



**NATIONAL  
MEDIA  
COMMISSION**



# **A Report on Migration from Analogue to Digital Broadcasting in Ghana**

# Broadcasting Policy, Legal & Regulatory Environment

## ❑ Policies

- ✓ NMC National Media Policy, 2000
- ✓ National Telecommunications Policy (NTP), 2005
- ✓ Report of the National Digital Broadcasting Migration Technical Committee, 2010

## ❑ Laws

- ✓ Television Licensing Decree, 1966, (N.L.C.D. 89)
- ✓ Television Licensing (Amendment) Law, 1991 (P.N.D.C.L. 257)
- ✓ Ghana Broadcasting Corporation Decree, 1968, (NLCD 226)
- ✓ National Media Commission Act, 1993 (Act 449)
- ✓ National Communications Authority Act, 2008 (Act 769)
- ✓ Electronic Communications Act, 2008, (Act 775)

## ❑ Regulations & Guidelines

- ✓ Television Licensing Regulations, 1991 (L.I. 1520)
- ✓ NMC Broadcasting Standards, 2000
- ✓ National Communications Regulations, 2003, (L.I. 1719)
- ✓ NMC Guidelines for Local Language Broadcasting, 2009
- ✓ Guidelines for the Deployment of Communications Infrastructure, 2010,



# Composition of Communications Space By Number in operation

Category	2004	2005	2006	2007	2008	2009	2010	Mid 2011
<b>Fixed Line</b>	2	2	2	2	2	2	2	2
<b>Cellular</b>	4	4	4	4	4	5	5	5
<b>ISPs</b>	25	29	32	34	35	35	35	35
<b>FM Radio</b>	84	84	127	129	144	171	190	203
<b>TV</b>	8	8	10	11	13	14	14	16

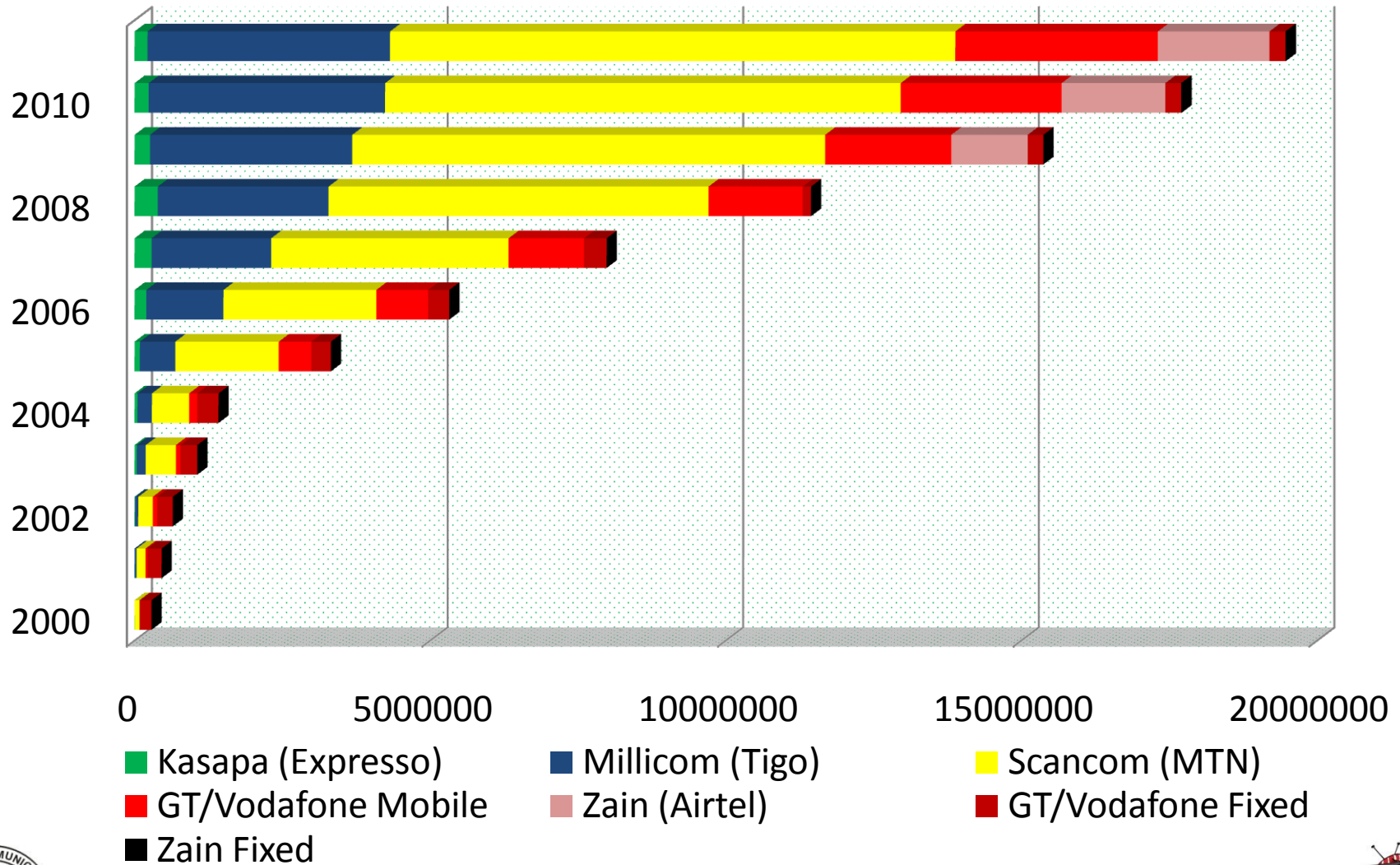


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# Composition of Access lines up to June 2011



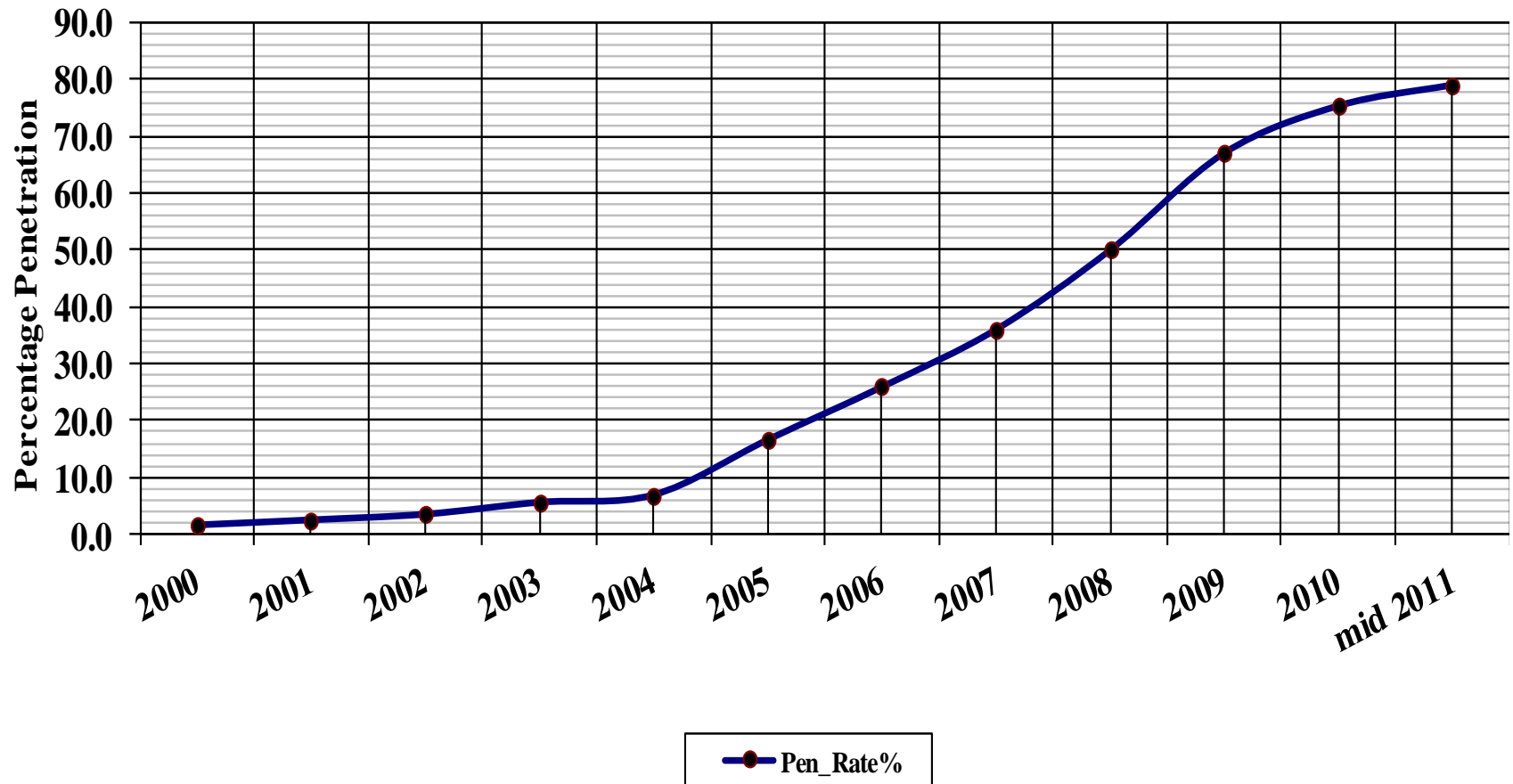
0 5000000 10000000 15000000 20000000

■ Kasapa (Expresso)      ■ Millicom (Tigo)      ■ Scancom (MTN)  
■ GT/Vodafone Mobile      ■ Zain (Airtel)      ■ GT/Vodafone Fixed  
■ Zain Fixed

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# Mobile Telephony Penetration Rates 2000 – mid 2011

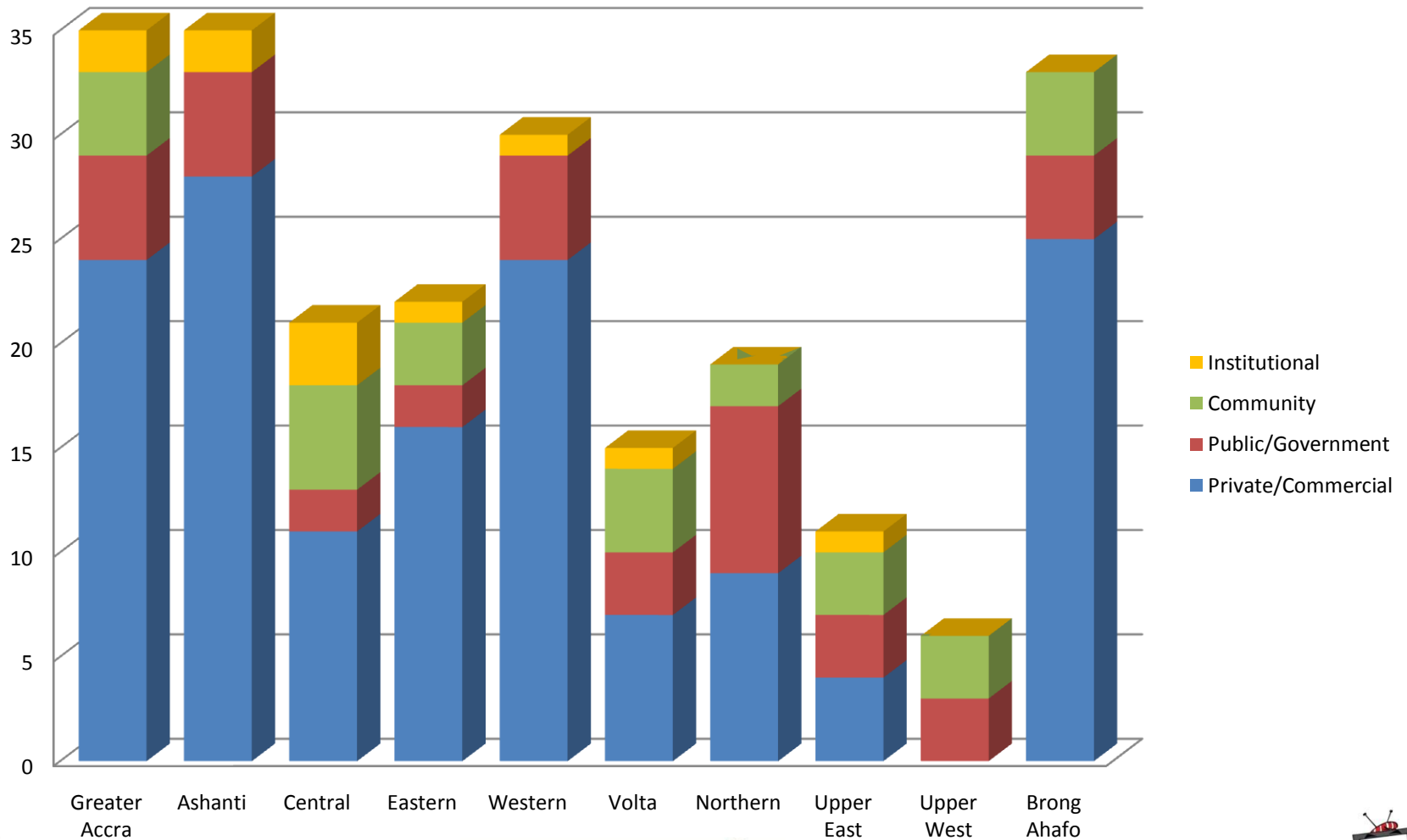


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# Distribution of FM Stations in Ghana as of June 2011

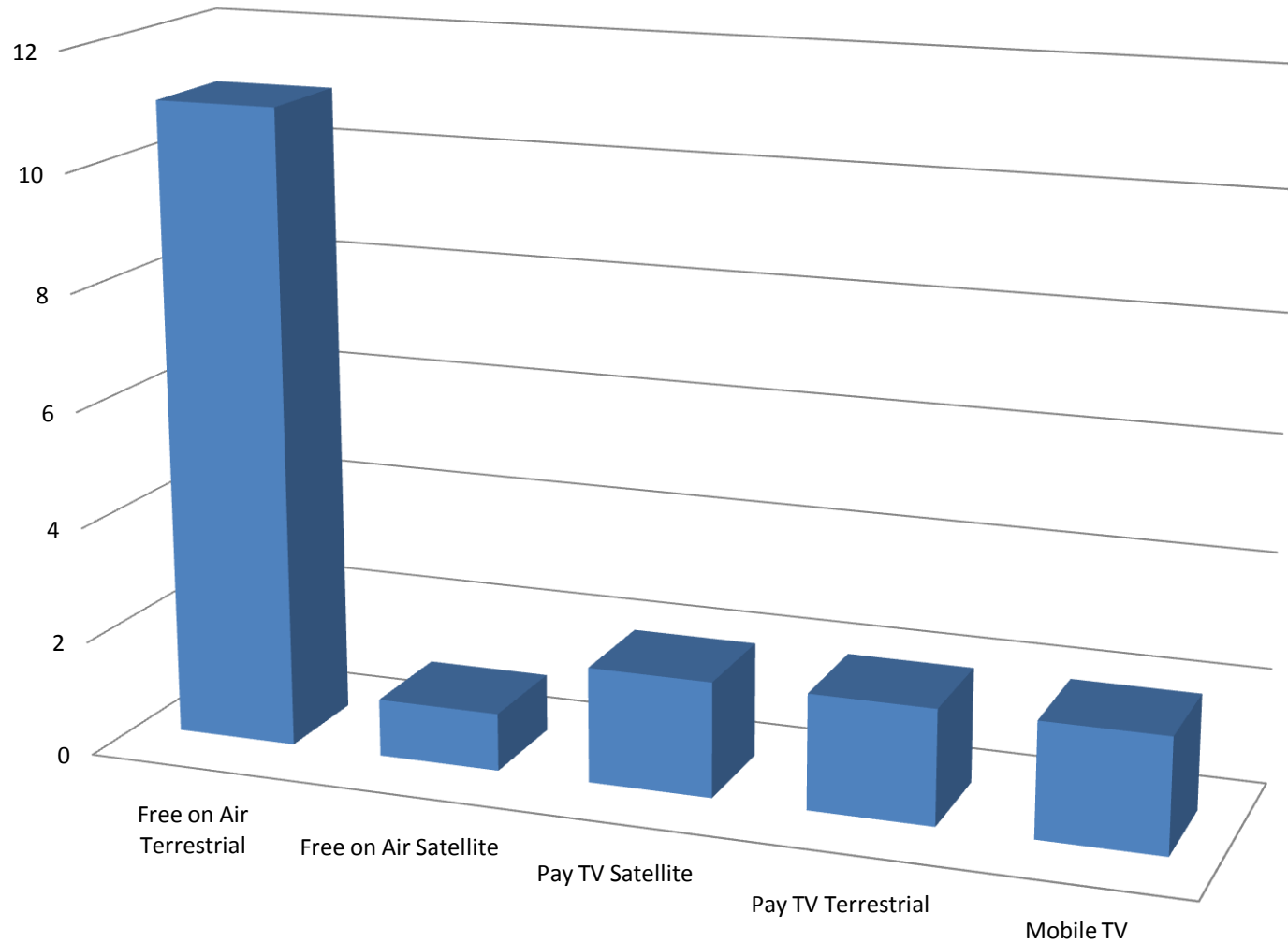


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# Distribution of Types of TV Stations in Ghana as of 2010



# Overview of Existing Analogue Terrestrial TV Signal Distribution

## □ GTV has

- ✓ 30 transmitters operating in VHF Band III
- ✓ 9 repeater stations operating in UHF Bands IV & V

## □ Private broadcasters

- ✓ TV3, Metro TV, TV Africa operate in Band III
- ✓ Net2 TV, Viasat 1, e-TV Ghana, Crystal TV, Coastal TV operate UHF transmitters





# Challenges of Existing Analogue Regime

## ❑ Poor Infrastructure sharing/Co-location

- ✓ Each broadcaster carries own signals
- ✓ Combined Network management costs for the industry are high
- ✓ Transmitters are located in varied directions for the same coverage target resulting in:

## ❑ Poor reception conditions

- ✓ Use of a single directional antenna presents serious reception challenges:
  - Ghosting
  - Blurred images
  - Lines across images
  - Poor sound, etc
- ✓ Environmental aesthetics are badly affected by the sight of long bamboo poles hoisting antennas



# Why Migrate?

- ❑ 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 a resource in the interest and benefit of stakeholders.
- ❑ To prevent dumping of obsolete analogue TV equipment into the country
- ❑ To enhance the quality and experience of TV viewers in Ghana



# **STRATEGY FOR THE TRANSITION FROM ANALOGUE TO DIGITAL BROADCASTING IN GHANA**

# Governance/Leadership

## ❑ Overall Leadership provided by the Government of Ghana:

- ✓ All policy decisions approved by Cabinet
- ✓ All Legal instruments to be approved by Parliament

## ❑ Digital Broadcasting Migration Committee:

- ✓ Chaired by Honourable Minister of Communications
- ✓ Membership of 13 from all stakeholder institutions
  - Ministries, Parliament, Regulators, State Broadcaster, Private Broadcasters
- ✓ Responsible for:
  - policy implementation
  - integrated planning
  - budgeting
  - communication with the public
  - performance monitoring



# Free-to-Air TV Strategy

## □ Independent DTT Transmission Entity

- ✓ Being established through Public Private Partnership
- ✓ Ghana Broadcasting Corporation (GBC) and Ghana Independent Broadcasters Association (GIBA)
- ✓ Preliminary discussions pointing to 50%:50% risk & reward
- ✓ Discussions led by Public Investment Unit of MoFEP
- ✓ RFP for DVB-T2 network under development in lieu of PPP



# Standards

- Transmission standard - **DVB-T2 (EN 302 755)**
- Television presentation formats:
  - ✓ **standard definition (SDTV)** until analogue switch off (ASO)
  - ✓ **high definition after ASO**
- Compression technology:
  - H.264/AVC/MPEG-4 (part 10) and**
  - Advanced Audio Coding (AAC)**
- Application Programming Interface (API) for additional and interactive services - **MHEG-5**



# Conformance Strategy

- ❑ Appointment of test lab for STB Compliance testing
- ❑ Licensing of compliant STBs to use certification logo



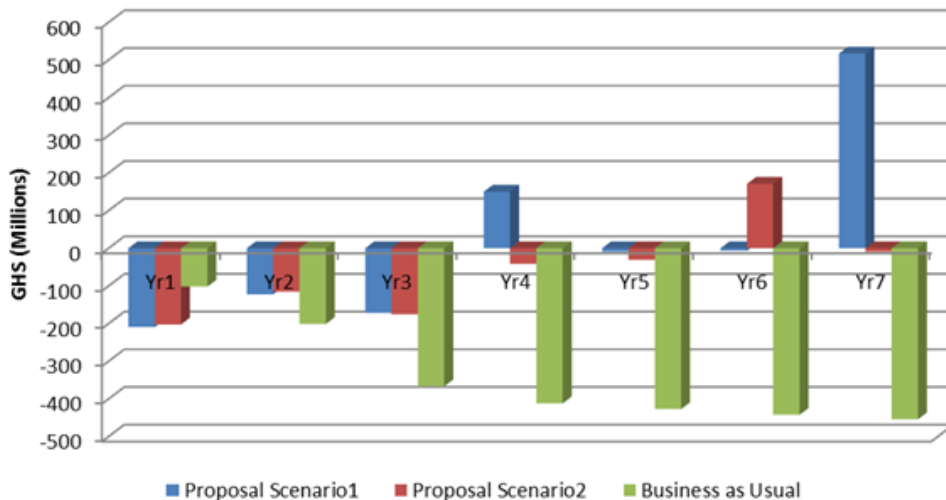
- ❑ Logo would confirm to consumers that the receiver is Ghana DTT compliant.
- ❑ Publication of STB Manufacturers 'White' list.



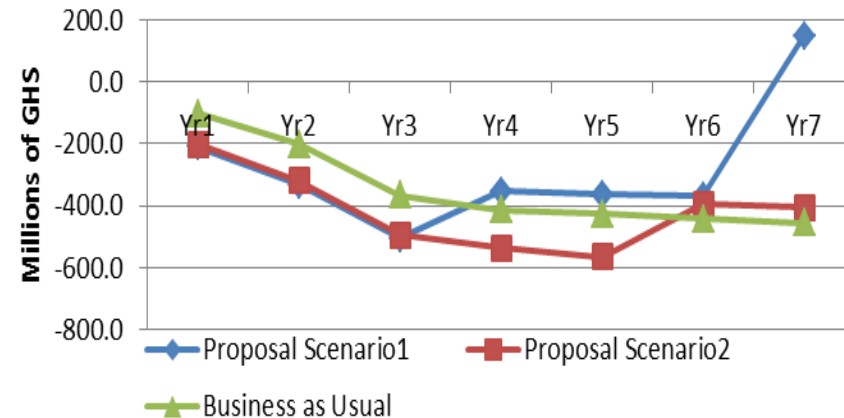
# Analogue Switch-off Date

- 31<sup>st</sup> December, 2014 (3 yr double illumination)

### Annual Net Cash Flow

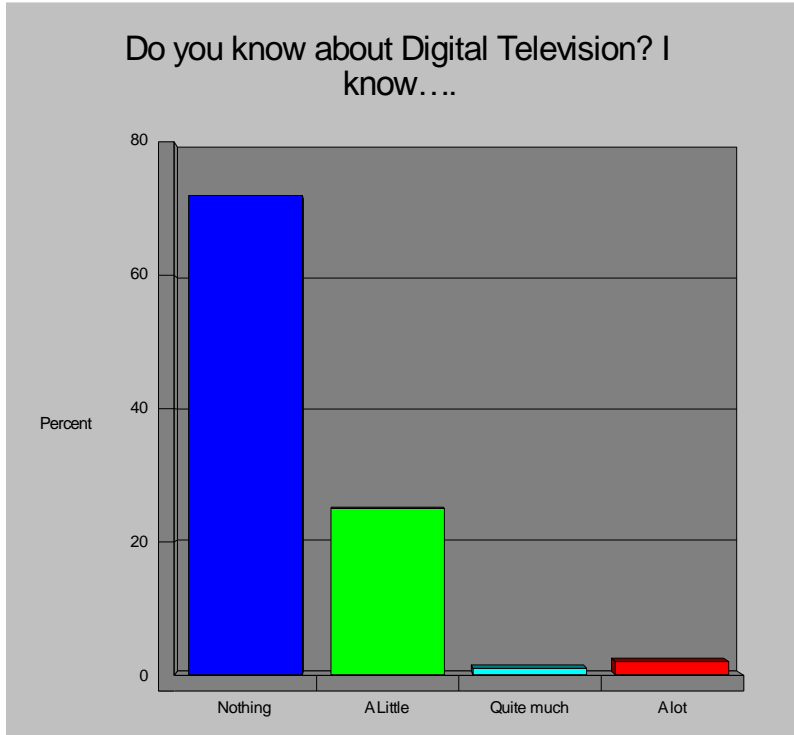


### Cumulative Net Cash Flow of all Scenarios

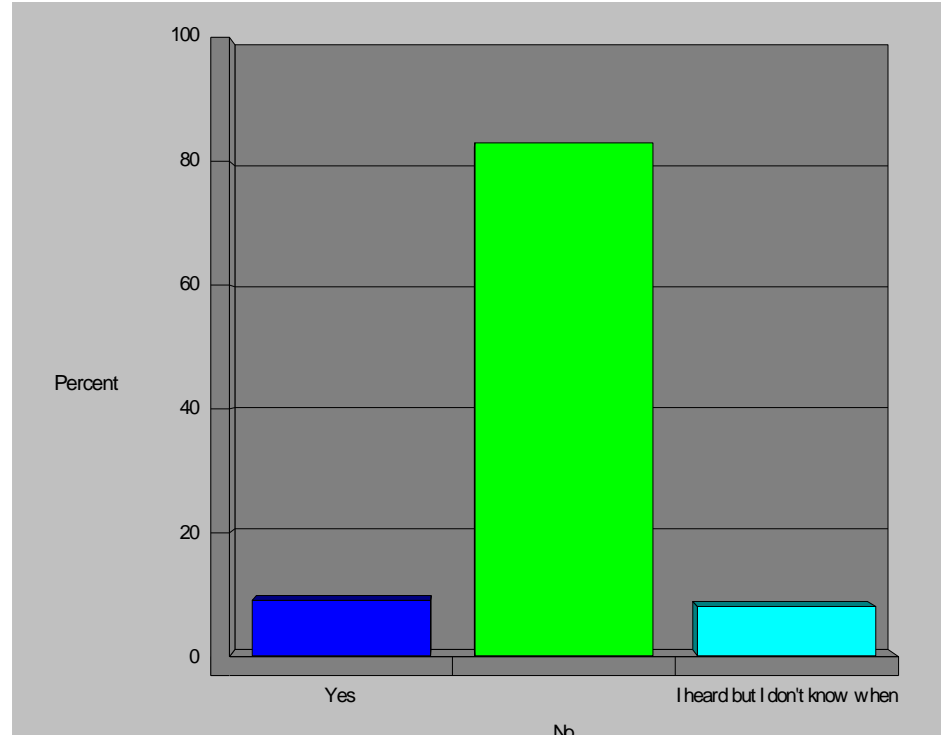




# Public Awareness

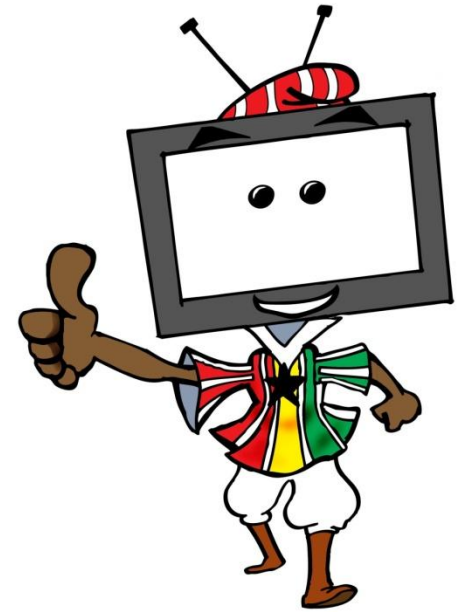
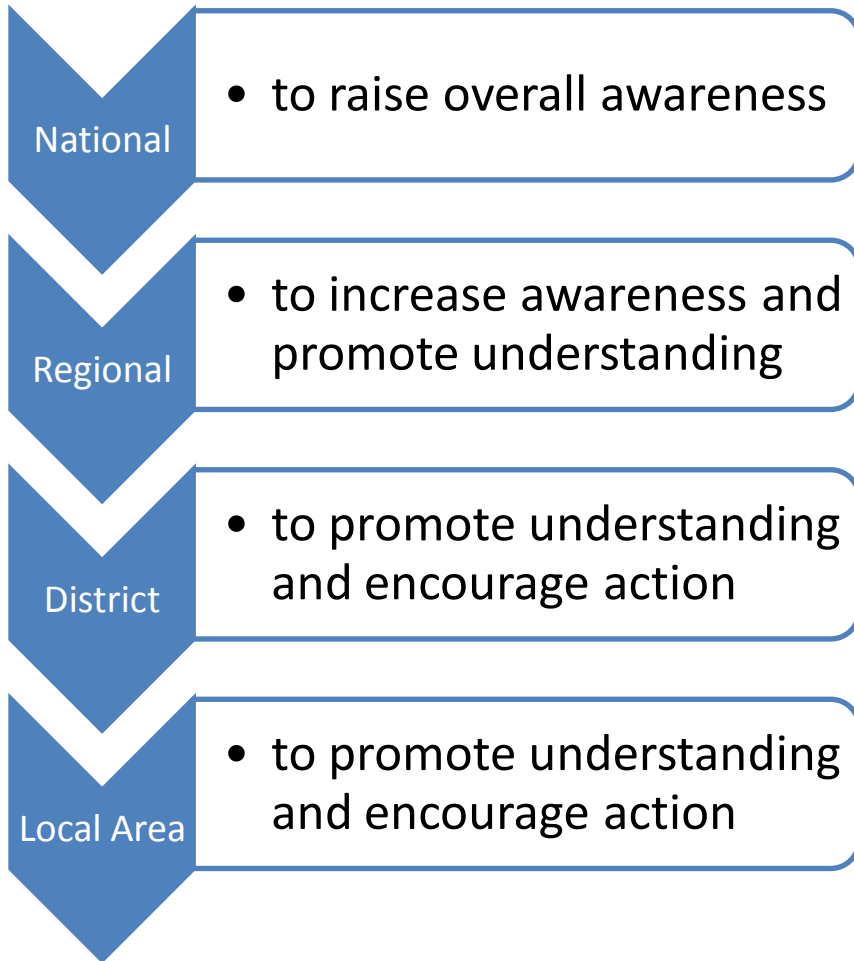


Awareness about Digital TV



Awareness about 2014 analogue switch-off

# Public Education Strategy



message should be *simple* and *straight forward*

materials should be transmitted in at least the languages identified to be widely spoken in Ghana

all media platforms should be used

Outreach events to schools, churches, mosques, etc

# Sample promos



# Sample Promo III



# Switchover Timetable

Activity	Start Date	End Date
NDBMTC Final Report to Govt	13 <sup>th</sup> Jan 2010	30 <sup>th</sup> Aug 2010
Development of Legal Framework (Amendment of Electronic Communications Act)	Sept 2010	December 2010
Public Awareness Campaign	September 2010	December 2014
Establishment of National Digital Migration Implementation Body	January 2011	
Licences for Digital TV	3Q 2011	
Nationwide Roll-out of Digital TV (Simulcast Period)	2012	2013
Coverage of all Regional Capitals & environs	By December 2012	
Phased Analogue Switch-off	To be determined according to locations and conditions	
Completion of Switchover	31 <sup>st</sup> December 2014	
Appraisal Report of Switchover Process	6 months after completion of switchover	

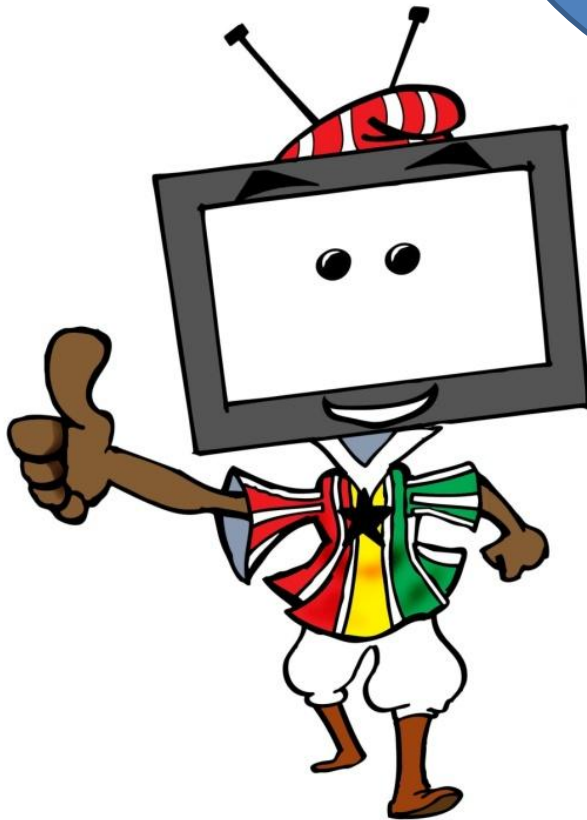
# Identified Risks

- ❑ Low public awareness:
  - ❑ could lead to a slow uptake of the service or conversely, panic when the 2014 analogue switch-off date is announced.
- ❑ Uncertainty about funding sources which could stifle implementation of the project.
  - ❑ Funding for consumer incentives e.g. help scheme for economically vulnerable, etc.
- ❑ Absence of a legal framework for ASO:
  - ❑ to avert any risks of legal suits from civil society organisations and/or pressure groups.



**It's Digitime in  
Ghana!**

**Thank You!**



# Contact Info

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