



BROADCASTING MONITORING CENTRE



**NATIONAL  
COMMUNICATIONS  
AUTHORITY**

*Commissioning of*  
**Broadcasting  
Monitoring  
Centre (BMC)**

November 2022

# Broadcasting Statistics for Third Quarter 2022

## Authorised Television Broadcasting Stations

Analogue Terrestrial Television

2

Digital Terrestrial Free-To-Air Television Programme Channel (Nationwide Coverage)

40

Digital Terrestrial Free-To-Air Television Programme Channel (Regional Coverage)

6

Digital Terrestrial Pay Television (Service only)

0

Digital Terrestrial Pay Television (Service and Frequency)

5

Digital Terrestrial Television (Network only)

0

Digital Terrestrial Radio Service on TV Multiplex

8

Satellite Television Broadcasting (Pay TV Direct-To-Home Bouquet)

3

8

Satellite Television Broadcasting (Free-To-Air Direct-To-Home Bouquet)

79

Satellite Television Broadcasting (Free-To-Air Direct-To-Home Single Channel)

0

Digital Terrestrial Television Additional Services (eg. Teletext, etc)

0

Digital Terrestrial Mobile Television Service (Stand-alone Authorisation)

1

Digital Cable Television

2

Television over Internet Protocol (Pay TV)

1

Subscription Management Service for a Satellite Television Broadcasting (Pay TV Direct-To-Home Bouquet)

TOTAL NO. OF AUTHORISED STATIONS **155**

TOTAL NO. OF STATIONS ON AIR **113**

TOTAL NO. OF STATIONS NOT ON AIR **42**



## Authorised Radio Stations

PUBLIC

31

PUBLIC (FOREIGN)

5

COMMUNITY

119

CAMPUS

24

COMMERCIAL

528

TOTAL NO. AUTHORISED **707**

TOTAL NO. IN OPERATION **513**





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**Hon. Mrs. Ursula Owusu-Ekuful**  
(Minister for Communications and  
Digitalisation, Ghana)



**Mr. Isaac E. Osei-Bonsu Jnr.**  
(Board Chairman, NCA)



**Mr. Joe Anokye**  
(Director General, NCA)



# COMMISSIONING OF NCA BROADCASTING MONITORING CENTRE (BMC)

by **Hon. Mrs. Ursula Owusu-Ekuful**  
(Minister for Communications and Digitalisation, Ghana)

**Date:** Tuesday, 29<sup>th</sup> November, 2022

**Venue:** NCA Tower, Airport City, Accra

## **Part 1**

- 9:30 a.m. – 10:00 a.m. Arrival and Registration**
- 10:00 a.m. – 10:05 a.m. Welcome Remarks  
(Mr. Joe Anokye, DG, NCA)**
- 10:05 a.m. – 10:10 a.m. Remarks - National Media Commission  
(Dr. George Sarpong, Executive Secretary, National Media Commission)**
- 10:10 a.m. – 10:15 a.m. Remarks - Ministry of Information  
(Hon. Kojo Oppong Nkrumah, Minister for Information)**
- 10:15 a.m. – 10:25 a.m. Keynote Address  
(Hon. Mrs. Ursula Owusu-Ekuful, Minister for Communications and Digitalisation)**
- 10:25 a.m. – 10:35 a.m. Presentation on the BMC  
(Edmund Y. Fianko, Ag. Director of Engineering, NCA)**

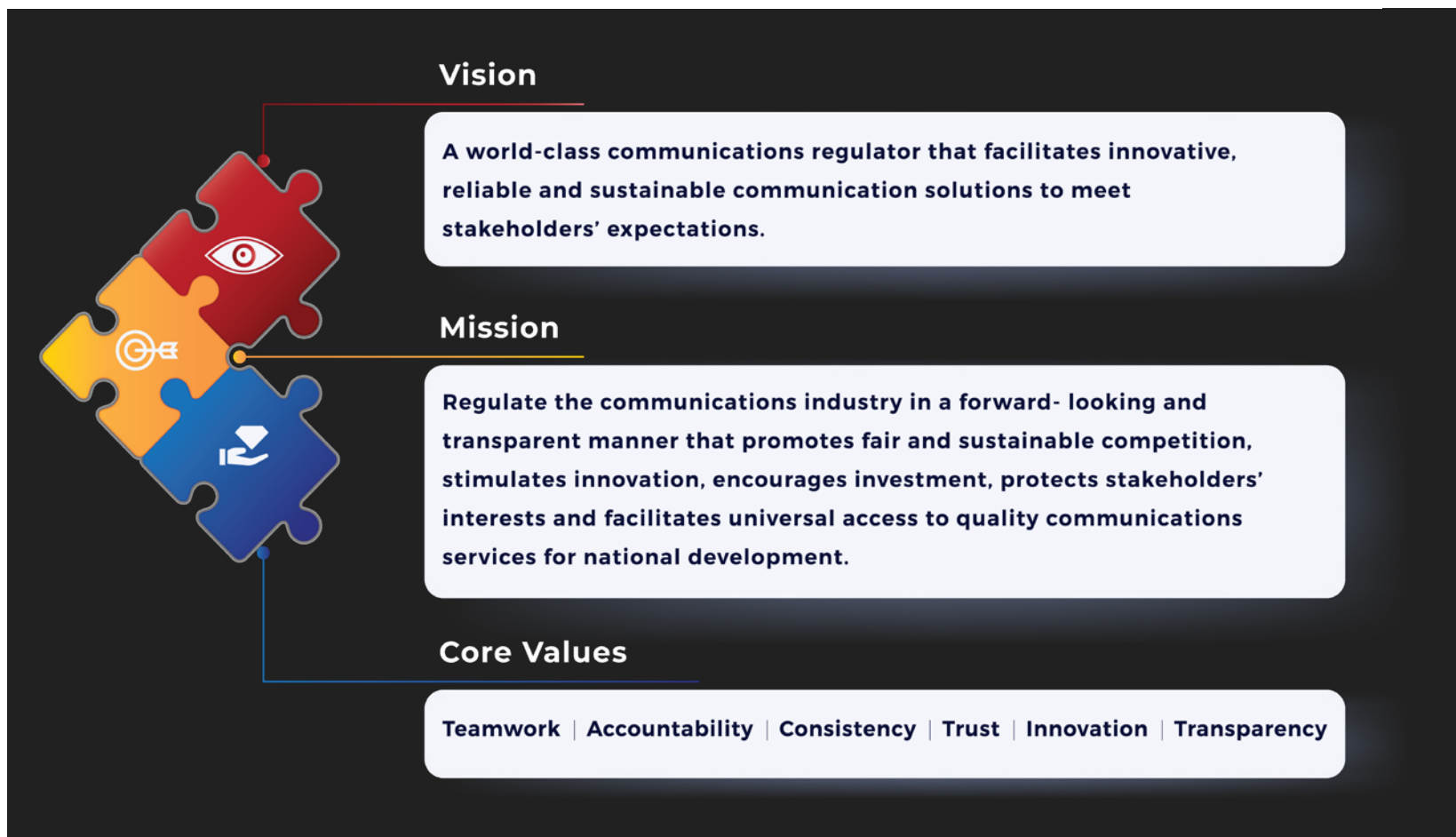
## **Part 2**

- 10:40 a.m. – 10:45 a.m. Unveiling of Plaque  
(Hon. Mrs. Ursula Owusu-Ekuful, Minister for Communications and Digitalisation)**
- 10:45 a.m. – 10:50 a.m. Tour of the BMC**
- 10:50 a.m. – 11:00 a.m. Photo Opportunity  
(Dignitaries)**
- Closing**

## ABOUT NCA

The National Communications Authority (NCA), was established by an Act of Parliament, Act 524 in December 1996, which has been repealed and replaced by the National Communications Authority Act, 2008 (Act 769). The Authority is the statutory body mandated to license and regulate electronic communications activities and services in the country.

**NCA -  
the Drive towards a  
World Class Regulator**





## WHAT WE REGULATE

The Object of the National Communications Authority (NCA) as enshrined in Act 769 (2) is to regulate the provision of communications services in the country. The Act also adds in Section 3 (Functions of the Authority) that for the purpose of achieving its object, the Authority shall among others grant communication licence, regulate and monitor licensees, holders of frequency authorisations in consultation with the National Media Commission where appropriate and also ensure fair competition amongst licensees, operators of communications networks and service providers of public communications. The Authority has over the years delivered on this mandate to cover twenty-seven (27) services that it regulates. These include;

1. Amateur Radio
2. Landing Rights Licensing
3. Infrastructure Licence (Metro Fibre)
4. Infrastructure Licence (Masts and Towers)
5. Aeronautical Radio Services
6. Maritime Radio Services
7. Public Radio Equipment (PRS) or Land Mobile Services
8. Microwave Authorisation
9. Type Approval Services
10. Dealership Services
11. Numbering Services (SIM, M2M, Short Codes, etc)
12. Value Added Services (VAS)
13. Very Small Aperture Terminal (VSAT) Services
14. DTT Conformance Certification
15. Internet/Public Data Services Provision
16. Television Broadcasting Services
17. Radio FM Broadcasting
18. International Inbound Traffic Services
19. International Wholesale Carrier Services
20. Mobile Virtual Network Operations
21. Interconnect Clearing House
22. 2G or 2nd Generation Cellular Services
23. 3G or 3rd Generation Cellular Services
24. 4G or 4th Generation Cellular Services/Broadband Wireless Access (BWA) Service
25. UMTS-900 Authorisation
26. Fixed Licence
27. Submarine Cable



## BROADCASTING MONITORING CENTRE BACKGROUND

Section 2 of the Electronic Communications Act of 2008, Act 775 mandates the National Communications Authority (NCA) to regulate the radio spectrum designated or allocated for use by broadcasting organisations and providers of broadcasting services. In furtherance of the above, the Authority has the mandate to determine technical and other standards and issue guidelines for the operation of broadcasting organisations and bodies providing broadcasting services.

In Ghana, the NCA regulates sound and television broadcasting services in consultation with the National

Media Commission (NMC) as required by Section 3(d) of the National Communications Authority Act, Act 769.

In light of this, in 2021, a Stakeholders' Consultative Meeting was held in the quest to address emerging issues relevant to Broadcasting in Ghana. To enhance the cooperation agreement between the Broadcasting Regulatory bodies (NCA and NMC) and effectively carry out the decisions from the meeting, it was imperative to install an independent monitoring system which records content and can produce them for review, analysis or evidence.



Some staff at the new Broadcasting Monitoring Centre (BMC)



## EXISTING BROADCASTING MONITORING SYSTEM

In 2018, the NCA established a Broadcasting Monitoring System (BMS) for the monitoring of Television and FM radio broadcasting services consistent with its mandate under Section 62 of Act 775. The law also mandates the NCA to operate frequency monitoring stations to monitor the use of the frequency spectrum, and carry out a technical function necessary for fulfilling the requirements of the Radio Regulations of the International Telecommunication Union (ITU).

This System was primarily focused on analysis of the frequency and technical specifications of Television and FM radio broadcasting services. However, the recording of content was included to facilitate the analysis of signals. Sufficient storage was also provided to preserve content records for up to three (3) months.

The BMS was extended to the Regional/Zonal Offices of the NCA outside the national capital to provide monitoring capabilities in the respective regions. While the BMS installed at the Head Office facilitates the comprehensive monitoring of broadcasting services in and around Accra, the installations in the other regions provide in-depth off-air Digital Terrestrial Television (DTT) and FM Radio monitoring in other parts of the country.

This decentralisation is significant since the National DTT network is designed to transmit on two multiplexes – a national multiplex on the same frequency with the same content throughout the country and Regional multiplexes with some channels specific to particular regions.



The current Broadcasting Monitoring System (BMS)

# INTRODUCING THE NEW BROADCASTING MONITORING CENTRE (BMC)

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To enhance the capabilities of the BMS, there was the need to expand the existing BMS to provide for the under listed hence, the installation of the Broadcasting Monitoring Centre:

- Recording of about one hundred (100) video channels (terrestrial/satellite)

- Recording of FM radio content in Accra
- Monitoring of 13 satellites with provision to scale up to 16



Monitoring Area of the new Broadcasting Monitoring Centre (BMC)



## TECHNICAL CAPABILITIES OF THE BMC

Following the expansion of the scope of the system, there are myriad of capabilities and these are summarised below:

***Content Recording of FM Radio Broadcasting Stations*** – The system supports the recording and retrieval of at least 50 FM radio stations in Accra and has an appropriate hardware for tuning, recording with date and time stamp, storage and retrieval.

***Television monitoring capabilities*** – The system has the capability of combining 24/7 transport stream monitoring with a fully configurable multi viewer (Mosaic) of decoded video, audio bars and monitoring status. In effect, it supports television monitoring functionality that are not limited to the under listed:

- Analysis and decoding audio, video and system information.
- Support for digital satellite and terrestrial television broadcast monitoring, with decoding of DVB-T, DVB-T2, DVB-S, and DVB-S2.
- Support the recording and storage of videos.
- Capability to monitor free-to-air as well as encrypted television broadcasts.
- A video-wall that displays the videos being monitored or recorded.



Staff monitoring the transmission parameters of FM Stations

**Television TS recording, error-logging and archiving capabilities** – The system supports the management, archiving and monitoring of data. This 24/7 media logger keeps records of all errors and violations including the duration of each error and can be exported for review and analysis. The video errors are also shown on each channel on the video wall.

**Monitoring of multiple Satellite TV Sources** – The system makes provision for the simultaneous monitoring of the following satellite sources:

- ◆ Astra 2F at 28.2oE
- ◆ Eutelsat 7B at 7oE
- ◆ Intelsat 37E at 18oW
- ◆ Amos 17 at 17 oE
- ◆ SES 5 at 5oE
- ◆ ABS 3A at 3oW
- ◆ Intelsat 20 at 68.5oE
- ◆ Astra 2G at 28.2oE
- ◆ AzerSpace 2 /Intelsat 38 at 45.1oE
- ◆ AzerSpace 1 / AfricaSat 1A at 46oE
- ◆ Belintersat at 51.5 oE
- ◆ Eutelsat 36C at 36.1oE
- ◆ 3 sources to accommodate services from satellites which may commence broadcasting services to Ghana at a future date.





# BENEFITS TO INDUSTRY AND CONSUMERS

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**01**

The NCA can meet ITU-R requirements for the measurement of FM and TV transmission parameters.

**03**

Ability to provide DTT quality analysis for the National Network on a real-time basis. This will also provide technical information to support consumer education during the transition.

**02**

The Authority can show proof of deviations for enforcement of authorisation conditions and evidence in cases of dispute before NMC, the Tribunal or in Court.

**04**

Ensuring better broadcast service quality for consumers.



# GALLERY

## THE NEW BROADCASTING MONITORING CENTRE (BMC)



Staff monitoring Quality of Service of TV/FM Stations



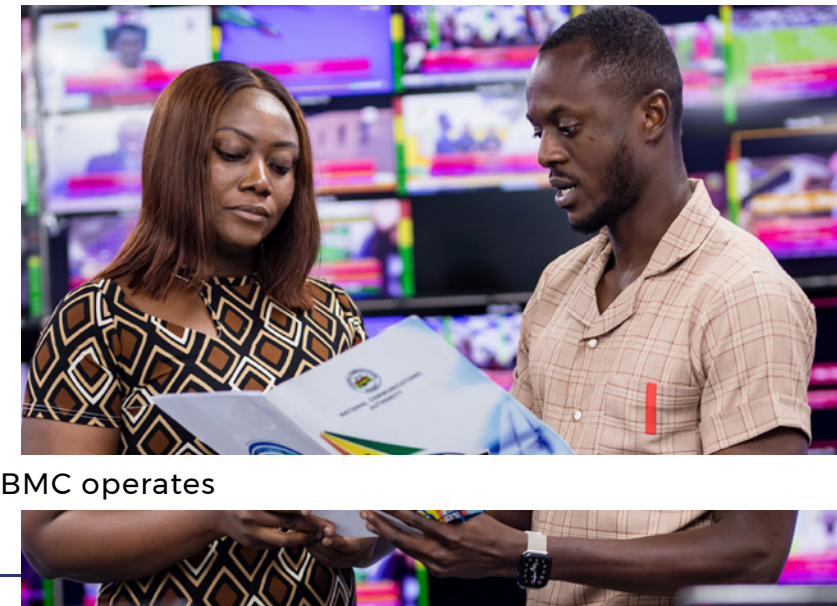
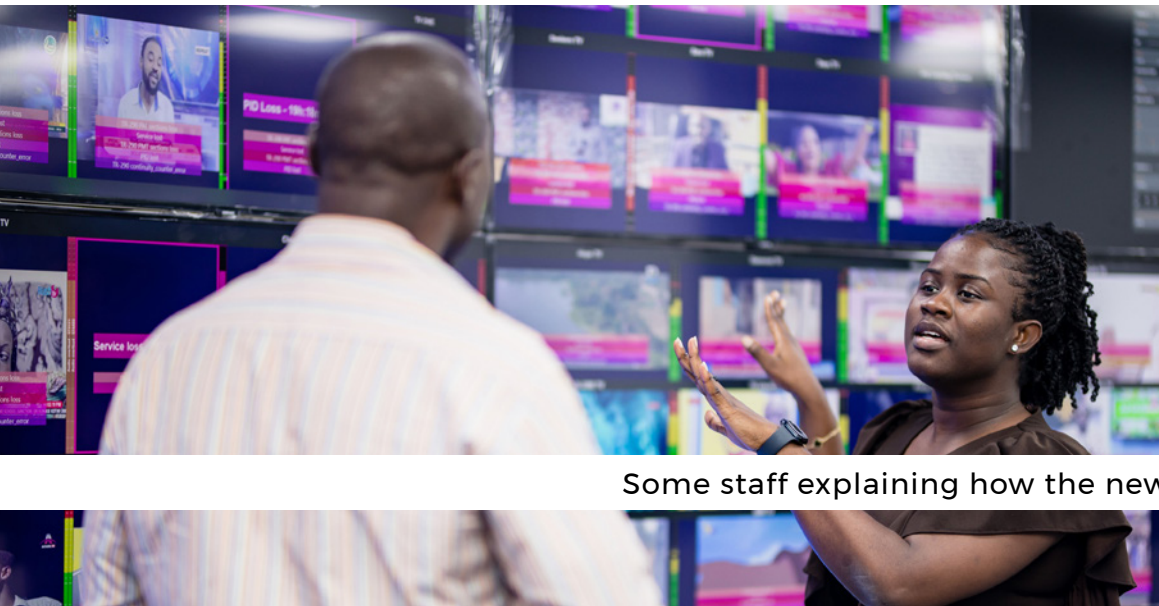
A section of the new BMC







Transmission error prompts of some television stations detected by the new BMC



Some staff explaining how the new BMC operates





Staff working at the new BMC



Display screens of TV/FM stations being monitored and recorded





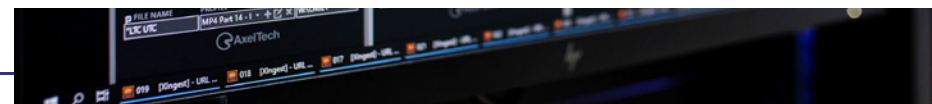
Monitoring workstation at the new BMC



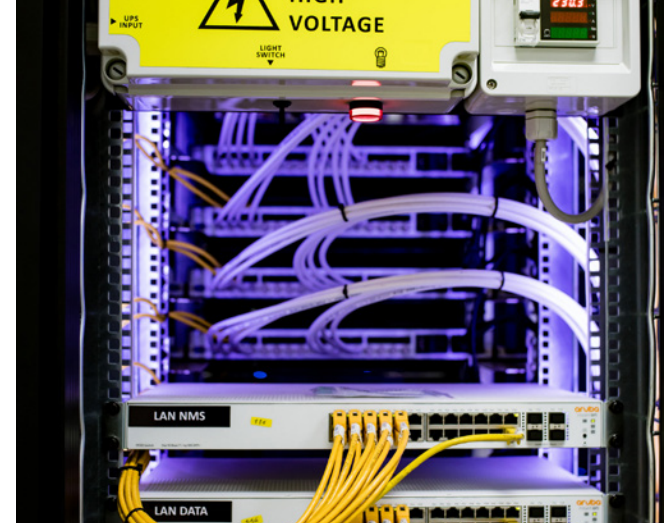
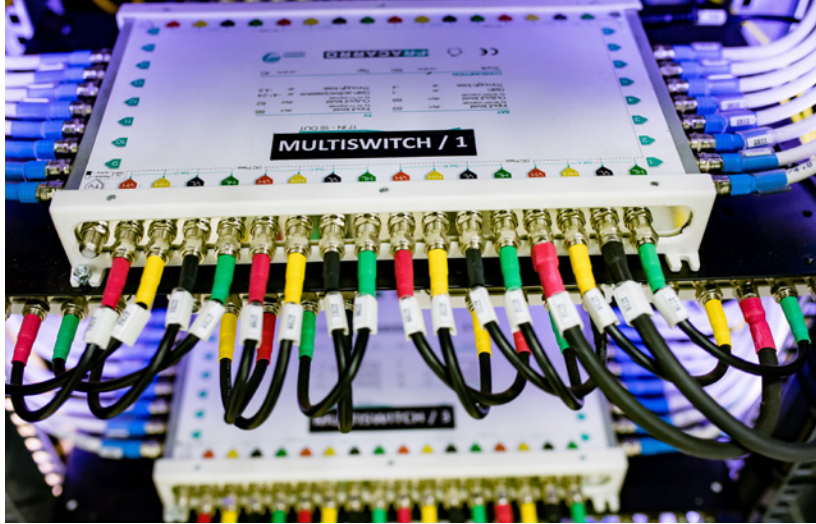
Data Centre of the new BMC



Display screens at the Data Centre







Rear view of the Data Centre Racks



Aerial view of Terrestrial and Satellite Receiving Antennae



**For further information, contact:**

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