DAB system features

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DAB+ Features
DAB+ feature overview

• DAB is a digital data delivery system which is optimised to provide multiple high quality audio and data services on a single transmission system

• Multiple audio services – typically 18 to 24 DAB+ audio services
  - Audio bit rate can be adjusted to provide appropriate quality for the broadcast material

• Programme Associated Data (PAD) - This supports the audio being delivered in text and image forms
  - Text
  - SlideShow images

• Advanced features e.g. Announcements and Emergency Warnings

• Data services e.g. TPEG traffic services, Journaline
Audio – room for lots of services
For broadcasters: opportunity to extend brand portfolios

Analogue and digital services

Digital-only services
Brand extension to associated music genres

FM / DAB+

- TRIPLE M 104.9 FM
  - Rock's Greatest Hits
  - View Website
  - MMM 90s
    - The Greatest Hits & Best Variety
    - View Website
  - MMM Classic Rock Digital
    - Rock of Ages
    - View Website
  - MMM Country
    - Good Times & Great Country
    - View Website
  - MMM Hard n Heavy
    - Hard Rock & Heavy Metal. MMM Hard n Heavy
    - View Website
  - MMM Soft Rock
    - Sweet Emotion
    - View Website

DAB+

- Hit107
  - More Music, More Variety
  - View Website
  - Hit Buddha
    - Tune in, Chill Out
    - View Website
  - Hit Dance
    - Move To It
    - View Website
  - Hit Easy
    - Feelgood Favourites
    - View Website
  - Hit Oldskool
    - Oldskool Hits From The 80's, 90's, & Noughties
    - View Website
  - Hit Urban
    - The Hottest Hip-Hop & RnB
    - View Website
DAB+ offers flexibility – pop-up stations
Choose the station from a list

No more need to remember the station’s frequency!!!

Services are listed alphanumerically

Increasing use of logos for brand recognition

station, listener has more information about the
Programme Associated Data (PAD)

Dynamic Label Segment (DLS) - Text

- Straight forward, effective
- Up to 128 characters per text segment
- All DAB+ receivers have DLS text display
- Good receivers block text display or have an appropriate scrolling speed
Programme Associated Data (PAD)

SlideShow (SLS) - Images

- Further strengthens the audio message
- Music information – Album art, Title & Artist
- Standalone advertising during song items
- Promotion of station activities
- Traffic and weather reports
- Sports results and stock market information
- Local news, happenings, community events
Data services

Traffic e.g. TMC and TPEG can provide up to the moment information on
• current traffic flow and congestion
• fuel locations and prices
• parking

Journaline
• Hierarchical categorised data service

Custom Applications can be developed
Advanced features

Service and Programme Information (SPI)
- Station/service logos
- Website links
- Programme schedules

Announcements and EWS
- Traffic information / channel
- Emergency warnings
- News, weather, travel information

Service Following
- Links services in different areas on different ensembles
- Provides continuity of service for services across multiple service areas

Logos delivered as SI provide immediate visual brand recognition

In-car listening can continue on the same service in different transmission and licence areas
 Receivers are now mass market

- Over 80 million receivers sold
- Prices from $15 USD
Most automotive brands now support DAB+
DAB+ Hybrid radio

- Hybrid radio is the next step in the evolution of radio
- Hybrid radio joins the broadcast and IP worlds
- Adds a range of new features to the existing extensive broadcast feature range
  - Logos and programme information
  - Interactivity
  - Metrics and analytics
  - Alternative content (audio and metadata)
  - High quality and rapid delivery
  - IP service following

Provides IP service capabilities with the cost effective delivery of audio content by digital broadcast

Source: RadioDNS
Hybrid makes broadcast better

**Broadcast Radio DAB/FM**
- Free reception
- Additional basic information
  - Station name
  - Radiotext
  - EPG
  - SlideShow
  - Station logo

**Online connection**
- Seamless Experience
  - Broadcast – Online Service Linking
  - Podcast access
  - Connection Radio + Smartphone
- HQ content for logos and slides
- Tagging
- Enabler for new radio functions

*Source: RadioDNS*
Mobile broadband connectivity provides the IP connectivity either via a smartphone or a mobile receiver integrated into the vehicle.

Several major brands are in development.
Summary

- DAB digital radio provides a wide range of advantages over traditional analogue radio:
- More spectrally efficient to allow significantly more services to be provided in an area
- Very high audio quality with optimised bit rate to efficiency
- PAD for added information
- Advanced features
- Data services
- Hybrid capabilities can be added to provide further features and interactivity
- Receivers are widely available for domestic and automotive case
Thank you

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