



GOVERNMENT GAZETTE

OF THE

REPUBLIC OF NAMIBIA

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No. 316 Publication of Digital Terrestrial Television Policy Guidelines: Communications Act, 2009 1

Government Notice

MINISTRY OF INFORMATION AND COMMUNICATION TECHNOLOGY

No. 316

2013

PUBLICATION OF DIGITAL TERRESTRIAL TELEVISION POLICY GUIDELINES: COMMUNICATIONS ACT, 2009

In terms of subsection (4) of section 7 of the Communications Act, 2009 (Act No. 8 of 2009) I, after consultation with the Communications Regulatory Authority of Namibia under subsection (2) of that section, publish the policy guidelines, which I issued to the Communications Regulatory Authority of Namibia in terms of subsection (1) of that section, as set out in Annexure 1 and Annexure 2.

J. KAAPANDA
MINISTER OF INFORMATION
AND COMMUNICATIONS TECHNOLOGY

ANNEXURE 1

POLICY GUIDELINES ON THE MIGRATION TO DIGITAL
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1. Introduction

- (1) There is a worldwide trend to replace analogue terrestrial television broadcasting with digital terrestrial television (DTT) broadcasting. This process is known as “digital migration”.
- (2) The International Telecommunications Union (“ITU”) is the specialised agency of the United Nations which is responsible for information and communication technologies. The ITU has been planning the digital migration process for many years.
- (3) The 2006 ITU Regional Radiocommunications Conference (RRC-06) resulted in a Digital Plan and technical standards for migration to DTT in Europe, the Middle East and Africa (known as GE-06). GE-06 set the deadline for analogue television switch off as 17 June 2015. Protection against harmful interference for analogue transmission caused by digital broadcasting transmissions in the UHF/VHF frequency bands will end on 17 June 2015.
- (4) The Republic of Namibia is a member, in good standing, of the ITU and is a signatory to the GE-06 Agreement. As such, the Republic of Namibia has committed to migrating all existing analogue terrestrial television broadcasting services to DTT by June 2015.
- (5) The Republic of Namibia is committed to meeting the June 2015 deadline and is preparing to commence the digital migration process.
- (6) The digital migration process will take place in a phased manner. For a period of time, analogue terrestrial television broadcasts will be made in both analogue and digital format. This period is known as the “dual illumination period”. At the end of the dual illumination period, analogue terrestrial television broadcasting will cease (known as “analogue switch-off”).

- (7) Any failure on the part of the Republic of Namibia to switch off analogue timeously could impose massive costs on the Republic and co-ordination challenges with other countries, particularly our neighbours.
- (8) Digital migration is a complex, multifaceted endeavour which will have a major impact on households all over the country, as well as all segments in the broadcasting value-chain including content production, transmission and reception. The success of the digital migration process will depend on all key public and private stakeholders participating effectively.
- (9) Clarity at a policy level as to what is to be done to prepare for, implement and manage the digital migration process is essential in order to streamline the migration process, take up its challenges, harness its opportunities and reap its benefits in the interests of the people of Namibia as a whole.
- (10) Government has accordingly adopted a policy-driven approach to guide the digital migration process. The Minister of Information and Communication Technology hereby issues these Policy Guidelines in accordance with section 7 of the Communications Act, 2009 and within the broader national policy framework as contained, amongst others, in the Broadcasting Policy of Republic of Namibia 2009, Telecommunications Policy for Republic of Namibia 2009, ICT Policy Implementation Plan and Overarching ICT Policy of Republic of Namibia 2009.
- (11) The Purpose of these Policy Guidelines is to provide the necessary clarity and to create an enabling policy framework for the successful migration to DTT.

2. Benefits of Digital Migration

- (1) Digital migration has many benefits:
 - (a) Digital transmission uses frequency spectrum much more efficiently than analogue transmission. This allows for the transmission of many more channels per frequency, which will increase content, diversity and choice.
 - (b) DTT offers better picture and sound quality.
 - (c) DTT enables broadcasters to transmit at lower power than in analogue transmission, without reducing the coverage area, and whilst simultaneously improving the quality of the consumer's viewing experience.
 - (d) With DTT it is not necessary for each broadcaster to establish its own broadcasting transmission infrastructure, so broadcasters can reduce their transmission costs by choosing to share transmission and other facilities.
 - (e) DTT enables value added services, such as electronic programme guides (EPG) and parental control mechanisms.
 - (f) The latest generation DTT standards enable the delivery of audio, video and data services to fixed, portable and mobile devices, or a combination thereof.
 - (g) DTT has the potential for new, enhanced and innovative broadcasting applications and technologies.
 - (h) Analogue switch-off will release spectrum which would enable communications operators to achieve more broadband coverage at lower cost, thus reducing the digital divide.

- (i) Overall, DTT has the potential for increased choice, diversity, competition and innovation, job creation, and economic spinoffs for related industries, such as producers, manufacturers, suppliers, retailers and installers.

3. Objectives of the Policy Guidelines

- (1) The main objectives of these Policy guidelines are to -
 - (a) provide for the smooth transition from analogue to DTT transmission;
 - (b) provide for a phased approach to the digital migration process, including the simulcasting of broadcasting signals during the dual illumination period, to allow for the gradual rollout and take-up of DTT;
 - (c) create an enabling policy framework for the licensing and regulation of DTT services, including—
 - to enable existing analogue terrestrial television broadcasters to migrate to DTT;
 - the licensing of multiplex operators and signal distributors in accordance with a three-tier structure which caters for a common carrier, commercial providers and self-provision, and which gives broadcasting licensees freedom of choice in that regard;
 - as regards the assignment of frequency spectrum in a manner that is consistent with the ITU requirements and with minimum interference between the existing analogue transmitters and DTT transmitters; and
 - as regards minimum transmission, compression and set top box (STB) standards for DTT; and
 - (d) maximise the frequency spectrum released upon analogue switch off (the so-called “digital dividend”) and other benefits from the digital migration process.

4. Digital Migration Process, Stages and Timing

- (1) The digital migration process will follow a phased path which will include the following phases:
 - (a) Licensing phase.
 - (b) Digital switch-on phase.
 - (c) Dual-illumination phase.
 - (d) Analogue switch-off.
- (2) The Minister of Information and Communication Technology will determine the DTT switch-on date and the analogue switch-off date—
 - (a) in consultation with the Communications Regulatory Authority of Namibia (“CRAN”);
 - (b) after consultation with all existing broadcasting licensees and other stakeholders; and

- (c) taking into account Namibia's regional and international commitments.

5. DTT Licensing Framework

- (1) The DTT licensing framework will comprise three categories, namely –
- (a) broadcasting;
 - (b) multiplexing; and
 - (c) signal distribution.
- (2) A licensee may elect to operate in any one or more of these licence categories; Provided that a broadcasting licensee will be automatically licensed and entitled to self-provide multiplexing and signal distribution for its own broadcasting service.

6. Multiplexing and Signal Distribution Licence Categories

- (1) The multiplexing and signal distribution licensing framework will cater for a common carrier, commercial providers and self-provision in accordance with the below-mentioned principles:
- (2) **Public Broadcaster Multiplex Operator and Signal Distributor**
- (a) The government of the Republic of Namibia has mandated the Namibian Broadcasting Corporation (NBC) to act as a common carrier to provide multiplexing and signal distribution to any requesting broadcasting service licensee.
 - (b) The common carrier will have mandatory national coverage in order to guarantee the universal provision of DTT broadcasting services to the whole population of Namibia.
 - (c) Subject to its technological capacity to do so, the common carrier will provide multiplexing and signal distribution services on a fair, equitable, reasonable, non-preferential and non-discriminatory basis to any and all broadcasting licensees who request for such services.

The common carrier with the coordination and approval of each channel by the regulator will -

- give preference to migrating public, community and commercial free-to-air broadcasting services in the allocation of digital television broadcasting channels;
- implement a consistent and fair method of allocation of capacity to all requesting broadcasting licensees for the fair, efficient and effective use of its capacity in terms of arm's length agreements between them, subject to such applicable minimum standards in regulations and licence conditions; and
- charge reasonable and non-discriminatory charges that are fair and transparent, taking into account, amongst other things, the nature and technical parameters of the service provided to each broadcasting licensee.

(3) **Commercial multiplexers and/or signal distributors**

- (a) Any person may apply for a licence to provide multiplexing and/or signal distribution services on commercial terms.

- (b) Subject to its technological capacity to do so, a commercial provider may –
- provide multiplexing and/or signal distribution (as the case may be) to any requesting broadcasting licensee subject to arms-length commercial agreements entered into between the parties on mutually agreed terms and conditions;
 - charge such tariffs as are agreed to between it and the relevant broadcasting licensee in an open market; and
 - enter into commercial infrastructure sharing agreements with other licensees.

(4) **Self-provision of multiplexing and/or signal distribution**

Any holder of a broadcasting licence may elect to –

- (a) request the common carrier to provide multiplexing and/or signal distribution for its broadcasting service;
- (b) contract with a commercial provider to provide multiplexing and/or signal distribution for its broadcasting service; and/or
- (c) self-provide multiplexing and/or signal distribution for its own broadcasting service.

7. Frequency Spectrum Management and Assignment in DTT Context

- (1) The Frequency Band Plan prescribed by CRAN will-
- (a) deal with DTT based on the GE06 Digital Broadcasting Plan;
- (b) take into account existing frequency spectrum uses and the DTT frequency band plans of other countries; and
- (c) adhere to ITU regulations.
- (2) CRAN will assign suitable frequencies to the signal distribution licensee concerned in order to facilitate the timeous roll out of digital broadcasting infrastructure.
- (3) All frequency usage must be co-ordinated with other existing frequency users and with neighbouring countries.

8. Grandfathering of Existing Digital Frequency Spectrum Assignments

- (1) MultiChoice Namibia may continue to operate its existing DTT broadcasting service on –
- (a) the analogue frequency currently assigned to it on channel 13 - 250 MHz centre, 253.25 MHz Audio and 247.25 MHz video; or
- (b) any other suitable frequencies which are assigned to it in accordance with CRAN's normal processes and procedures in terms of the Communications Act.

9. Dual Illumination

- (1) For the duration of the dual illumination period each existing on-air analogue terrestrial television broadcasting service will be transmitted in both analogue and digital format simultaneously (simulcast).
- (2) CRAN will manage the frequency spectrum in order to ensure that the DTT transmissions do not cause harmful interference with the existing analogue transmissions.

10. Payment of Spectrum Fees During Dual Illumination Period

- (1) The spectrum fees which CRAN currently levies in respect of analogue transmissions will remain payable by the licensees concerned until such time as they surrender their analogue frequencies to CRAN.
- (2) During the dual illumination period only, CRAN will, upon application, consider waiving the spectrum fees levied by it in respect of digital transmissions of simulcast content, provided that the analogue and digital content is identical. This waiver will not be applicable to programmes and/or channels which are introduced onto the digital platform once the existing analogue channels have been accommodated.

11. Compression Standards

- (1) The Republic of Namibia hereby adopts the Moving Picture Experts Group 4 (MPEG-4) standard, as amended or updated from time to time, as the minimum compression standard for DTT.

12. Transmission Standards

- (1) The Republic of Namibia hereby adopts the DVB-T2 and MPEG-4 standards for the deployment of DTT in accordance with the November 2010 decision of SADC member states to adopt the DVB-T2 standard as the recommended DTT standard for the region.
- (2) The DTT Broadcasting Standards will incorporate the DVB family of standards for DTT (Digital Video Broadcasting - Terrestrial 2 (DVB-T2) (ETSI EN 302 755) and (Digital Video Broadcasting – Handheld (DVB-H)) (ETSI EN 302 304), as amended or updated from time to time.

13. Set Top Box Specifications

- (a) All DTT STBs, regardless of whether they are manufactured locally or imported into Namibia, must -
 - (a) comply with the minimum transmission (DVBT2) and compression (MPEG4) standards;
 - (a) be able to decode free-to-air broadcasting services. Broadcasters may implement conditional access systems provided that the STBs are able to decode free-to-air services as well; and
 - (a) comply with the type approval requirements determined by CRAN with reference to international best practice, including, where practicable, SADC states.

14. Set Top Box Manufacturing and Distribution Strategy

- (1) STB manufacturing and distribution are commercial activities in the context of the business of digital television.
- (2) STB manufacturing and distribution will be left open to the free market in order to achieve the best prices and service levels for the viewer.
- (3) Broadcasters are encouraged to work together to harmonise STB distribution.
- (4) The Ministry of Information and Communication Technology will promote and support waivers on duties on STBs.

15. Initial Funding of DTT Infrastructure Roll-Out and STBs

- (1) The Ministry of Information and Communication Technology will provide funding to the NBC for the initial rollout of DTT for site upgrades, new sites, aggregation equipment and signal distribution equipment.

16. Public Private Partnerships

- (1) The Ministry of Information and Communication Technology supports public private partnerships for the roll out of DTT services.

17. Consumer Awareness

- (1) Each migrating broadcasting licensee must publicise the migration of its broadcasting service to digital format in each affected area of the Republic well in advance of the digital switch-on in that area.
- (2) Broadcasters are encouraged to work together with the Ministry of Information and Communication Technology, CRAN, fellow licensees and other stakeholders to publicise the digital migration process as a whole.

18. Analogue Switch-Off and the Digital Dividend

- (1) Analogue switch-off will only take place if -
 - (a) the DTT transmitter coverage area reaches at least 80% of the area previously covered by analogue transmission; and
 - (b) at least 80% of consumers who previously received analogue terrestrial television signals have the capability to receive DTT broadcasting services using STBs or integrated television receivers.
- (2) The analogue switch-off date may be brought forward if the conditions in paragraphs (1)(a) and (1)(b) are met.
- (3) At the end of the dual-illumination period –
 - (a) all analogue terrestrial television transmissions must cease; and
 - (b) broadcasting licensees must surrender to CRAN the frequencies previously used by them for analogue terrestrial television broadcasting.

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- (4) CRAN will develop a strategy, regulatory and licensing framework to –
- (a) maximise the “Digital Dividend”;
 - (b) manage the Digital Dividend equitably and effectively; and
 - (c) determine the equitable and appropriate use of the digital dividend by existing and new communications services.

ANNEXURE 2

MIGRATION TO DIGITAL TERRESTRIAL TELEVISION BROADCASTING PLAN

Foreword

In 2006, the International Telecommunication Union (ITU) developed a Digital Terrestrial Television (DTT) broadcasting frequency plan that covers the European Broadcasting Area (EBA), the African Broadcasting Area and the Middle East, including the Islamic Republic of Iran. The plan covers the frequency bands 174 – 230 MHz and 470 – 862 MHz. The agreement is commonly called the Geneva 2006 Agreement (GE 06) or Regional Radio-communications Conference 2006 (RRC 06) Agreement.

Participants to the RRC 06 resolved that all signatories of the Agreement should migrate from analogue to digital television broadcasting by the 17th of June 2015. This is the internationally agreed date for the switching-off of analogue television broadcasting transmitters in the specified frequency bands. Namibia is a member, in good standing, of the ITU, a signatory to the GE 06 Agreement and as such has an obligation to align its practices to the requirements of the ITU including meeting the switching off date for analogue television. In any case, failure on the part of Namibia to be ready for the switch off may impose massive costs and coordination challenges with other countries, particular our neighbours.

As a proponent of technological development for the benefit of its population and in terms of the NDP 4, Namibia has commenced with the migration from analogue to digital terrestrial television broadcasting project as one of the national programmes.

In order to showcase the nature and scope of the project the Ministry of Information and Communication Technology has developed a detailed plan, which I want to present herewith to the Cabinet for perusal and appreciation.

JOËL N. KAAPANDA (MP)
MINISTER

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2. Baseline Data
3. Challenges
4. NDP4 Goals
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1. SECTOR DESCRIPTION

Information and Communication Technology (ICT) Sector is an enabling pillar to promote economic growth by providing postal, telecommunication, broadcasting and media services to the nation in a transparent, accountable and equitable manner.

2. BASELINE DATA

- Nationally there are 342 FM Transmitters, 57 TV transmitters and 36 Studios.
- Telecom Namibia has established 193 stations / PoPs for Broadband Coverage.
- MTC has well over 1000 base stations country wide offering a combination of 2G, 3G and 4G services.

3. CHALLENGES

- Insufficient electricity infrastructure in rural areas
- Expensive telecommunications transmission network leasing
- Insufficient telecommunication backhaul infrastructure to very remote rural areas.

4. SECTOR CONTRIBUTION TO NDP4 GOALS

NDP4 goals:

- Economic Growth;
- Employment Creation and
- Income Equality

The sector will ensure the availability of adequate ICT infrastructure which is imperative for economic development and competitiveness. Hence, through expansion and upgrading, modern and reliable ICT infrastructure will be established to enhance the sector's contribution to the Gross Domestic Product (GDP).

5. DESIRED OUTCOME

Adequate ICT Infrastructure will be in place to facilitate economic development and competitiveness through innovation, research and development by 2017. Availability of latest technologies score improves to 6.0 from 5.5.

6. STRATEGIC INITIATIVE / SECTOR INITIATIVE

Ensure modern and reliable and affordable ICT infrastructure.

7. PROGRAMME

Provisioning of reliable and affordable broadcasting services.

Through this programme, the entire Namibia will be able to receive countrywide TV and radio coverage, better signal quality of broadcasting services, choice of relevant Radio and TV channels and content.

This programme will ensure modern and reliable infrastructure as well as affordable services to all parts of the country. The programme will strengthen ICT access and usage.

The Broadcasting subsector, spearheaded by the NBC, has a mandate to, as per the GE 06 agreement; migrate from analogue to digital television broadcasting by the **17th of June 2015**. This is internationally agreed date for the switching-off of analogue television broadcasting transmitters in the specified frequency bands.

Namibia is a member, in good standing, of the ITU, a signatory to the GE 06 Agreement and as such has an obligation to align its practices to the requirements of the ITU including meeting the switching off date for analogue television.

8. PROJECTS

The below stated *themes* have been identified and embarked upon as projects to be undertaken to achieve the above stated objectives.

1. PRELIMINARY ARRANGEMENTS

Description: The Minister has established DTT Forum in 2009. The Forum was tasked to manage and administrate the DTT programme effectively. In order to execute its task effectively and efficiently, the Forum, headed by the Permanent Secretary, has established a technical committee, awareness campaign committee and a national coordinator. Further, the Forum managed to establish a task team to facilitate the availability of the national roll-out plan and operational plan.

Project: *Ground work preparation for DTT Project*

	<i>Outcomes</i>	<i>Timeframe and milestones</i>			
		<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
1.1	Establishment of the DTT Forum	March			
1.2	Establishment of the Technical Committee				
1.3	Establishment of the public awareness campaign committee		February		
1.4	Establishment of the DTT Coordinator				April
1.5	Development of the National DTT Plan				February

Responsible Unit: The Ministry of Information and Communication Technology (MICT) has spearheaded the preparatory initiative for the DTT project. The Regulator and National Broadcaster (NBC) played an advisory and supportive roll in the development of the groundwork for the DTT. Non-governmental and private entrepreneurs were consulted and their respective inputs were incorporated when required and / or deemed appropriate.

Costs/Budget: Despite the unvalued opportunity costs no direct cost was budgeted for this project.

2. POLICY GUIDELINES

Description: Namibia is in the process of switching from analogue to digital television. The impending analogue switch-off will have a major impact on households all over the country.

Switchover will affect all segments in the broadcasting value-chain including: content production, transmission and reception. It is therefore critical that there should be clarity at a policy level as to what is being done to prepare for the transition from analogue terrestrial television to DTT, particularly with respect to the allocation and use of the spectrum and other regulatory and licensing challenges and opportunities to be brought about by this major change. The Policy Directive is meant to provide such clarity.

Project: Development of DTT Policy Guidelines

<i>Outcomes</i>		<i>Timeframe and milestones</i>			
		<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
2.1	Policy Guidelines Analysed by the Forum	March			
2.2	Working document on policy guidelines prepared	April to October			
2.3	Draft policy guidelines Analysed and validated in a workshop	October			
2.4	Draft policy guidelines considered and approved by the Minister		February		
2.5	Draft policy guidelines submitted to National Assembly via Cabinet		August		

Responsible Unit: The MICT is responsible to develop policies for information and communication technology (ICT) sector and as result was responsible for the availability of DTT Policy Guidelines.

Costs / Budget: Due to lack of funding a private consultant was not employed but the Forum members were responsible for the development of the current DTT policy guidelines. The initial inputs were provided by ITC Consultants (Botswana) without costs. The validation workshop was budgeted for *N\$ 30 000.00*.

3. **PREPARATORY PILOTING**

Description: The objective of the pilot was to test the transmitted signal and to test the decoder samples. The results of the tests were integrated back into the decoder specification and design. The test also provided NBC with an opportunity to provide stakeholders with decoders so that they can experience the DTT signal themselves.

Project: Preparatory piloting phase roll-out

<i>Outcomes</i>		<i>Timeframe and milestones</i>			
		<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
3.1	Installation & commission	Aug			
3.2	Testing	Aug			
3.3	Switching on.	Sept			
3.4	Decoder purchase. 20,000 decoders arrived in Namibia in October 2012.	Oct			
3.5	Decoder testing	Oct-Dec			

Responsible Unit: Namibian Broadcasting Corporation and CRAN allowed NBC to trial from Klein Windhoek site.

Costs / Budget: 0

Cost of 20,000 decoders shown in STB section.

Klein Windhoek Transmitter purchase and installation = N\$ 2.83 million.

4. **NBC TECHNICAL READINESS**

Description:

Project: NBC technical readiness

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Satellite uplink upgrade	Apr			
8 – 16 Channel Expansion installation and commissioning		Q3		
Electronic Programme Guide Upgrade to include online publishing and backup.		Q3		
Transmission control Centre(TCC) installation and commissioning		Q3		
Parliament camera facility installation for contribution feed for the NBC News channel.		Q4		
DVB – T to DVB – T2 Migration		Q4		
IT systems integration for decoder sales and distribution		Q3		

Responsible Unit: NBC

Costs / Budget:

<i>Activity</i>	<i>Estimated Cost/Budget (NAD) '000</i>
Satellite uplink upgrade	30,216
8 – 16 Channel Expansion installation and commissioning	5,500
Electronic Programme Guide Upgrade to include online publishing and backup.	890
Transmission control Centre(TCC) installation and commissioning	6,000
Parliament camera facility installation for contribution feed for the NBC News channel.	2,000
DVB – T to DVB – T2 Migration	200
IT systems integration for decoder sales and distribution	1,000

5. **MINIMUM STB SPECIFICATIONS (TO BE ADDED)**

Description:

Project: Availing of minimum specifications for set top boxes

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Development of minimum Specifications for set top boxes				
Publishing the minimum specifications in the Gazetted		April		
Conduct Public Hearing		June		
Receiving and consideration of stakeholder's inputs				
Availability of the minimum specifications		August		

The minimum specification has been gazette and CRAN is currently in the commenting period. CRAN used the SADC minimum specification.

No cost will be involved.

6. SET TOP BOXES

Description: 100,000 Set Top Boxes (also known as a decoder) were ordered through Huawei as an initial injection into the digital migration project. The draft policy makes provision for a free market approach to the sourcing of decoders into the Namibian market. The schedule below shows how the decoders will be delivered over the next 3 years.

The decoder is subsidized by Government. The recommended retail price will be 199 NAD. The initial 20,000 decoders are a different specification to the 80,000 decoder. The initial 20,000 decoders will be sold in retail at a launch price of 20% less than the recommended retail price. Total 100,000 STB's will be delivered by end of Q3 2014.

Project: Set-Top Boxes Distribution

Outcomes	Timeframe and milestones			
	2012	2013	2014	2015
20,000 STB Delivered	Q4			
10,000 STB Delivery		Q3		
20,000 STB Delivery		Q4		
20,000 STB Delivery			Q1	
20,000 STB Delivery			Q2	
10,000 STB Delivery			Q3	

Responsible Unit: NBC/MICT for decision of subsidy level

Costs / Budget:

10,000,000 USD for 100,000 STBs

7. TRANSMITTER ROLL-OUT

Description: The transmitter rollout has been divided into 3 phases which spans 3 years. The planned coverage for all 3 phases is 80.2%. The current analogue coverage is 66%. By the end of phase 1 NBC would have reached 69.5% coverage, which means Namibia can start the switch off process for analogue television. The 80.2% coverage is planned to be completed by March 2016. Namibia will meet the ITU analogue switchover deadline of June 2015.

Project: Transmitters Roll-out

Outcomes	Timeframe and milestones			
	2012	2013	2014	2015
Windhoek (Gross Herzog and Klein Windhoek)	Q3			
Oshakati, Rossing, Katima Mulilo, Paresis, KL Waterberg	Q4			
Kamanjab, Signalberg, Arendesnes, Keetamashop, Mariental, Opuwo		Q1		
Eenahana, Impalila Island		Q2		
Gobabis, Gam, Brukkaros, Bethanien, Aminuis		Q3		
Epukiro, Okongo, Stampriet, Ur		Q4		

Erongo, Omuthiya, Khorixas (New sites)			Q1	
Maltahohe, Otjimbingwe, Aranos (Newsites)			Q2	
Onesi (Ruacana), Oranjemund, Rosh Pinah			Q3	
Divindu, Terrace Bay, Aus			Q4	
Ovitoto, Rietfontein, Kalkrand (Schlip)				Q1
Cheto, Nkurenkuru, Okahandja				Q2

Responsible Unit: NBC

Costs / Budget:

<i>Activity</i>	<i>Estimated Cost/ Budget (NAD) '000</i>
Windhoek (Gross Herzog and Klein Windhoek)	201,000
Oshakati, Rossing, Katima Mulilo, Paresis, KL Waterberg	
Kamanjab, Signalberg, Arendesnes, Keetamashop, Mariental, Opuwo	
Eenahana, Impalila Island	
Gobabis, Gam, Brukkaros, Bethanien, Aminuis	184,000.
Epukiro, Okongo, Stampriet, Ur	
Erongo, Omuthiya, Khorixas (New sites)	
Maltahohe, Otjimbingwe, Aranos (Newsites)	
Onesi (Ruacana), Oranjemund, Rosh Pinah	87,000.
Divindu, Terrace Bay, Aus	
Ovitoto, Rietfontein, Kalkrand (Schlip)	
Cheto, Nkurenkuru, Okahandja	

8. SPECTRUM USAGE LICENCES

Description: The radio frequencies assigned require a broadcasting service licence. However, in terms of section 93 of the Communications Act, until a date determined by the minister, Chapter IV on broadcasting services is not applicable to the NBC or to any broadcasting activities carried on by the NBC.

Project: Spectrum Usage Licences Issued

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Preparation of the spectrum usage licence for NBC	April	April		
Spectrum usage license issued to NBC (and Multi-choice)		June		
Complete frequency channeling plan				
Publishing frequency channeling plan in the Gazette				
Harmonization with neighboring countries completed and approved by ITU				

Responsible Unit: CRAN - National DTT band plan was completed by April 2013 and harmonization with neighboring countries is also completed and submitted and approved by ITU. Spectrum use licence was also allocated to NBC and Multichoice Namibia.

Costs / Budget: No cost – the project is part of CRAN's normal activities.

9. SERVICE LICENCE

Description: The radio frequencies assigned require a broadcasting service licence. However, in terms of section 93 of the Communications Act, until a date determined by the minister, Chapter IV on broadcasting services is not applicable to the NBC or to any broadcasting activities carried on by the NBC.

Project: Service Licences Issued

Outcomes	Timeframe and milestones			
	2012	2013	2014	2015
Issue of a service license to NBC				

Responsible Unit: CRAN - CRAN has issued service licenses to Multichoice Namibia but cannot issue a service license to NBC unless the Minister has enacted section 93 of the Communications Act.

As National Signal Distributor NBC will need a class comprehensive multiplex and signal distribution service licenses.

Costs / Budget: None

10. REGULATORY FRAMEWORK

Description:

Project: Regulatory Framework Established

Outcomes	Timeframe and milestones			
	2012	2013	2014	2015
Draft Regulations on service license conditions for NBC (draft stage)	October	June		
Finalise Regulations on service license conditions for NBC.		November		

Responsible Unit: CRAN - CRAN can only commence with the regulatory framework once the DTT Policy Guidelines are approved by Cabinet and duly gazetted. Regulations needed are like service license conditions for NBC – CRAN has drafted it already but cannot go ahead until the Policy has been approved and section 93 enacted.

Costs / Budget: None

11. SIGNAL DISTRIBUTION LICENCES

Description:

Project: Signal Distribution Licences Issued

Outcomes	Timeframe and milestones			
	2012	2013	2014	2015
Create the Signal Distribution and Multiplex license categories		Much		
Consideration for applications from commercial broadcasters.		July		
Publish licence conditions for multiplex and signal distribution licencees for public comments		June		
Publishing of final Notice in the Government Gazette				

Responsible Unit: CRAN - – As per an earlier decision NBC will be the national signal distributor for DTT. However for that to happen, section 93 of the Communications Act must be enacted first. NBC must also provide to CRAN the pricing schedule it intends to charge other broadcasters – inclusive of FM broadcasters. NBC do this date does not have such a pricing scheme. To date no signal distribution offer has been submitted by NBC.

However License conditions can only be issued once NBC is licensed and once the Policy is approved.

Costs / Budget: None

12. **SIMULCASTING**

Description: From the launch of DTT until analogue switch off existing broadcasters will have to pay for both analogue and digital signal distribution. NBC is currently finalizing its signal distribution tariff for DTT. The tariff is based on a cost plus principle. It is expected that by June 2015 broadcasters will only pay for digital broadcasting signal distribution as analogue will be switched off by that time.

Project: *Simulcasting commenced*

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
DTT launched	Q3			
69.5 % Coverage		March		
77.5% Coverage			March	
Simulcasting period ends			June	
80.2% Coverage				March

Responsible Unit: NBC

Note: biggest issue here is again costs to broadcasters during that period – FTA broadcasters (One Africa and TBN) will have two costs – current analogue network costs plus SD cost by NBC.

Costs / Budget:

13. **ANALOGUE SWITCH OFF**

Description: This means that the current broadcasting mode, known as analogue broadcasting will be switched-off and television broadcasting will be made on digital platform.

Project: *Analogue Switched-off*

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Analogue switch off commences	June			
Analogue switch off completed		June		

Responsible Unit: NBC

Costs / Budget:

Linked to national consumer awareness campaign budget.

14. **PUBLIC AWARENESS CAMPAIGN**

Description: The National Public Awareness Campaign aims at educating consumers on DTT and informing them on the transition process. The role players to be involved in this

campaign are NBC, TBN, One Africa, CRAN, Multichoice Namibia, MISA and MICT. The Campaign targets the mass audience for Television. The messages on DTT transmission will be conveyed via Radio, Television and Print. The Consumer Awareness Committee shall report to the DTT Forum every two month.

Project: Public Awareness Initiative commenced

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Development of Materials and promotional Items		Jun -Jul		
Marketing		Jul - Dec	Jan - Dec	Jan - Dec

Responsible Unit: MICT and NBC

Costs / Budget: N\$ 4.5 Million

15. CALL CENTER/SUPPORT CENTRE

NBC has appointed MobiPay to provide the call centre service for digital migration. The call centre will start out with 2 seats and will grow as the demand grows.

Costs / Budget: 4750 per month per seat. For 2 seats for one year the cost is 114,000 NAD.

16. DTT PROJECT LAUNCH

Description: The technical switch on of the project happened in December 2012. The industry still needs to agree a launch date for DTT. It is expected that this launch date by towards the end of 1uarter 3 of 2013. The cost presented below is only for the launch event.

Project: DTT Project Launched

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Technical switch on	Dec			
Industry agree on date for launch		June-July		
Prepare for launch event		Aug		
Projected launch month		Sept		

Responsible Unit: MICT / NBC / CRAN

Costs / Budget: N\$ 500,000

17. DTT BUDGET

Description: The switching from analogue to digital terrestrial broadcasting is a national programme which consists of various projects.

Project: DTT Budget

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Budget for public awareness campaign	Q4			
Budget for the Coordinator		Q2		

Responsible Unit: MICT

18. MONITORING AND EVALUATION

Description: Establishing whether the stakeholders are implementing the activities as planned and whether the project is on track. Determining the challenges experienced during the implementation phase and establishing the remedial actions.

Project: DTT Project Implementation Monitored and Evaluated

<i>Outcomes</i>	<i>Timeframe and milestones</i>			
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Monitoring and Evaluation		Quarterly	Quarterly	Quarterly