Digital Audio Broadcasting (DAB) Trial in Ghana

September, 2023

NATIONAL COMMUNICATIONS AUTHORITY



Presentation Outline



Background to Introduction of DAB in Ghana



FM Band Occupancy



Benefits of DAB in Ghana



The DAB Trial in Ghana



The Official Launch



Radio Stations Participating in DAB Trial

Presentation Outline - 2



Overview of NCA DAB Trial Setup

Ghana DAB Transmission System Installation

Challenges with DAB introduction in Ghana

Next Steps



Background to Introduction of DAB in Ghana



FM Band congested in major cities;

ACCRA

KUMASI

TAKORADI

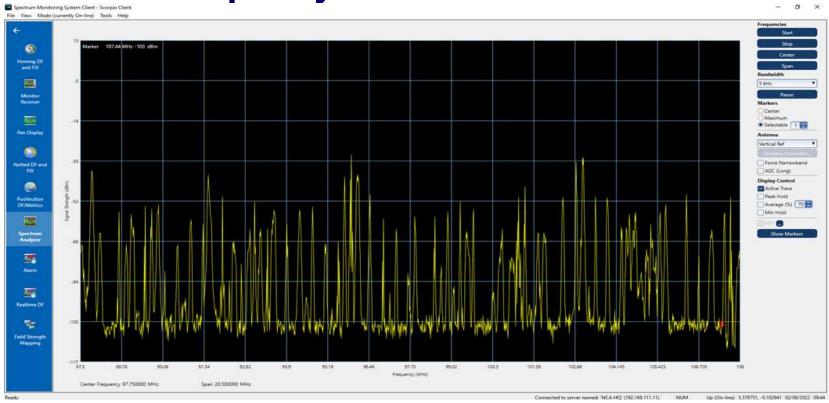
ETC.

Large number of outstanding FM Radio applications

New applications received every week



FM Band Occupancy in Accra



Benefits of DAB for Ghana - 1



DAB+ provides:



Good quality audio



Support for multiple radio channels (spectrum efficiency)



Support for value added data services



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







Service can be delivered simultaneously with FM



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 for Ghana - 2



Improved Reception

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



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.



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.



The DAB Trial in Ghana



Launch of DAB Trial for Greater Accra and Ashanti Regions



The Official Launch





















Radio Stations participating in the Trial



CATEGORIES *

Campus Radio Stations

Urban / Music Radio Stations

News and Talk Radio Stations

Sports and Entertainment Radio Stations

LOCATIONS Q

Greater Accra Region

Ashanti Region 08 STATIONS



Objectives of DAB Trial in Ghana

01

Test the features, coverage characterisctics 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

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

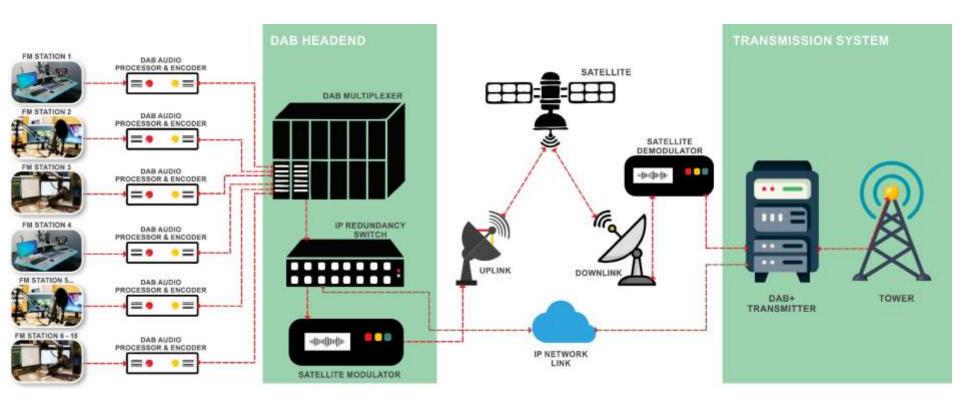
05



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 System Installation



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





Promotion of DAB Services

Continue to promote

DAB during trial period

for listeners to acquire

receivers.

2



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





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



Development of Regulatory framework

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



Thank You, Any Questions?

