



**National  
Communications  
Authority**



# **DIGITAL AUDIO BROADCASTING**

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# Digital Audio Broadcasting (DAB)

## Current Challenges with FM Broadcasting in Ghana

Over the years, Frequency Modulation (FM) radio has become a critical medium for communication, entertainment, and information dissemination in Ghana.

As Ghana's population continues to grow and urbanise, the demand for FM radio stations in major cities has surged, however, the available FM frequencies are limited, leading to numerous challenges.

Some of the issues currently being faced by Ghana's FM radio landscape are:

- ▶ Spectrum constraints, which hinders the grant of new FM radio authorisations.
- ▶ FM radio sometimes suffer interference which causes poor sound quality and disrupted reception for listeners. Additionally, this pose a challenge for advertisers and broadcasters, as it impacts their reach and potential revenue.

## Promotion of Digital Radio

Embracing digital radio technologies, such as Digital Audio Broadcasting (DAB), can alleviate some of the challenges faced by traditional FM radio. Digital radio offers better sound quality, more efficient spectrum utilisation, and a wider range of channels.



## Benefits of DAB

- 1. Overcoming Frequency Constraints:** With severe constraints on FM radio frequencies in major Ghanaian cities, DAB offers a solution to expand coverage and cater for the growing demand for sound broadcasting services.
- 2. Improved Reception Quality:** DAB utilises digital signals, mitigating interference and delivering superior audio quality compared to traditional analogue FM radio.
- 3. Efficient Spectrum Usage:** DAB allows more stations to share the same frequency channel and transmitter thereby enhancing energy and frequency efficiency. In this trial, 18 existing FM stations in Accra and Kumasi will share the same frequency channel to deliver DAB services.
- 4. 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.
- 5. 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.

### DAB+ Provides

- 1** Good quality audio
- 2** Support for multiple radio channels (spectrum efficiency)
- 3** Support for value-added data services
- 4** Enhanced interactive services
- 5** Ease of selecting DAB stations to listen

