an introduction

EMPIRE
6-TRANSISTOR
PURE
EVOKE-1
PURE EVOKE-1 S
Now playing...
GRACE
Welcome to
WiFi Radio
5:06 PM
NOW PLAYING
Sam Sparro
Black And Gold
NOW ON AIR
Greg Burns
Lucio from 7pm
Missed the Sugababes Capitalive gig? Check out all the highlights at www.capitalfm.com
iriver
NOW PLAYING
Sam Sparro
Black And Gold
NOW ON AIR
Greg Burns
Lucio from 7pm
12:45
PURE

Internet Streaming

listening on a computer, or via a wifi radio

2.2%

Digital Television

selected stations available as additional channels on TV systems, many with visual accompaniment

3.6%

DAB Digital Radio

station-name tuning, pause/ rewind, and additional choice using new broadcast technology and frequencies

13.3%

(as a percentage of total hours, RAJAR Q3/2009)

The future of radio is multi-platform

- Digital Radio
- Radio over the TV
- Internet Radio

BROADCAST radio is the primary part
of our multiplatform future

We risk being left behind if we don't invest in more functionality

More functionality: like...

"I like this song, remember it"
"Subscribe to this show's podcast"
"Can I text the studio?"
"Give me more info on this news story"
“Let me contact this advertiser”
"What does this DJ look like?"

Connected radio devices are everywhere

Radio and internet
in one box

"Connected radio devices" means that for...

"I like this song, remember it"
"Subscribe to this show's podcast"
"Can I text the studio?"
"Give me more info on this news story"
"What does this DJ look like?"

... we can use web services

Broadcast over radio
Visuals and data over the internet

...but your radio needs help

“I am listening to TripleM on FM”
and
“I can connect to the internet”

"I do not know how where TripleM is online."
"I do not know how to connect to its web service."
"So I cannot get any metadata"
"Help me. I'm only a radio."

It makes sense to use
broadcast radio for audio

It makes sense to use internet for
additional, personal, flexible, metadata;
and for a back channel

How do we link the two?

How do we tell a connected radio
where to find
a radio station's web services?

Obvious answer

Transmit metadata
containing the address
of this station's webservice

A new metadata field in broadcasts means...

Infrastructure Implications

- 10,000+ of FM transmitters / RDS encoders
- 50+ DAB multiplexers

Standards Implications

- DAB, FM RDS, HD Radio, Internet Streaming...

We're already broadcasting metadata!

FM RDS : (ECC) + PI
DAB : SCIDs + SID + EID + ECC
HD Radio : “FCC Facility Code”

These broadcast parameters, that we are already broadcasting alongside our radio stations, are specified to be unique for each and every station

What the radio can see

Extended country code **CE1**

Programme identification **C586**

FM frequency **95.80**

Extended country code **4e1**

Ensemble identifier **4001**

Service identifier **42f1**

Service component identifier **0**

R·D·S

DAB

What RadioDNS does

`09580.c586.ce1.fm.radiodns.org`

`rdns.musicradio.com`

`0.42f1.4001.4e1.dab.radiodns.org`

`ssatr.ch`

Current and potential services

- RadioVIS: “visualised radio” - adding glanceable pictures to radio on all radio platforms
- RadioEPG - a fully-featured electronic service and programme guide, encouraging discovery and enhancing listening choice
- RadioTAG - allowing the listener to display interest and interact with elements of programming, while acknowledging the secondary nature of radio
- ...and your idea too

All stations
1Xtra
6 Music
Absolute Classic...
Absolute Radio
Absolute Xtreme
BBC 7
BBC Asian Network
BBC Radio 1
12:45
Absolute Radio
PURE

Radio DNS

radiodns.org

Radio DNS is a technical collaboration between the BBC, Global Radio (UK), and over 100 broadcasters worldwide

Representative only. For a full list, see radiodns.org/supporters