RadioDNS
Introduction to Hybrid Radio

Nick Piggott,
Project Director

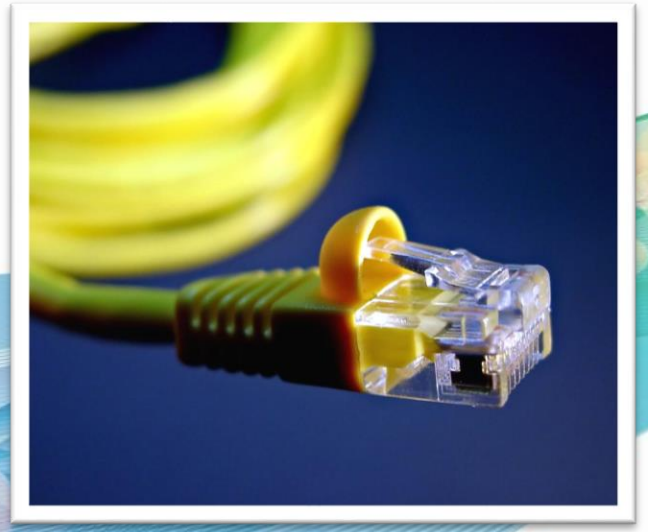
Broadcast or Internet?

RadioDNS HYBRID RADIO

Broadcast and Internet?

RadioDNS HYBRID RADIO

Strengths



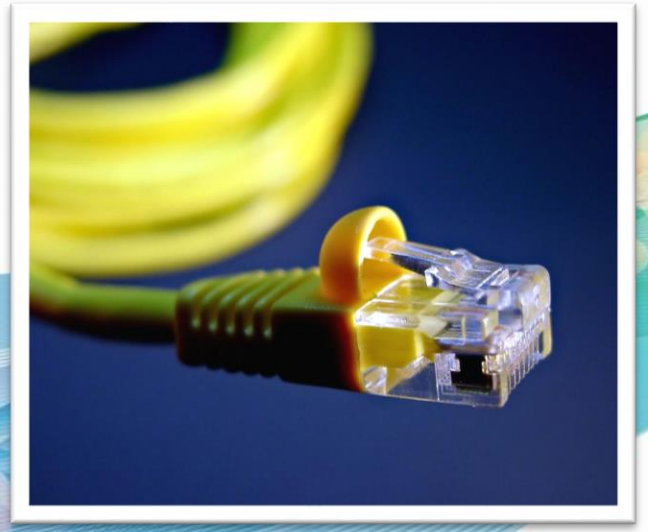
Free for the listener

Stable regulation

Bi Directional

Flexible

Weaknesses



One way

Inflexible

Reliability

Costs, Neutrality

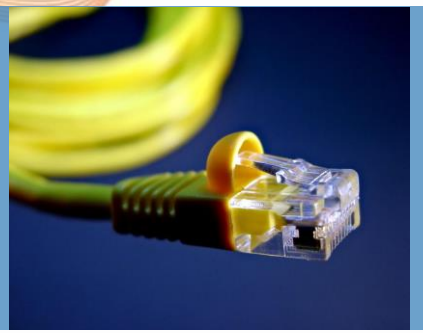
Hybrid Radio

Deliver audio using broadcast

Reliable, ubiquitous, free, economic

Enhance radio using IP

Add a richer experience & interactivity



RadioDNS HYBRID RADIO

Our Vision for Hybrid Radio

What makes our approach unique?

RadioDNS HYBRID RADIO

Open Standards

Decentralised

RadioDNS HYBRID RADIO

Open Standards

Anyone can build an FM or DAB+ transmitter

Anyone can build an FM or DAB+ radio

Anyone can build a RadioDNS device or platform

Everything works together

Encourages innovation and price points

Decentralised

Radios receive signals directly from transmitters

Failure of one operator does not affect others

RadioDNS devices connect directly to radio stations

RadioDNS has no control / visibility of connections

RadioDNS is…

Decentralised

Open standards based

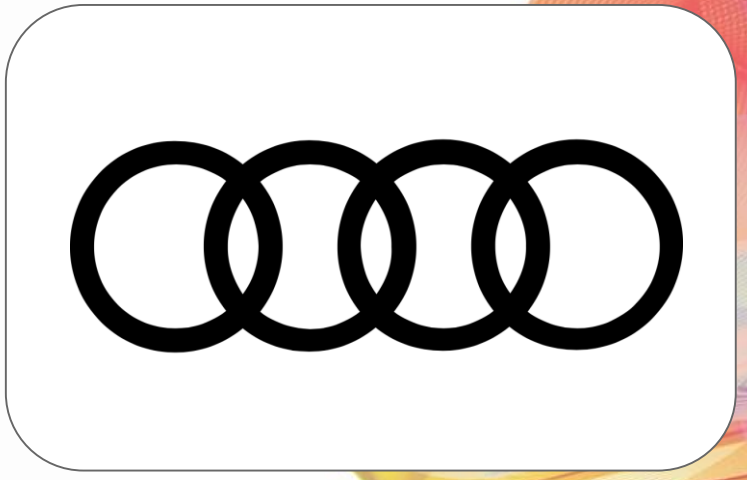
Not-for-profit, funded by **membership fees**

Global in reach

Represents **everyone** in the radio ecosystem

RadioDNS HYBRID RADIO

Newest Members



RadioDNS HYBRID RADIO

1. Existing Identifiers
(e.g. f=95.8MHz, SId=c479)

FM or DAB+ Radio

4. Contact ‘capitalfm.com’
Exchange data over IP

IP

2. DNS lookup
‘09580.c479.ce1.fm.radiodns.org’
‘0.c479.c185.ce1.dab.radiodns.org’

3. DNS Response
‘capitalfm.com’

DNS

Capital FM
95.8MHz
& DAB+
capitalfm.com

RadioDNS HYBRID RADIO

Listener finds station by tuning **normally**

No central database of stations

The radio connects **directly** to radio station

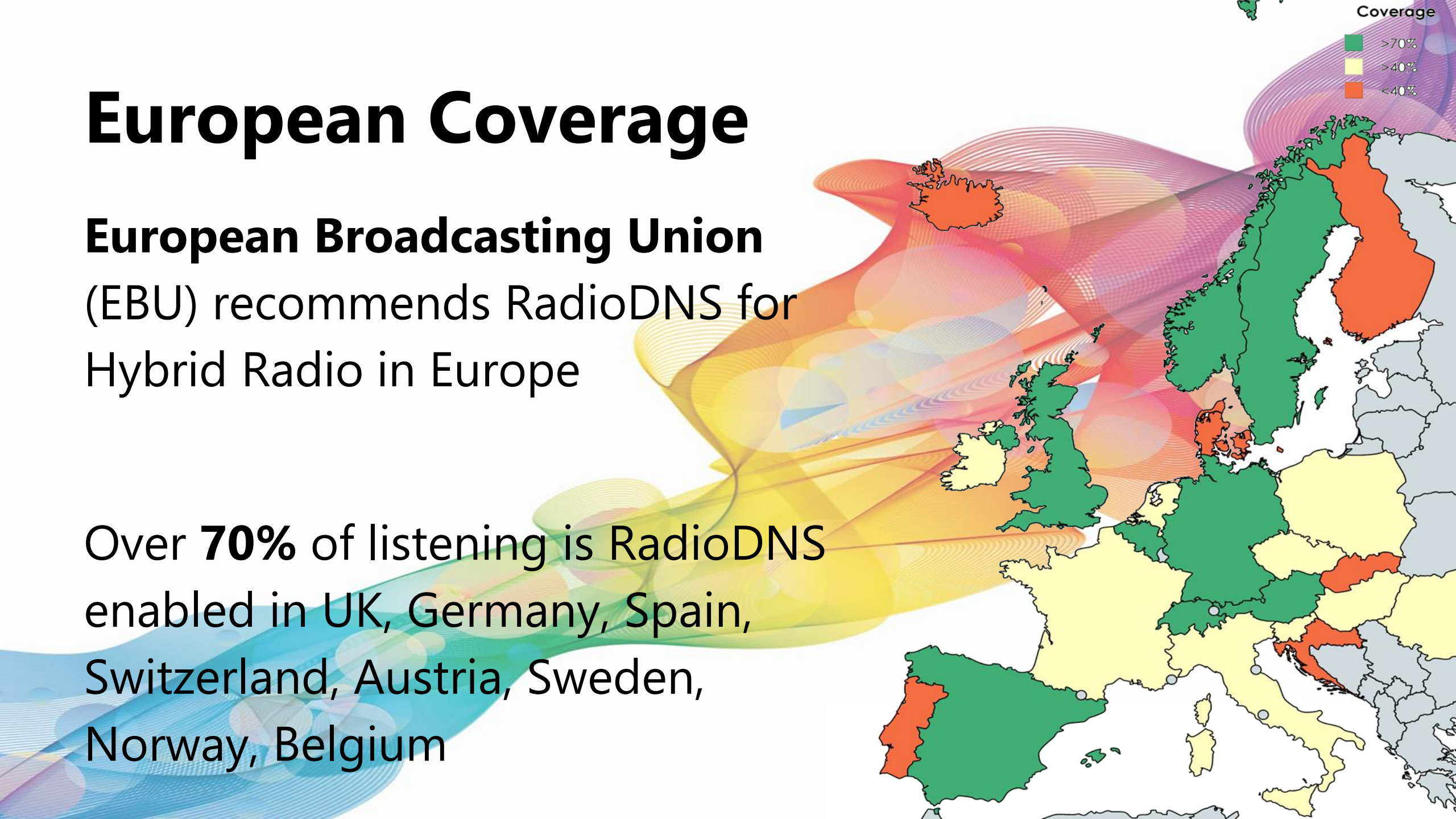
NO connections come via RadioDNS

RadioDNS HYBRID RADIO

European Coverage

European Broadcasting Union (EBU) recommends RadioDNS for Hybrid Radio in Europe

Over **70%** of listening is RadioDNS enabled in UK, Germany, Spain, Switzerland, Austria, Sweden, Norway, Belgium



RadioDNS in Practice

Hybrid Radio Applications

Metadata

Visuals

Interactivity

RadioDNS HYBRID RADIO

Service & Programme Metadata

Deep, searchable metadata

RadioDNS HYBRID RADIO

Metadata

Describing your **station** accurately

Name, description, logos, frequencies

Describing your **programmes** accurately

Names, times, presenters, synopsis, keywords

Live and **On-Demand / Podcast**

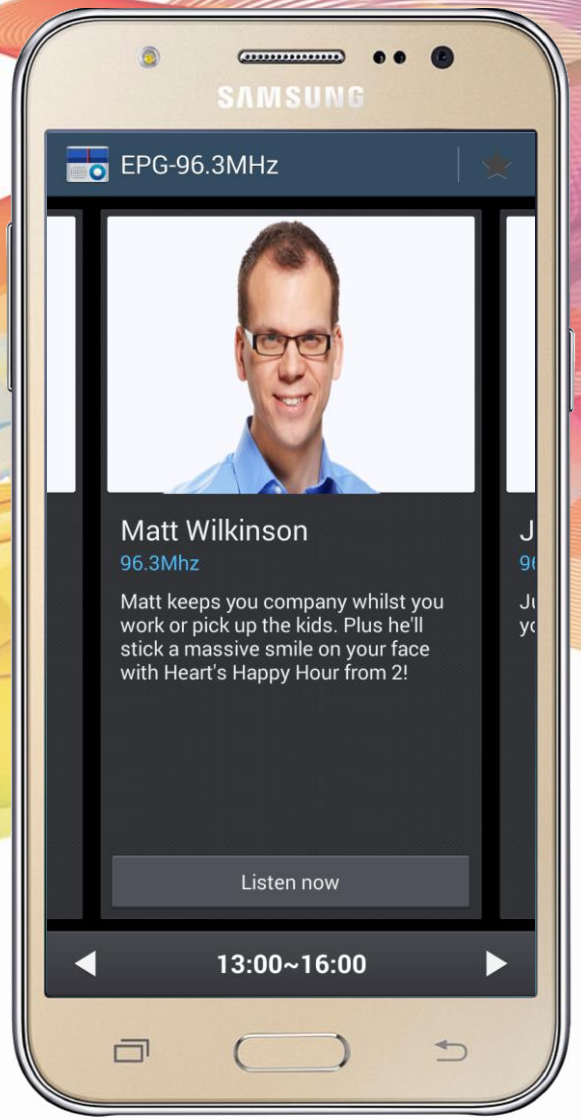
Searchable

Measurable

RadioDNS HYBRID RADIO

Logos

Programme Information



RadioDNS HYBRID RADIO

Uninterrupted Listening

Broadcast Radio

Audio

IP

Streaming

Audio

RadioDNS HYBRID RADIO

Visuals

Making radio look great on great screens

Visuals

Kate Tempest

Not Kate Tempest

Dashboard screen resolution	**1280px x 720px**
"Good" quality image	**68kbytes** (~550kbits)
IP transmission time	**0.55 seconds** (1Mbit/s)

Measure how many visuals you deliver

DAB+ slideshow	**320px x 240px**
DAB+ transmission time	117 seconds (6kbit/s)*

** Assumes average 1.3 repetitions to acquisition, using typically available data rates*

RadioDNS HYBRID RADIO

Tagging

Remembering interesting things on the radio

Tagging

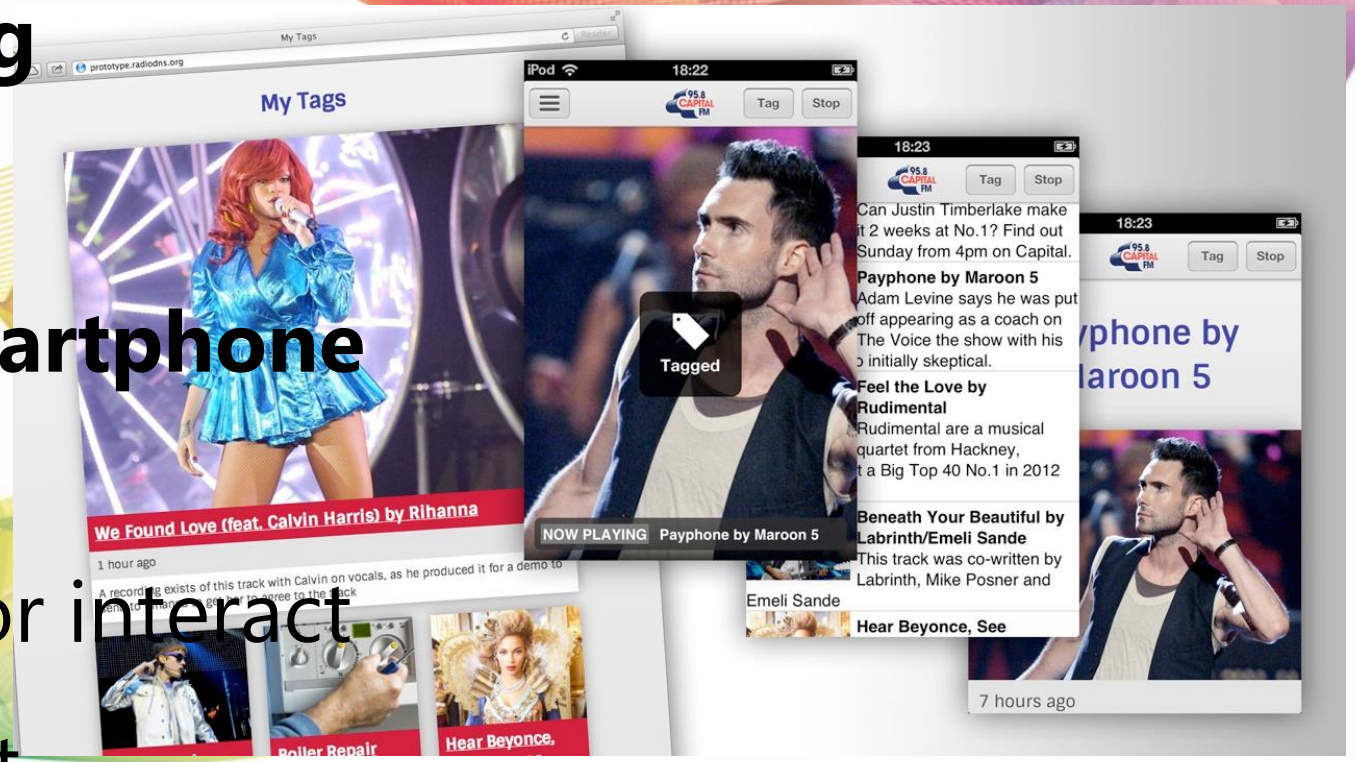
Hear something **interesting**

Push **one button**

Look it up later on your **smartphone / tablet**

Listen again to the audio or interact

Engagement measurement



New Hybrid Applications

A framework to innovate on, quickly…

RadioDNS HYBRID RADIO

New Hybrid Radio Ideas

Programme and preset **sync** between home and car

Replace broadcast audio with targeted IP audio

Audience **measurement**

The framework is open to use in new open standards

In a digital world, you are **invisible** without accurate meta-data and good content

The risk to radio is not existence, but **prominence**

RadioDNS HYBRID RADIO

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FIND
Great music / speech that I'll love

TAG
I **loved** that!
Tell me more about it

SKIP
I **hate** this!
Give me something different

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