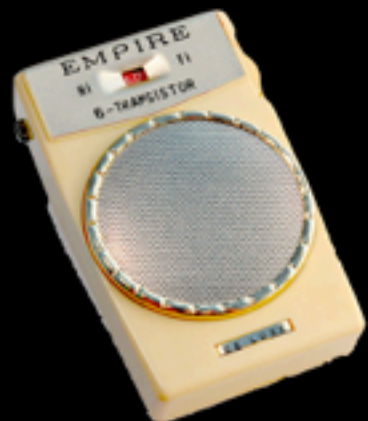




an introduction





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**



# 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  
iXtra  
6 Music  
Absolute Classic...  
Absolute Radio  
Absolute Xtreme  
BBC 7  
BBC Asian Network  
BBC Radio 1

CHRISTIAN PROMMEL  
with The Christian O'Connell Breakfast Show  
Absolute Radio  
Now playing...  
The Christian O'Connell Breakfast Show

12:45

PURE

serena

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](http://radiodns.org/supporters)