

Update on Digital Audio Broadcasting (DAB+) Trial in Ghana

**NATIONAL
COMMUNICATIONS
AUTHORITY**



Presentation Outline



FM Band Occupancy



The DAB Trial in Ghana



Objectives of DAB Trial in Ghana



Overview of NCA DAB Trial Setup



Frequency Band for DAB in Ghana



Presentation Outline - 2

 Selected Audio Channels

 Benefits of DAB in Ghana

 Challenges with DAB introduction in Ghana

 Next Steps



FM Band Occupancy



FM Band congested in major cities;

ACCRA

KUMASI

TAKORADI

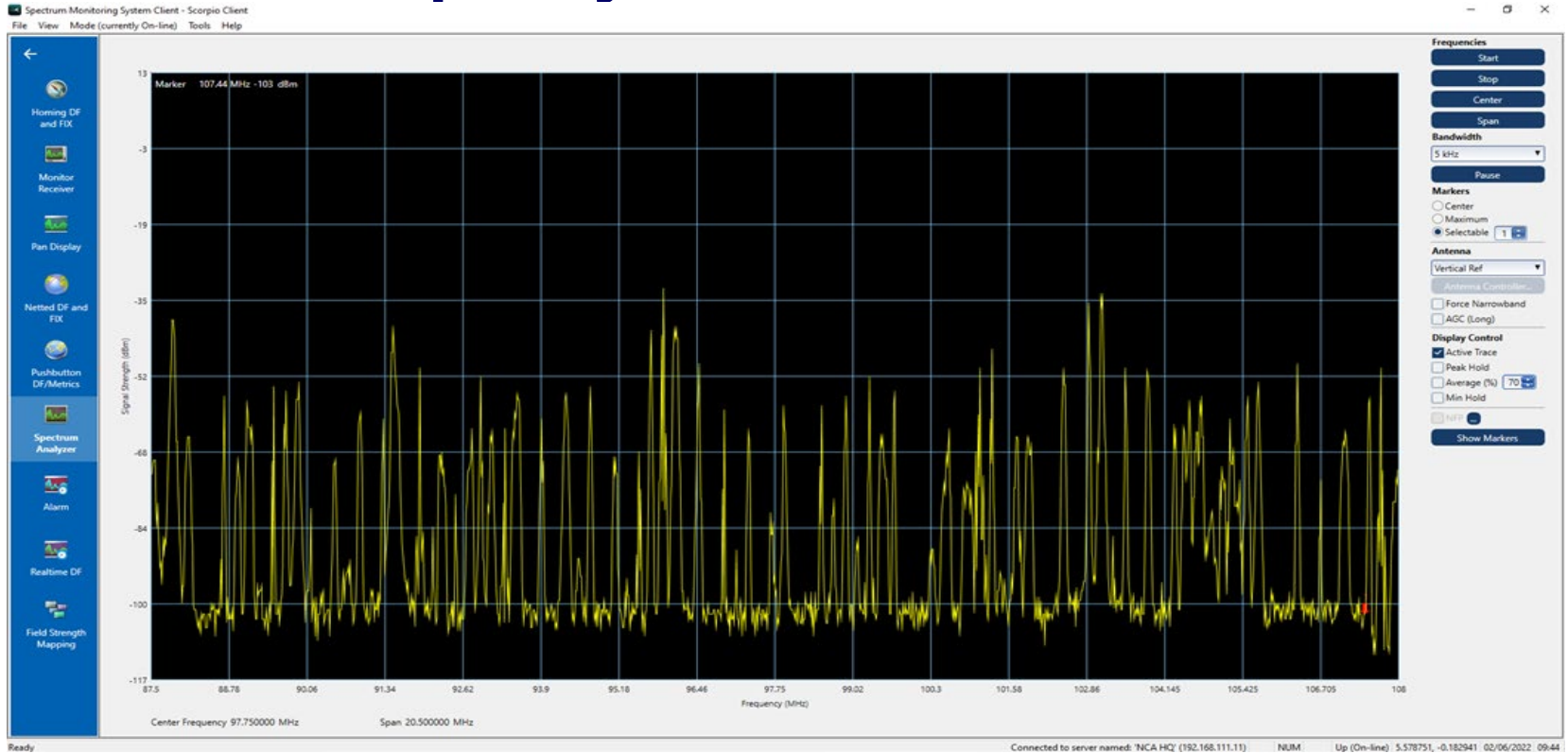
ETC.

Large number of outstanding FM Radio applications

New applications received every week



FM Band Occupancy - 2

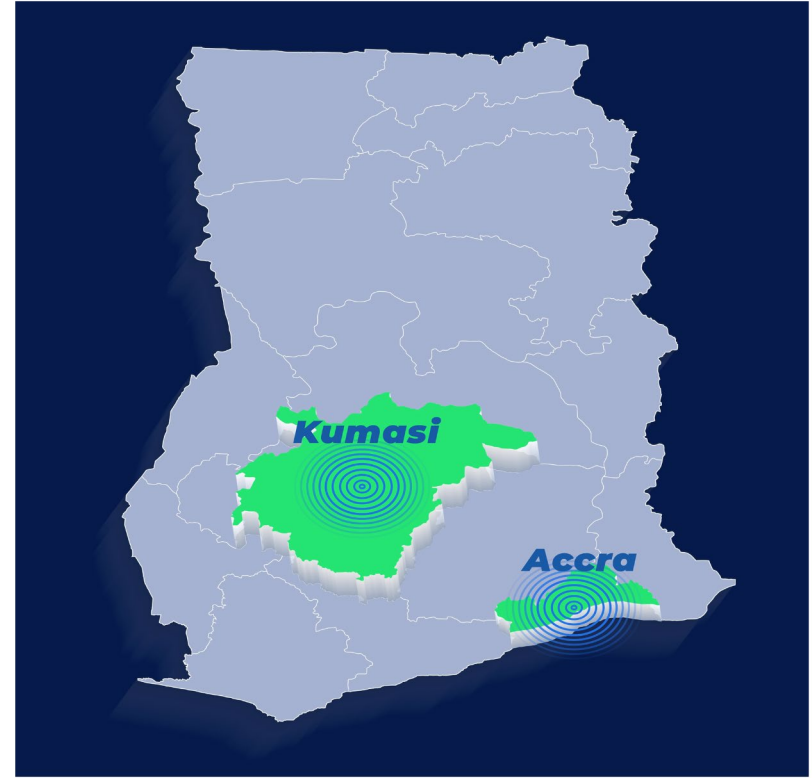


The Dab Trial in Ghana



22 JULY, 2023

Launch of DAB Trial for
Greater Accra and Ashanti
Regions



Objectives of DAB Trial in Ghana

01



Test the features, coverage characteristics and other technical metrics of DAB+ to inform frequency planning and regulatory standards

02



Establish the quality aspects of DAB and the transmission parameters which delivers optimum quality

03



Ascertain the issues that may emerge with multiple stations sharing the same infrastructure with a single transmission network provider

Objectives of DAB Trial in Ghana - 2

04



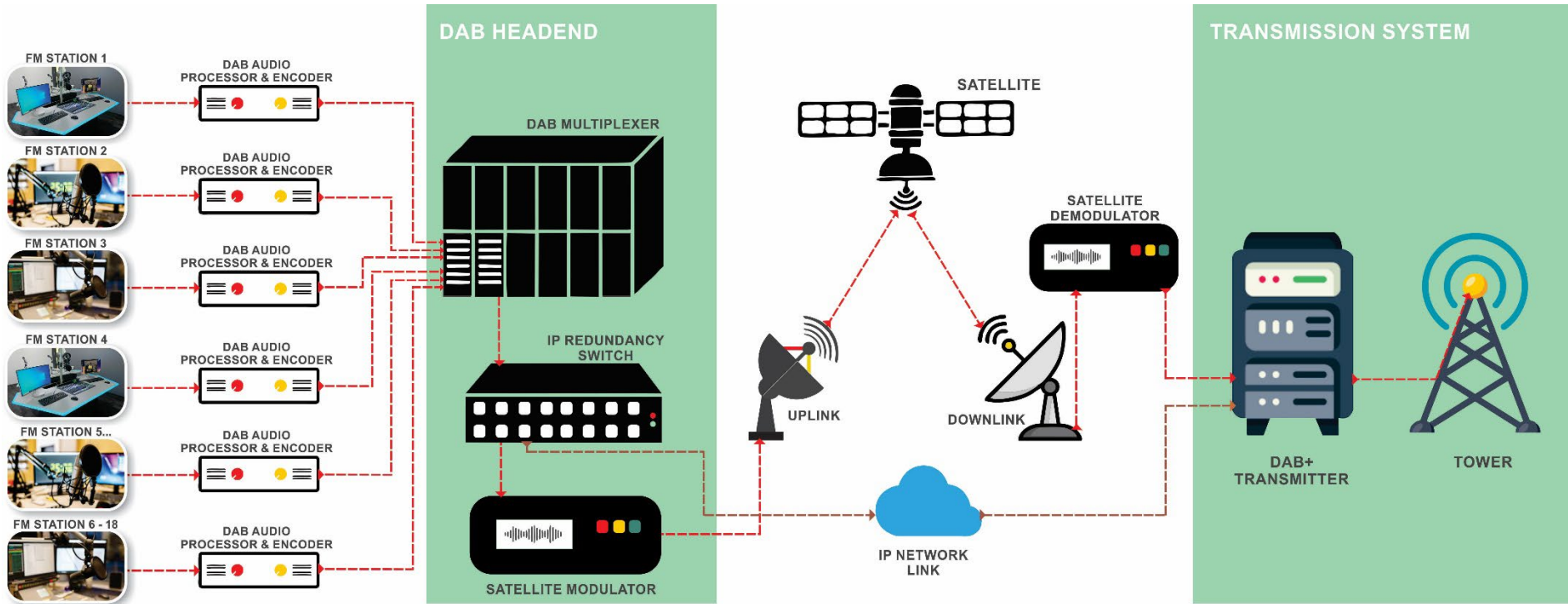
Market readiness and required market structure to inform the development of an appropriate authorisation framework for DAB

05



Determine the requirements for the development of minimum specifications for DAB receivers in collaboration with the Ghana Standards Authority (GSA)

Overview of NCA DAB Trial Setup



Ghana DAB Transmission Infrastructure



Frequency Band for DAB in Ghana

174 - 230 MHz



Selected Audio Channels

01



UNIIQ
FM

02



ANGEL
FM

03



ASAASE
FM

04



ASEMPA
FM

05



ATLANTIS
RADIO

06



CITI
FM

07



CLASS
FM

08



HOT
FM

09



KESSBEN
FM

10



OMAN
FM

11



OPEMSUO
FM

12



ORANGE
FM

13



PEACE
FM

14



RADIO
FOCUS

15



RADIO
UNIVERS

16



SOMPA
FM

17



STARR
FM

18



WONTUMI
FM



Benefit of DAB in Ghana

1

DAB+ provides:



Good quality audio



Support for multiple
radio channels
(spectrum efficiency)



Support for value
added data services

2

**Will utilize a
different frequency
band (174-230MHz)
from that of FM
radio (87.5-108MHz)**



Service can be delivered
simultaneously with FM

3

Up to 18 Stations will
share the same
frequency channel and
transmitter.

Stations on DAB can
extend their coverage
beyond their current
FM coverage area.

Benefits of DAB in Ghana - 2

4

Improved Reception

Quality: DAB utilises digital signals, mitigating interference and delivering superior audio quality compared to traditional analogue FM radio.

5

Enhanced Interactive

Services: In comparison to FM, DAB allows the transmission of metadata such as text and images for the following - service and programme information, emergency warnings, news, weather and traffic information.

6

Ease of Selecting DAB stations to

listen: Consumers are able to select DAB stations by searching for the names of the stations instead of memorising their frequencies.

Challenges with DAB introduction in Ghana



DAB+ requires new digital radio receivers which are currently not available in the Ghanaian market



A few individuals may have receivers acquired directly from Europe but is insignificant compared to the current FM receiver population



The comparable audio quality of FM to DAB+ may not incentivize consumers to voluntarily acquire new receivers which support DAB+



Internet radio, music streaming and podcasts are growing in Ghana and represent an alternative to DAB from the consumer perspective

Next Steps

1



Promotion of DAB Services

Continue to promote DAB during trial period for listeners to acquire receivers.

2



Monitoring

Continuous monitoring of DAB transmission parameters for optimization.
Assessment of feedback from listeners.

3

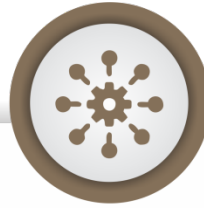


Public Awareness Campaign

Public education on benefits of DAB.

Next Steps - 2

4



Expansion of DAB Trial into other Regions

- * Improved access to information and entertainment.
- * Enhance communication and public service broadcasting.
- * Create economic opportunities.
- * Bridge the digital divide.
- * Stimulate technological advancement.
- * Promote cultural preservation and diversity.

Next Steps - 3

5



Development of Regulatory framework

- * Promoting innovation and competition.
- * Protecting consumer interests.
- * Fostering the growth of the DAB ecosystem.

Next Steps - 4

- Use of optimal pricing schemes to encourage uptake of the technology
- Encourage Syndication as a way of sanitizing the airwaves when many Radio Stations are on-air.
- Use regulation to encourage target marketing.

Thank You, Any Questions?





NATIONAL COMMUNICATIONS AUTHORITY

Website: www.nca.org.gh
E-mail: info@nca.org.gh
Tel: +233 (0)302 776621/771701



National Comms. Authority
National Communications Authority
@NCA Ghana

Copyright @ NCA Ghana