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Hybrid Radio

EBU HBB Workshop
Geneva – 1st December 2010

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EBU TECHNICAL
European Broadcasting Union

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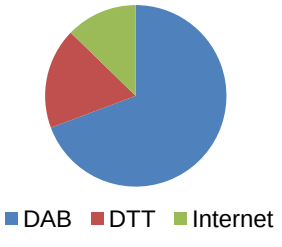
Listening figures for Radio

- Radio is popular: UK Case
  - 46.5 millions adults listening weekly, 90.6% UK population (15+)
  - A all time high !
  - Digital listening share: 15.8% DAB, 4.1% DTT, 2.9% Internet

Source: rajar.co.uk



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History and Context for Hybrid Radio

Digital radio generations

- 1st generation (1990-)
  - Context: Audio migration from analog to digital
  - Simulcast of AM/FM programs on digital
  - Audio quality as the only added value

Digital radio generations

- 2nd generation (2000-)
  - New and exclusive audio content on digital
  - Strategy with broadcasters, governments, retailers
  - Growing success in some countries (UK, Denmark, Australia,..)
  - Inaction or rejection in other countries

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Digital radio generations

- 3rd generation (now)
  - Context: Internet and Iphone disruption
  - Broadcast ? Broadband Internet ? On demand ?
    Rich media content associated to the audio ?

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How will radio be delivered in the future ?

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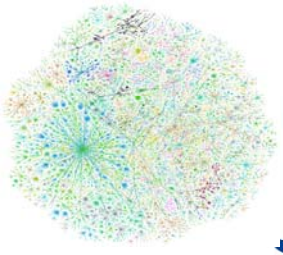
Different approaches: Broadcast & Internet/Broadband

- Terrestrial Broadcast
  - **Efficient** one to many delivery
  - **Direct access** to listeners
  - Horizontal market
  - **Free to air**
  - Spectrum is available
  - Strict regulation

- Internet/Broadband
  - High flexibility
  - Worldwide coverage
  - Inefficient for mass delivery
  - Democratised delivery (no license needed)
  - Subscription needed for reception (not free to air)
  - **Net/operators neutrality** questions – quality of service



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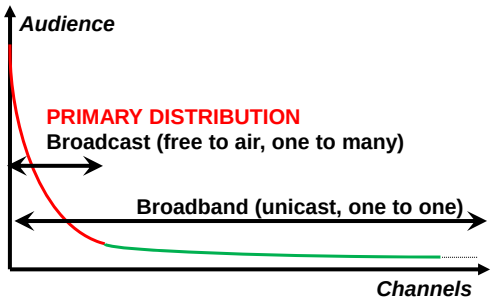
The Hybrid Broadcast&Internet/Broadband Approach



- Broadcast for national/regional/local programs
  - Primary distribution
  - Efficient delivery through a free-to-air broadcast system (one-to-many)
- Broadband for niche programmes, interactivity, rich content

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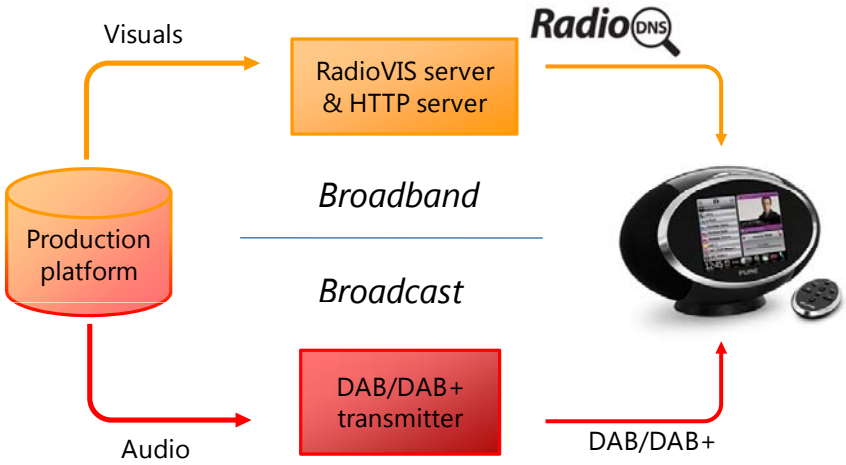
The Hybrid Broadcast Internet/Broadband Approach

- **Automatically push multimedia content to listeners**



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RadioDNS system

- RadioDNS, linking broadcast and broadband worlds
- Distributed approach (same as Internet DNS hierarchy)
- Can works with any system
  - DAB, DAB+, T-DMB
  - FM
  - DRM/DRM+
  - HD Radio
  - DVB-S, DVB-T, DVB-T2, DVB-H, ...
  - Could even work with AM (using AMSS), ...

RadioDNS applications

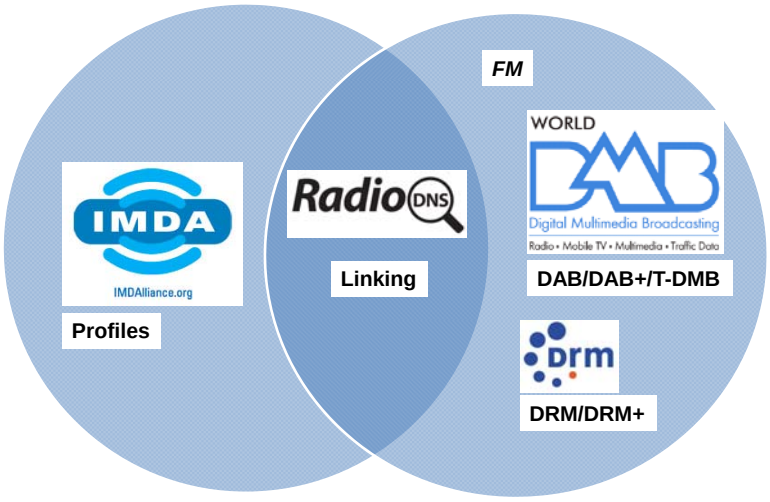
Slideshow

Electronic Program Guide

Tagging

Opened to other applications...

Standards for hybrid broadcast/broadband



What about the receiver ?

Profiles of receiver: standard radio receivers

- Standard radio receiver profile
  - The “daddy’s radio” as we know it
  - KISS (Keep It Simple Stupid)
  - Simple text screen
  - Low cost

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Profiles of receiver: Rich media receivers

- Rich media receiver profile
  - Colour screen
  - Interactive controls
  - Very often with Internet connection
  - Integration in multimedia devices (players, phone, car nav, etc)
  - Hardware tends to become generic (micro PC platforms)
  - Possibility sometimes to create your own application

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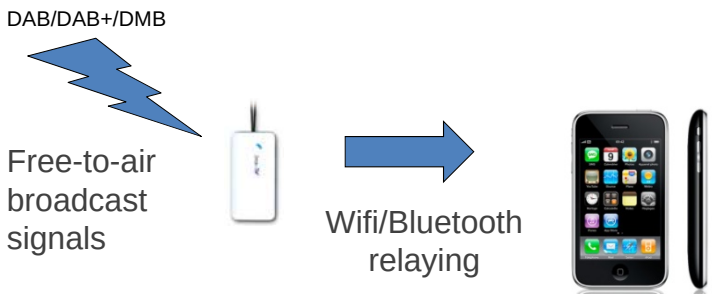
Broadcast hotspot



- A solution for “tuner-less” multimedia devices
  - Argo One SmartTV for DAB/DAB+/T-DMB
  - Equinix Tizi for digital TV (DVB-T)

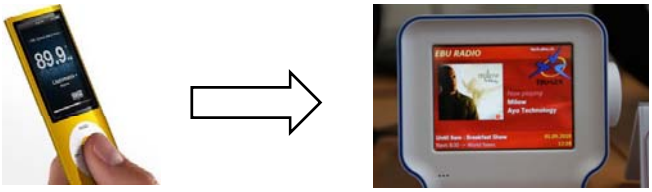
Hybrid Radio deployment ?

RadioDNS organisation

- RadioDNS an open organisation since 2010
- A steering board with broadcasters
  - BBC, SWR, EBU, ABC (Australia), Global (UK), Absolute, NAB (USA)
- Already lots of members with RadioDNS services
- Virtually any smartphone with a tuner is RadioDNS ready
  - ...depends on developments, API availability
- Planned workshop on 15th February 2011 at EBU
- Start now, it's easy !
  - Free tools available
  - Start with branding of your station

Content is the key => Broadcasters: Be creative !

- Create a compelling offer
- Think of associated content to the program
  - Visuals, text, additional audio content
- Integrate Production: Produce once distribute to many
- Push your web content to the listeners with hybrid radio



- ...and don't forget the broadcast medium, the digital radio clock is ticking (for spectrum, industry, etc)

The future of radio is hybrid

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