complaints and inquiries from the general public on the services provided by the Free TV
- to offer both technical and other client support and advisory services to the public.
- to generate data for the Industry
- to liaise with the middleware company to provide technical services like box activation and DAF collection.

CCNL

Role:

Management of Digital Roll out strategy and Analogue Switch Off, and Marketing the FreeTV Platform

- Agree Roll out strategy and timing with NBC and DigiTeam
- Development of a detailed DSO project plan
- Recruitment of a team of Project Managers to manage the process on a day by day, state by state basis.
- Recruitment of a Town Storming marketing team to launch DSO in agreed states and to max PR
- Monitoring digital take up in each state
- Manage Analogue Switch Off in states in conjunction with NBC and DigiTeam
- Regular liaison with NBC and DigiTeam to monitor success of project as per Project Objective.

Ensuring efficient distribution and marketing of STBs

- STB Design, Branding and instructions
- Forecasting of box volume requirements with appropriate lead times to allow sufficient boxes in pipeline to achieve Project Objectives
- Choice of suitable Approved Box Distributors in each DSO Roll Out State
- Management of Distribution of boxes from production facility to approved distributors
- Management of STB Authentication supplier and process for attaching to boxes
- Monitoring of box pricing in retail chain.
- Training of retailers, distributors and installers
- Production of FreeTV Marketing materials for Distributors and Retailers.
- Ongoing liaison with Newline for effective box subsidy management

Channel Aggregation and consumer platform management

- Develop a compelling line up of NBC licensed channels on heFreeTV and DSAT platforms.
- Contract with Approved channels, and monitor performance on an ongoing basis
- Contract with the signal distributors to ensure carriage at national, regional and state

- Contract and manage SES on behalf of the NBC for the provision of satellite bandwidth the Free TV DSAT platform.
- Manage the channels on the Free TV and DSAT platforms, including issues of LCN
- Provision of content for the service platform including EPG data, info services, public service announcements, advertising, 3rd party applications etc.
- Management of the bandwidth allocation of the Free TV DTT and DSAT platforms, as agreed with the NBC

Tracking and auditing of STB subsidies and distribution

Responsibilities:

- Overseeing delivery and distribution of STB's
- Tracking of all STB related data
- Auditing of all aspects of STB subsidies
- On-going liaison with CCNL for effective management of the subsidized box processes.

LEGISLATURE: HOUSE OF REPRESENTATIVES AND SENATE

- Provision of legislative frame work for the entire DSO frame work
- General oversight on all of the above

CURRENT STATUS:

In line with the provisions of the white paper the NBC has authorized 13 Set-Top box manufacturing companies- 30million STBs were estimated to be needed for the Nigerian market. As such, the Federal Government in its bid to promote local industry and create Jobs, through the National Broadcasting Commission (NBC) issued licenses to thirteen (13) indigenous companies to locally Assemble and manufacture Set Top Boxes in Nigeria, who paid N50,000,000 (Fifty Million Naira) each for the Licences.

A total of 10million of these STBs were proposed by Government white paper to be subsidized for identified poor households all over the country. Already 1.45million of this **10million** already subsidized under the First phase, leaving a total of 8.55million STBs for subsidy and **overall 28.55million** STBs estimated for the entire country, for a successful DSO.

Benefits to Government

- Expected 6,500 Direct Jobs in the initial phase by the 13 manufacturers
- Creation of SMT, and Chip set industry in Nigeria, making Nigeria the only of such in West and Central Africa, and creating a hub
- Creation of estimated 5000 Local Plastics Industry Jobs needed for the production Casings for the STBs.
- Creation of estimated 1000 Local wires and cables Jobs, needed for the A V cables for the STBs
- Creation of estimated 1000 Local Cartons Jobs, needed for the gift packs for the STBs

- Set up of In country Digital TV testing laboratories, the only of its kind in West and Central Africa.
- This will not only create Jobs but will also be used by other West and Central African Countries and so earn Foreign exchange for the government

Benefit to the Industry

- Massive Technology transfer in terms of SMT, Chipset, Design and PCB implementations
- Opening up of ancillary manufacturing opportunities for other electronic devices and equipment
- Creation of a possible AAA batteries manufacturing opportunity due to the massive quantities of batteries needed by the STB remote controls

In a bid to ensure that the signals of various channel owners are compressed into multiplexes and well packaged before transmission to consumers, and to protect the boxes from hacking and piracy the Commission engaged the middleware operator Inview Nigeria limited. According to Ebuebu Charles(2016) MD of Inview Nigeria in an interview states that - Inview is a technological company, contracted by the NBC to provide the technology platform that would ride on the Set Top Box as well as a few other services that would link several of the stakeholders. What Inview does according to him, first is to provide the software that rides on the box, provide features such as EPG (Electronic programme guide), information services guide on the TV without an internet connection with updates daily. Inview also provides features that will enable you have video on demand run on the same box. They also have encryption on it that ensures that it is those who have been registered on the NBC national box that will have access to the programs and also collaboration with Pay wizard on their software which allows the NBC to collect the Digital Access Fee (DAF) and manage a lot of other services.

Another indigenous company Cable Channels Nigeria Limited (CCNL) is managing the marketing and aggregation of the channels on behalf of the content owners and the signal distributors

The DSO White Paper makes a provision for the reservation of a licence for an independent signal distribution operator to be created out of the Nigerian Television Authority (NTA) using the existing infrastructure invested by Government over the years for deployment of the DTT network in Nigeria. The Company has been created and is today known as Independent Television Services (ITS) Limited.

The second company which emerged through an expression of interest and evaluation of bids was Pinnacle Communications Limited. Pinnacle won the second licence and was licensed by the Commission, accordingly. These transmission companies are already making impact serving broadcast contents to Nigerians and employing lots of young people.

On 30th of April 2016 history was made in Jos with the Launch of the pilot Scheme by the Honorable Minister of information and culture Alhaji Lai Mohammed. Alhaji Lai Mohammed brought on board the needed political will and passion to drive the Digital Switch in Nigeria. According to him at the launch of the pilot in Jos 'this may well be one the major legacies that the Buhari administration will bring to Nigerians'. Mohammed (2016) had noted that tribute must be given the Buhari administration for the political will he mustered to record such a feat saying that before the advent of the administration the nation had missed the transition deadline twice, thereby eroding the confidence of investors and the public in the DSO. The minister stated that at the beginning of this administration a cloud of uncertainty

and confusion hung over Nigeria's digital transition. There were no set-top boxes without which the transition could not be kick started, there was no established Signal distributor on ground. There were no software devices for protection of the boxes.

Mohammed then adds that 'but the administration swung into action, setting up an inter-ministerial task force to drive the process in a show of political will. After a series of meetings and concrete actions to resolve knotty issues, investors and stakeholder confidence was restored and we were firmly set on the path that led to Saturday 30th April roll-out.

It is gratifying to note that the pilot scheme in Jos is demonstrating the gains of the Digital Switch over. Viewers in Jos now enjoy over 15 free Television channels-some News, Sports, Business, Music and many other Genres of programming. ITS, plans to add on 15 more channels in the next few weeks.

To encourage social inclusiveness government also consciously provided about 200,000 free boxes for the indigent while the rest are available for purchase at a subsidized rate of 1,5000 Naira only.

Also on the 22nd of December 2015 the Abuja/FCT roll out of the DSO took place. The roll out was performed by no less a personality than the President Mohammadu Buhari who was represented by the Vice- President Professor Yemi Osinbajo. The president stated at the event that the digitization process will boost the nation's economy and increase the versatility of media information. According to him 'first is that it would liberalize access to and increase versatility of information, interactive programming, two-way data exchanges, mobile reception of video, internet and multi-media data will open up. The opportunities that this will provide are only limited by imagination. Advertising, formal education, sales and marketing are obvious hanging fruits.'

He further noted that the local industry was already experiencing a boost from the new vista in digital economy with several indigenous companies now manufacturing set-top boxes.

The president reiterated that the federal government was irreversibly committed to meeting the June 2017 deadline. At the same venue, same day the Minister Of Information And Culture, Alhaji Lai Mohammed, Said That The DSO In Broadcasting would provide A Boost of N100 Billion per annum for Nollywood, among a number of other positive Spin-Offs.

Alhaji Mohammed also listed other advantages as job Creation, 30 Free Digital Channels, free and easy access to government and public information through a touch of the remote control current affairs and news available through middle ware on the boxes and a world class electronic programme guide that will make television viewing an unbeatable experience.

Alhaji Mohammed said the DSO would also help to grow the TV Advertising market By \$400 Million per annum through Audience Measurement. According to him, "Our Digital environment will give equal opportunity to everyone to be rewarded for investment in creativity.

Mohammed adds that with the Middleware in Our Set- Top Boxes people at home will be able to buy and watch the latest Nollywood Movies without the need for Internet. In His Speech Entitled, "The Best Of Television For All Nigerians," Alhaji Mohammed said the Local Manufacture Of Set-Top Boxes, which

had already begun, was already extending to local Smart TV and tablet manufacturing thus creating jobs.

The Minister Said the electronic Program Guide will also be a platform for application (App) developers to create products that will make life easier for the home consumers, thereby creating and promoting an industry of developers that will operate in both television and telecom industries.

In addition, he said, the Increase In Free-To-Air Channels and the Separation Of transmission from content aggregation will spur an increase in TV Production activities, as the Channels will now be able to focus on their TV Shows and harness the variety of human and creative skills to compete to become the most watched.

There are currently 30 free channels running in the Abuja, To achieve this Pinnacle communications an indigenous Broadcast manufacturing company under took the task of transmitting signals for all the channels on the Abuja bouquet.

The Free Television services also come with interactive capability and government information portal. This is very significant in this era of information and knowledge where the right of every citizen to information, access to pluralism of media choices and diversity of content cannot be over-emphasized.

NEXT PHASE

The National Broadcasting Commission announced a phased approach to the implementation of the DSO in Nigeria. According to the Director-General Modibbo Kawu the Commission has concluded plans to roll out in Kwara, Delta, Enugu, Gombe, Kaduna and Osun states in the next phase. The Signal Distributors ITS and Pinnacle have already set up transmitter sites at those locations and test signals are already up and running. The plan is to launch the roll-out in those states before the end of September, 2017.

The selection of the above mentioned states was consciously done to reflect the geo-political structure of Nigeria viz North Central, South-South, South East, North East, North West, and South West regions. Kawu further announced that following the roll out in the above 6 states the Commission shall consciously move another 6 and continue same until the National roll-out is achieved.

I believe that with this phased approach which allows structured and planned timelines coupled with the necessary financial and legislative support the country can achieve a national roll out in two years.

CHALLENGES FOR THE IMPLEMENTATION OF THE DSO IN NIGERIA

According to Maduka (2015) political and economic circumstances in Nigeria tend to tilt to a level the citizens are not confident about some of the policies. There are no available stringent measures put in place to make sure all broadcast stations comply. Considering the slow approach to issues and projects in Nigeria like reinvigorating the power sector, infra structural development, offering political solutions, reversing the brain drain syndrome, etc. one would not wonder why the country failed to meet with 2012 deadline it gave herself. It is on record that NigComSat-1, the Nigeria Communication Satellite, has been re-launched into space and it is hoped it won't be shut down again as was done in 2008. The deadline factor, however, embodies some other challenges.

He notes that the switchover from analogue to digital broadcasting requires huge investment on the equipment and gadgets. To acquire this, there must be finance. The technical and financial issues are two-fold: The involvement of the broadcaster and the implication for the audience. The broadcasters need to acquire new digital equipment ranging from production equipment to transmission equipment. In this vein, the massive investments on digital equipment being done by broadcast organizations like Nigerian Television Authority, NTA, and Federal Radio Corporation of Nigeria, FRCN become an eye opener. The technological cum infrastructural challenge manifested in USA where less than 15% of the stations signed off at the June 12, 2009 deadline is also a pointer to the fact that Nigeria is not alone when it failed her self-set 2012 deadline.

Furthermore, the masses will be seriously affected. The broadcast audience without digital compliant sets will have to acquire them. Considering the low economic standard of most Nigerians; it will be a herculean task for all the audience to comply with the deadline. Take for instance, in 2005, HDTV sets start at \$1,000 and go as high as \$16,000, it is true the prices will go down with time. But the question is: How soon will that be? Even when Set Top Boxes (STBs) are going to be used, they have to be acquired first. STBs are used to connect sets that are not compliant to digital signals. It is on this note that the financial and technical factors are considered big challenges to the digitization process.

As the complex and fragile equipment are coming in, there is need for matching manpower. The task of training and retraining personnel to fit into the digital process pose a challenge to the race. On the other hand, the process will definitely increase the number of stations. Thus, the existing broadcast personnel who may likely fit in may not be enough to fill the spaces and as such, pose an initial challenge. However, some of the existing personnel may be adversely affected too. Those who may not be able to understand the flexibility and, or cope with the fragility of the new technology may be thrown to the labor market. That will eventually add to the burden of unemployment that has bedeviled the nation in recent times.

The power sector in the country is nothing to write home about. The country has spent huge sums of money, though not accountably, to revive the power supply to no avail. Consequently, the sound of generators at every corner of a Nigerian street calls for alarm. But the people have to use these generators to at least, "live life". Also, all the companies in the country - petrol stations, telecom, banks, manufacturers, broadcast organizations, etc. rely on standby generators to carry on their businesses. In the long run, it impacts on the cost of production or service rendering costs will surely manifest. The charges are later transferred to the consumers. It would be apt to point here, that the epileptic power supply and the invariable dependence on generators pose big challenges to the digitization process. It would create high cost of programme production and presentation.

Another challenge, though not easily noticed, is the issue of awareness of the audience, government officials and sundry, of the digitization process. Nigeria has a large segment of illiterate population. Most of this population dwell in the rural areas. They do not readily get information concerning the process. Also in the government offices, the awareness is not yet there. These scenarios create a gap between those that are aware of the process and those that are not. In this wise, the digitization process is faced with the challenge of being drawn backwards by people who do not understand the issues and other intricacies of the programme. Therefore government must engage in aggressive and massive public

awareness campaign to sensitize the public about the digital switchover. This is very crucial for the success of this process as attested to at the pilot switchover in Jos recently. The public must know that digitization is not just disruptive, but more fundamentally, an evolutionary process, which will continue to impact business models as technologies evolve and become more common place.

Rates of pay channels are not based on market demand but whims of the large content aggregators, vertical monopoly business houses and companies like the DTH Big League who enjoy monopoly in pay TV content distribution. Also the issue of carriage fees has not been sorted out yet either. That really is sounding optimistic but it is expected that there will be decrease in carriage fees as digitization rolls out for simple reason that the capacity constraint of analogue system will go away. However, carriage fees is not going away completely and it will take time. Both broadcasters and MSOs are expected to work together to make a gradual transition to reach a stage economically in the short run so that it sorts itself out in the long run.

Maduka therefore notes that -for the full digitization to take place in Nigeria, transparency is required on each level: between broadcasters and channel aggregators; between channel aggregators and MSOs; between MSOs and LCOs and between LCOs and consumers. Digital Cable System is relatively new in Nigeria and is not tried and tested. Lots of teething problems, application hazards are popping up which needs to be addressed. Redressing of all such issues should be considered on practical ground and not on any task force or ministerial meeting. The launching phase of digitization is practically incomplete. Supply of STB is not yet clarified and concretized.

According to Maduka (2014) in a paper titled Demands and Resources Management in the Era of Digitization, at an NBC organized seminar for broadcasters on the DSO in Lagos, he states that - Digitization allows new communicative, journalistic and content consumption which will force us to reformulate the existing paradigm. The audience is becoming fragmented into the atoms represented by each individual while, in turn, the pace of information is accelerating. In this context, the mobile gadgets in their multiple forms and sizes may play a prominent role as peripherals, as they can supply information in any place in an immediate form to the citizens. These possibilities for new communicative practices, together with the fragmentation of the contents, will significantly affect audiovisual production and journalistic practices over the next few years.

Maduka further notes that -In the recent times, those who oppose digitization probably because they are yet to understand the whole process are objecting to the mandatory digitization and the impact it will have on the poorest of poor. Some of the concerns of their objections have either been addressed or being addressed. The supporters of the digitization move believe that at long last there is going to be some order in the broadcast business. One is not very sure whether these set of stakeholders who are very elated about the move now will be so in future. Because transparency comes with its own set of problems. Especially for those who have been used to the inefficiencies for far too long.

According to Amana (2016) Chairman Digiteam Nigeria- The major thing needed for transition is the availability of enough set top boxes. Therefore is the need to do everything to encourage the manufacturers, though some have already commenced production. Amana believes that before we move to any major location or city, with the experience in Jos Pilot launch and having known the obstacles we might face, there has to be enough set top boxes on ground.

On Signal Distributors, Amana believes that there is no much of problem with signal distributors setting up their transmission network.

Amana (2014) however notes that funding is certainly a major issue, the DSO is fund consuming and highly expensive. Funds are required for Public Awareness, Training and man power development, legislative issues, content creation and e waste/ disposal.

Ebuebu (2014) supports the above view and even states more when he says' We cannot achieve DSO without funding. Two major issues or aspect is the infrastructure. Do not forget what we are talking about here is the digital transmission, what we call digital terrestrial transmission (DTT). You have to set up facilities, towers that will transmit over a distance and would probably relay stations for people, where the signal is not that strong.

He adds that you will have to deliver those channels by satellite to those places where they would transmit by terrestrial; it cost money to take satellite space. Ebuebu then recommends that -'What needs to happen very quickly is that the federal government need to put up a structure and I know they are doing that right now that would provide a viable environment for all the players including the signal distributors to have access, you know the forex issues we are having right now, the CBN has to make some provisions for them to transfer money out to get those equipment shipped in, get other space for the box.'

Digitag (2012) The lack of funding to roll-out a DTT network has impeded many countries from launching their DTT platforms. Several countries in Africa have highlighted that the lack of the necessary funds has prevented progress with digital switchover.

It is for this reason that many African countries have entered into Public-Private Partnership for the roll-out of the DTT network operated by the public service broadcaster. Often, these networks are jointly owned by the foreign investor and the public service broadcaster. The Chinese company Star Times has rolled out DTT networks in several countries, often with loans provided by Export-Import (Exim) Bank of China.

Alternatively, in Ghana, the government opted to award the contract to roll-out the national DTT network to a local network provider. The cost of the network roll-out will be financed by the sale of frequency licenses.

The government in Ghana has estimated that the roll- out of its DTT network will cost \$83 million while roll- out of the DTT network in the Ivory Coast will cost \$54 million. The cost of digital network will vary by country, depending on its size and the coverage requirements.

Ohaunwa (2016) chairman of the Box manufacturers Association in an interview believes that-the Transmission Company needs to roll out base stations quickly. The order for the set top boxes must be placed now and paid immediately. According to him, it takes 3 months for the chips set to be produced and it is made by few countries in the world. The chip set drives the box. It is not gotten off the shelf. Ohaunwa states that as a means of extra urgency, the government must release fund. He cautions that If Nigeria does not meet the June 2017 deadline, it will be a disgrace to the country. The safety of the airwaves cannot be guaranteed. If the neighboring country like Niger goes digital, there will be interference of wave because frequency are used for other things.

On the issue of lack of adequate publicity Ohaubunwa notes that - it is very critical that much has not been done in that regards. Though according to him the problem is not farfetched as it concerns funding. What the government should do according to him is to roll out comprehensive nationwide campaign awareness (Local, State and Federal). Media, under line, Byline adding that government needs to improve in their game.

With the successful take off of the Pilot scheme, and the roll out in Abuja, It must however be noted that the tempo of publicity for the Digital Switch over is not enough. Therefore media groups, unions and owners of broadcast stations must design a deliberate programme of educating the vast majority of Nigerians on this new phenomenon and get the necessary buy in of the people.

Governments (federal, state, local) must also secure the needed funds to support the project.

CHAPTER 6

RECOMMENDATIONS AND CONCLUSION

I have deliberately elected to write this chapter in order to document some of the field experiences of mine in the process of delivering the DSO in Nigeria.

That the whole idea of the DSO though an initiative of the International Telecommunications union is one that is well intended to promote media access and pluralism-therefore the DSO proposition in Nigeria was one that took cognizance of the media requirements of the vast of Nigerians in line with the intention of the constitution of the federal republic of Nigeria with respect to the rights of citizens to receive and disseminate information. At the base is the desire of government to ensure that the poor or indigent could have access to a multiplicity of channels and in the process enjoy the special privilege of choices.

To achieve the above the NBC needed to put in place a lot with regards to planning and execution. I believe that some of the policy intentions have been well captured in the preceding chapters, especially in the chapter related to policy.

A Key issue among several sociological considerations is the factor of afford ability of Set-Top Boxes. Before the advent of the FREE TV VIEW brand which is the federal government brand proposition several DTT pay TV channels existed and Nigerians with the financial capacity subscribed to enjoy those services.

The first major task then was how to get affordable Set- top boxes for a vast majority of Nigerians. Though the federal government had categorically stated in the white paper that-

22.4 Government observed that attaching a price tag of N2,000 to a Basic Set Top Box, and asking for any kind of subsidy at this time may not be in the best interest of Government, as the policy would be self- sustaining. It therefore directed that the end user price of a Basic Set Top Box, should be determined by the DigiTeam Nigeria from time to time, using economic indices.

But the Commission reasoned that for the pilot scheme in Jos to work out well a few number of boxes may have to be imported in the interim, more so that it may take some time to set -up the local manufacturing plants that the white -paper envisaged. Government therefore requested some box manufacturers to import the initial sum which totaled 850,000 boxes. These boxes which were imported and assembled at some of the plants in Nigeria were used for the pilot scheme in Jos and the roll-out in Abuja .The boxes were therefore subsidized and fixed at a price of 1,500.

With the subsidy regime now over question begging attention is the future of the notion of afford ability of the boxes, the worry is that if licensed manufacturers are allowed to produce and sell at market rate the prices may be beyond the reach of the indigent.

Some manufacturers are already considering different financing options including direct negotiations for the states and local governments to buy directly from the manufacturers at rebated or negotiated subsidy rates.

Added to the above is the issue of Digital Access Fee (DAF) the DAF fee is considered an access fee that each viewer will have to pay before they can access the Free-view Television channels. The NBC believes that this fee can form the basis for a fund which could be used for the advancement of the broadcast industry-for instance it is expected that a programme production fund will be created out of it which can be used to create grants and other financial support for young creative persons wishing to create content in the digital era. The Commission also believes that this is a veritable opportunity for the broadcast industry to benefit from the constitutional Radio and Television license fee which the constitution stipulated to be collected by the local governments, a function which they have scarcely performed. The Commission is therefore in liaison with the Association of Local governments, the Broadcasting Organizations of Nigeria and other relevant Associations for the collection and allocation of this fund.

Another recurrent challenge is the question of publicity. Many critics and commentators on the DSO say that there is not enough communication on the process. I agree that the right phrase is 'not enough' as there have been sporadic but un-sustained attempts at publicity. The NBC is yet to get the requisite funds for an orchestrated campaign but the commission has consistently made the point that the issue of publicity should be a shared responsibility for all stakeholders, including of course the many channels and broadcasters in the country. It is expected that with fresh funds and a synergized approach of stakeholders the publicity challenge will be overcome.

Other issues are technical and software oriented. Some owners of set-top boxes especially after the launch at Abuja are experiencing challenges activating the boxes. The software managers in-charge blamed it on cluster activations as many people were trying to activate their boxes at the same time. Some analysts blamed it on lack of basic knowledge of technological skills, even by viewers. Even as simple as activating a set-top box. Fortunately the problem seems now to be redressed.

Added to this is the issue of signal reception and the need for the use of external antennas by the viewers. This was a lingering issue as not many users were knowledgeable or informed about the rudiments of using external antennas to enhance signal reception.

Finally countries wishing to transition must consider the question of political will and or interference. In the course of Nigeria's DSO the Directors General of the Commission were changed 3 times. Engineering Yomi Bolarinwa who supervised the setting up of Digiteam and the eventual release of the whitepaper gave way to Emeka Mbah who practically set-up the ground policy norms and the implementation strategy, he more or less gave practical illustration to most of the theories on the Digital transition, it is to his credit that the pilot scheme was launched in April 2016, at the eve of the pilot rollout he was requested to pave way for Modibbo Kawu the current DG to whose credit the Commission has commenced the national rollout, beginning with the roll-out at the FCT on 23rd December, 2016.

Similar to the scenario at the NBC the digital transition has witnessed several changes of serving Ministers of Information, from Labaran Maku, to Patricia Akwashiki and the current Minister Lai Mohammed. These constant changes have sort of slowed down the process each time it happens as each new appointee will naturally need time to understand the project before venturing in to implementation. But Lai Mohammed has brought in a lot of political support to the project and most significantly created a ministerial intervention task force comprised of all stakeholders. This implementation task force was able to address and surmount lots of policy and administrative encumbrances that were bedeviling the transition before he came on board.

The role of the parliament is one that is very key and vital in the digital transition project. In Nigeria the sensitivity and importance of the broadcast media made the subject of the digital transition one that caught the attention and interest of the parliament. First was the House and Senate committees on information who had oversight functions over the activities of the ministry of information and the parastatals under the ministry including of course the NBC. They used the opportunity of their oversight to interrogate the process. As it turns out a number of them are not conversant with the process and all the details of the implementation, some were out rightly ignorant of the process.

But following complaints from various stake holders involved in the DSO project the house of representatives set-up an adhoc committee to investigate several issues on the DSO first was the issue of revenues arising from the licensing or leasing of parts of the digital switch over spectrum and how the monies arising from the sales was spent, second was why some box manufacturers who participated in the project were not paid months after they were requested by the NBC to deliver a total of 850,000 boxes which were primed for the Jos roll-out project. (As at the time of this writing the work of the Committee is yet to be concluded). It is my view that countries embarking the Digital Switch over project must make concrete efforts to ensure that the parliament is well informed and educated about the process. With effective participation of parliament, funds may be easily more available if the parliament puts it into the national budget. This however is not the case with Nigeria's digital transition.

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