

# EUR(O)RADIO

OPERATED BY EBU

**Brave  
new  
digitalistan**

**And  
where is  
Radio ?**



Dr. Christian Vogg  
Head of Radio  
EBU

# ONCE UPON A TIME...

RADIO...



PHONE...



MAP...



CAMERA...



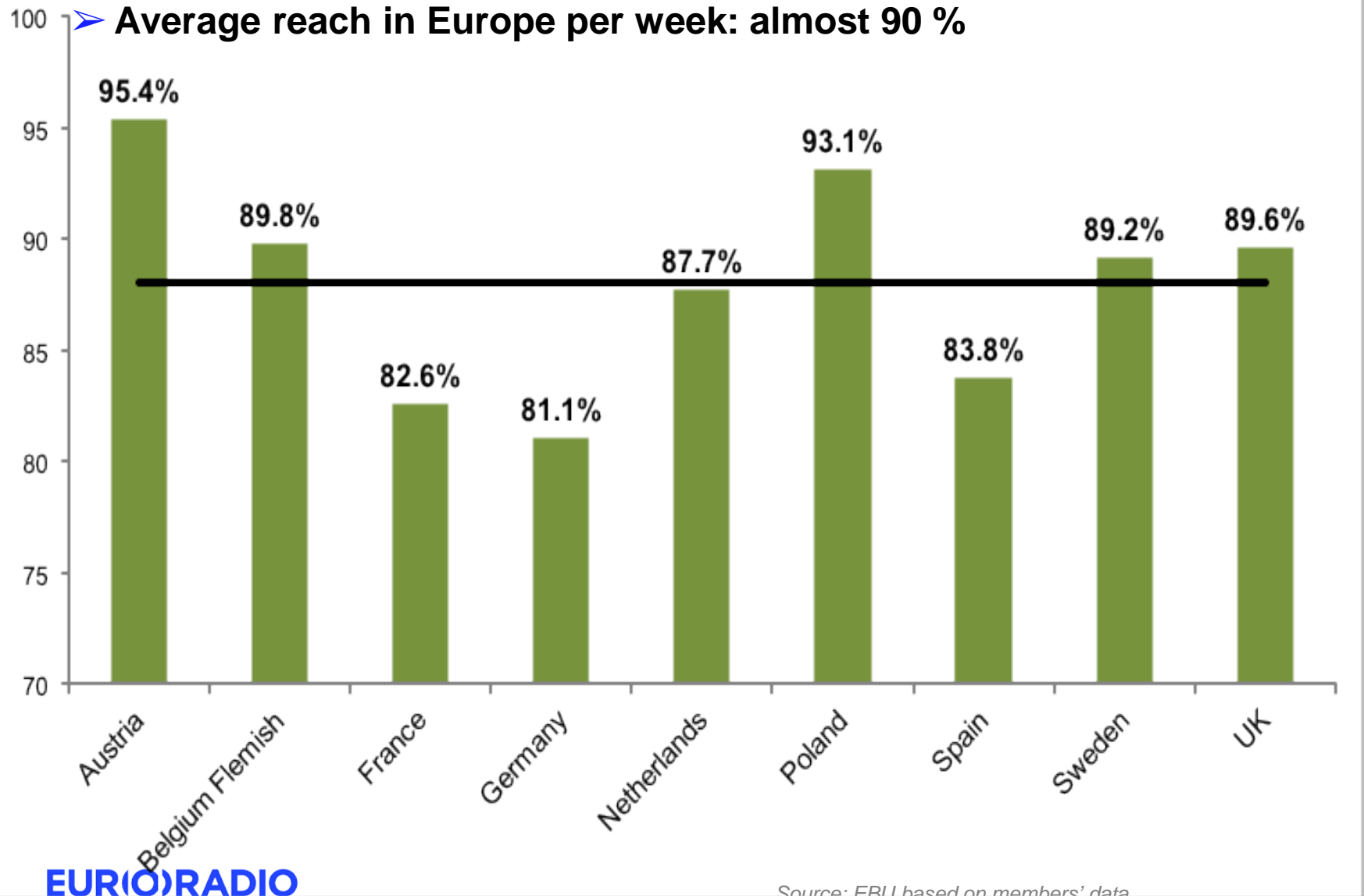


# And Radio?

**EURO(R)ADIO**  
OPERATED BY EBU

# RADIO AUDIENCE

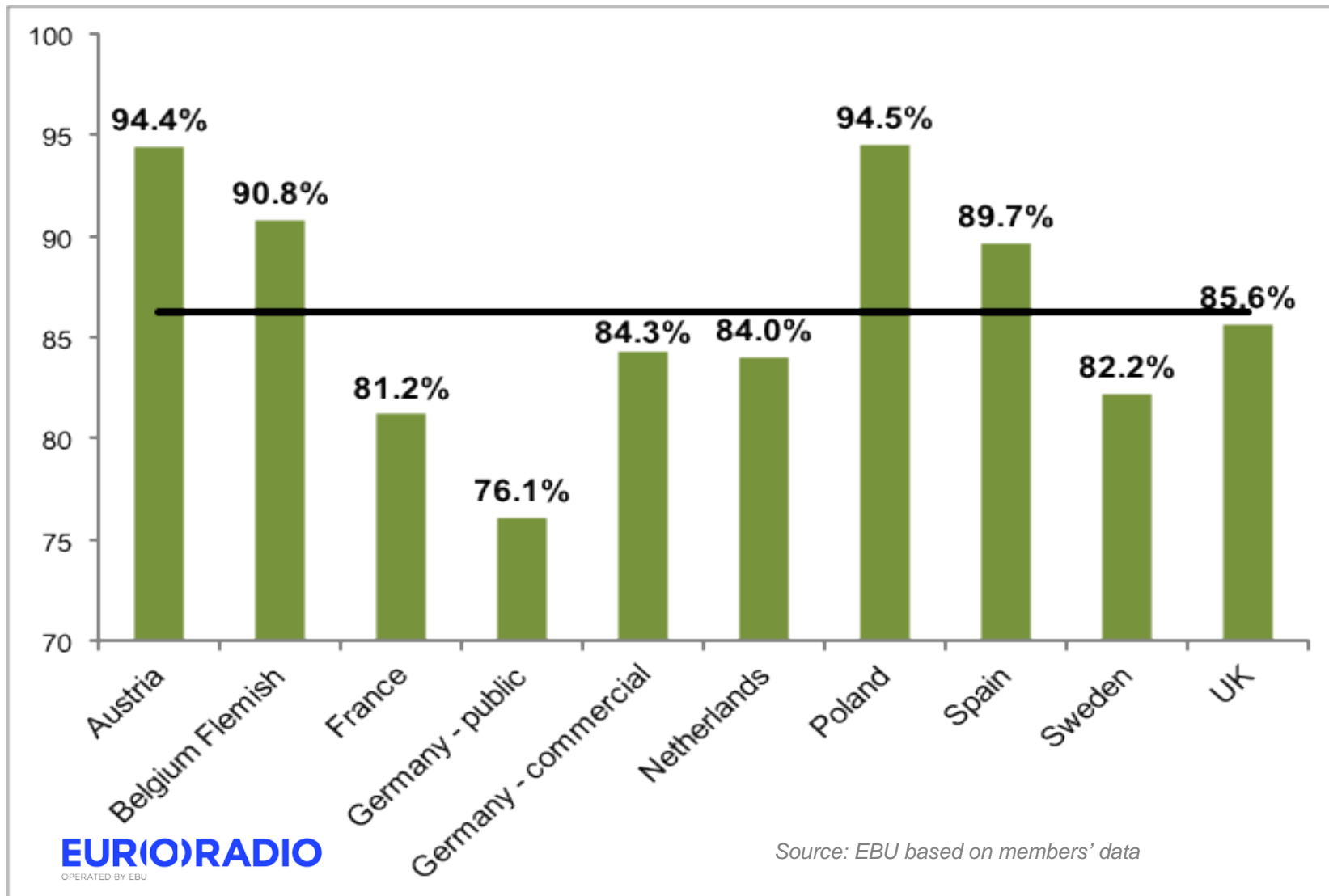
➤ Average reach in Europe per week: almost 90 %





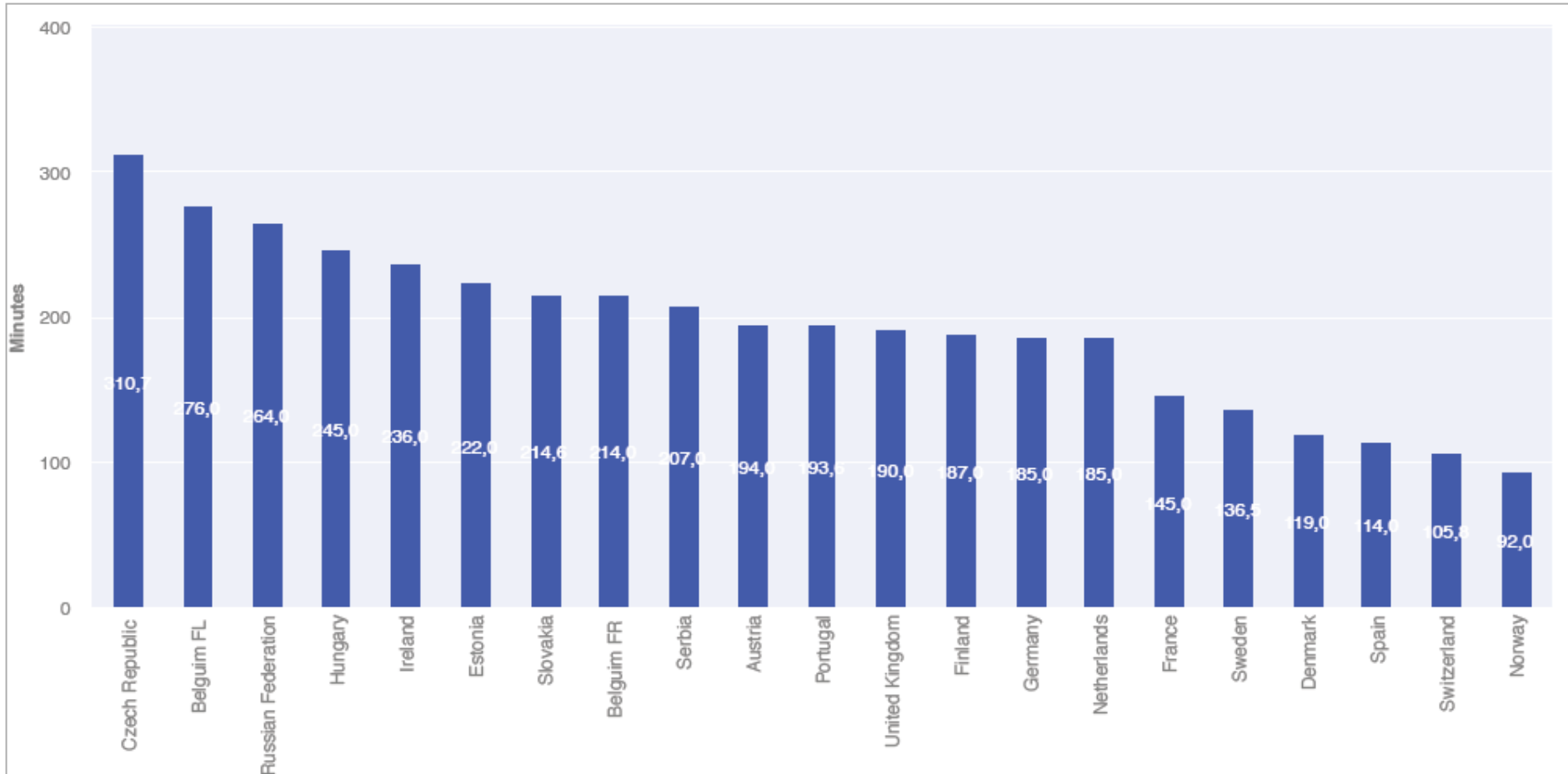
# YOUNG AUDIENCE


➤ Average reach in Europe per Week: 86 %



# LISTENING DURATION

➤ Average in Europe: 3 hours per day



A person is lying in a hospital bed, wearing a white hospital gown and a white earpiece. A white surface, possibly a wall or a piece of paper, is visible in the foreground. A yellow sticky note is pinned to this surface with two red pushpins. The sticky note contains a handwritten list of two items under the heading 'To Do:'.

To Do:

1. Don't Worry
2. Be Happy



# THREE PROBLEMS



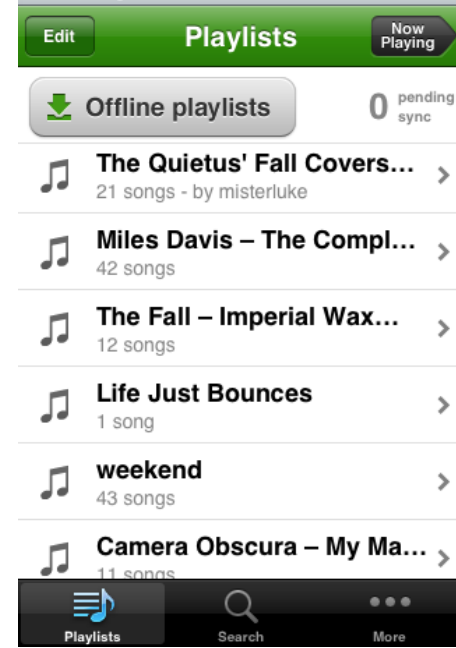
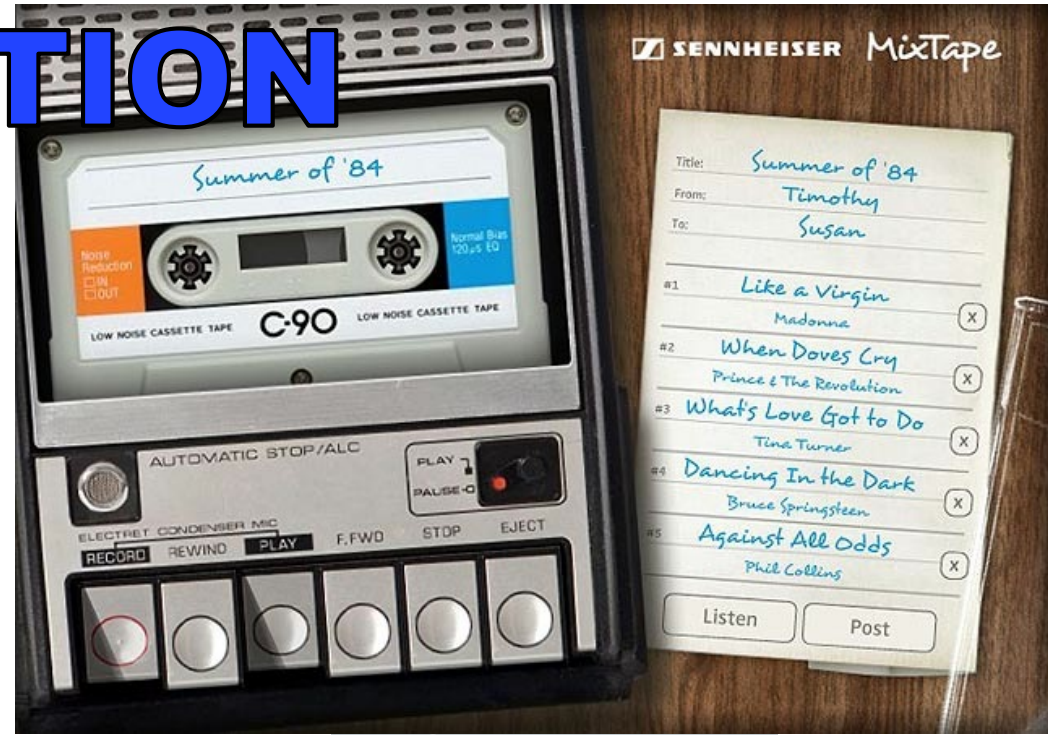




# THREE PROBLEMS



# SOCIALIZATION



# FRAGMENTED WORLD



Spotify®







iPad 23:38 10% Mail

**YAHOO!** Search

Sign In

**Workers left behind by the economic recovery**  
 The loss of millions of manufacturing and construction jobs has hurt one age group disproportionately hard. [Men vs. women](#)

U.S. workers left behind | Amazon's latest standoff | Eric Cantor stepping down | Why soccer game is off | Bonding at 26,000 feet | New front in malaria war | New details in Vegas ambush

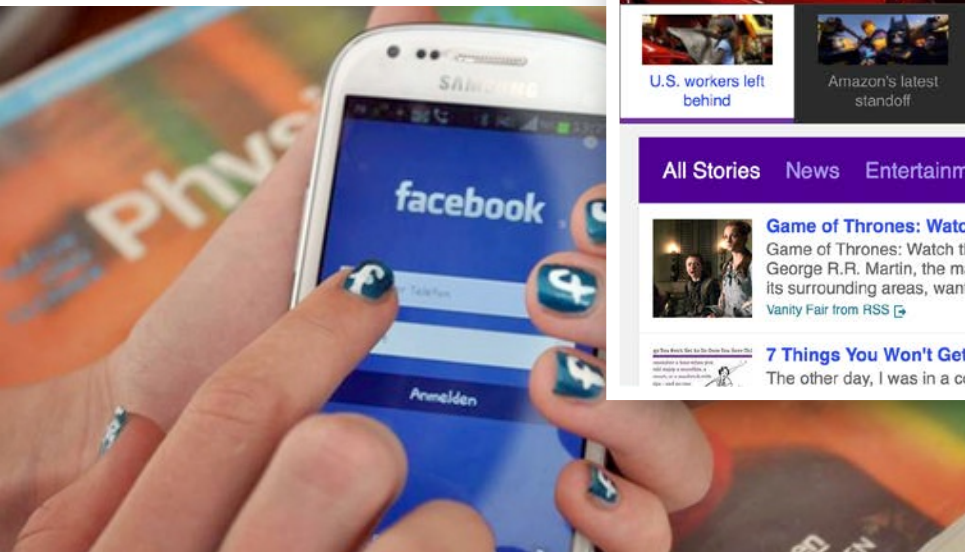
All Stories News Entertainment Sports Business Lifestyles Technology Science

Winkel 79°F 82° 61°

Nasdaq 4,331.93 -0.14% | Dow 16,843.88 -0.60%

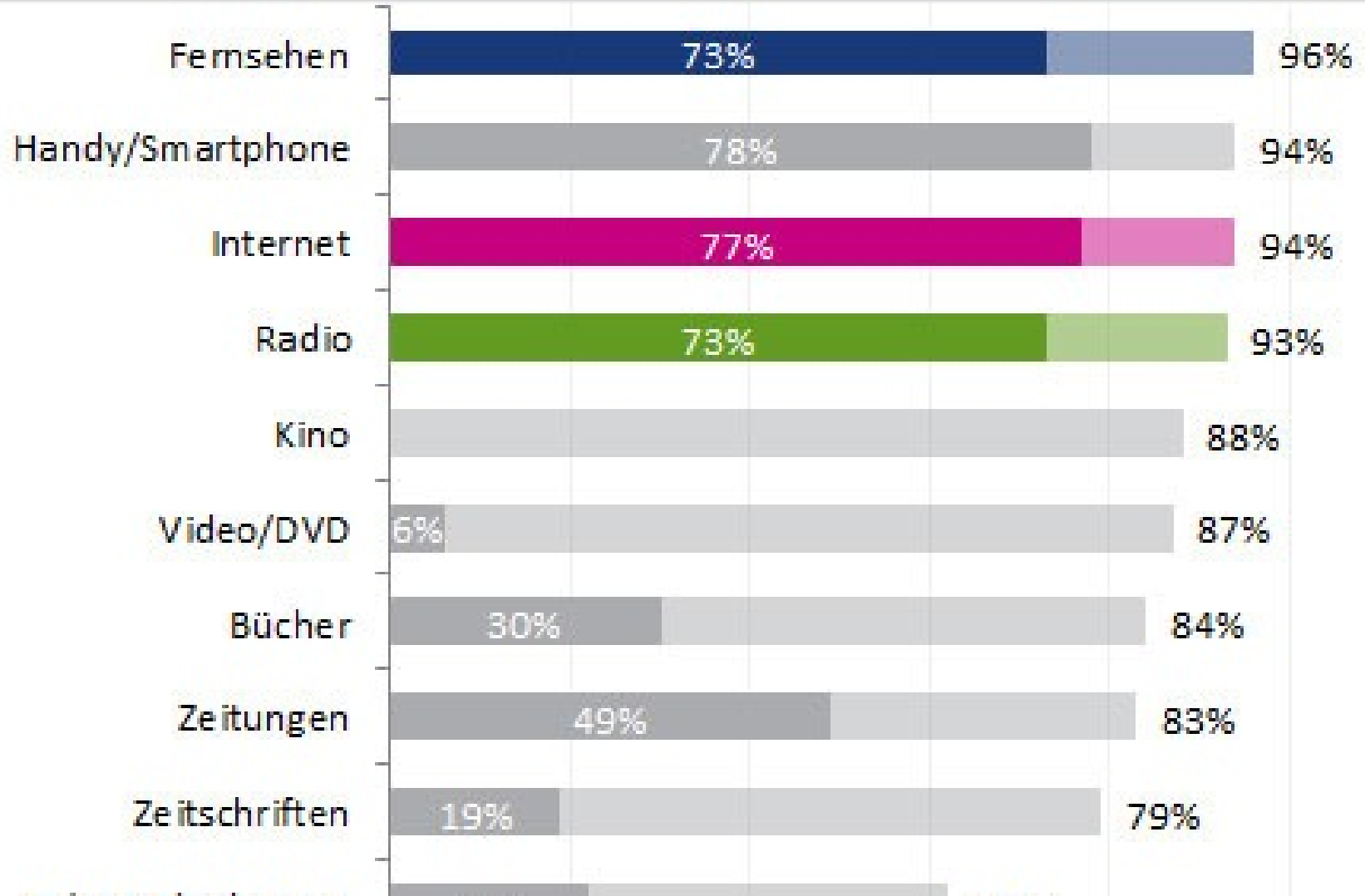
**Game of Thrones: Watch the Scene George R. R. Martin Regrets Having to Cut**  
 Game of Thrones: Watch the Scene George R. R. Martin Regrets Having to Cut Surprise, surprise, George R.R. Martin, the man who was written more than 4,000 pages on the saga of Westeros and its surrounding areas, wants more Game of Thrones. In a recent interview with The New York Times, Vanity Fair from RSS

**7 Things You Won't Get to Do Once You Have Children**  
 The other day, I was in a cosmetics store and asked the girl working there what product she would





# Media consumption Germany Reach in 2013, age 14 to 49 ys.





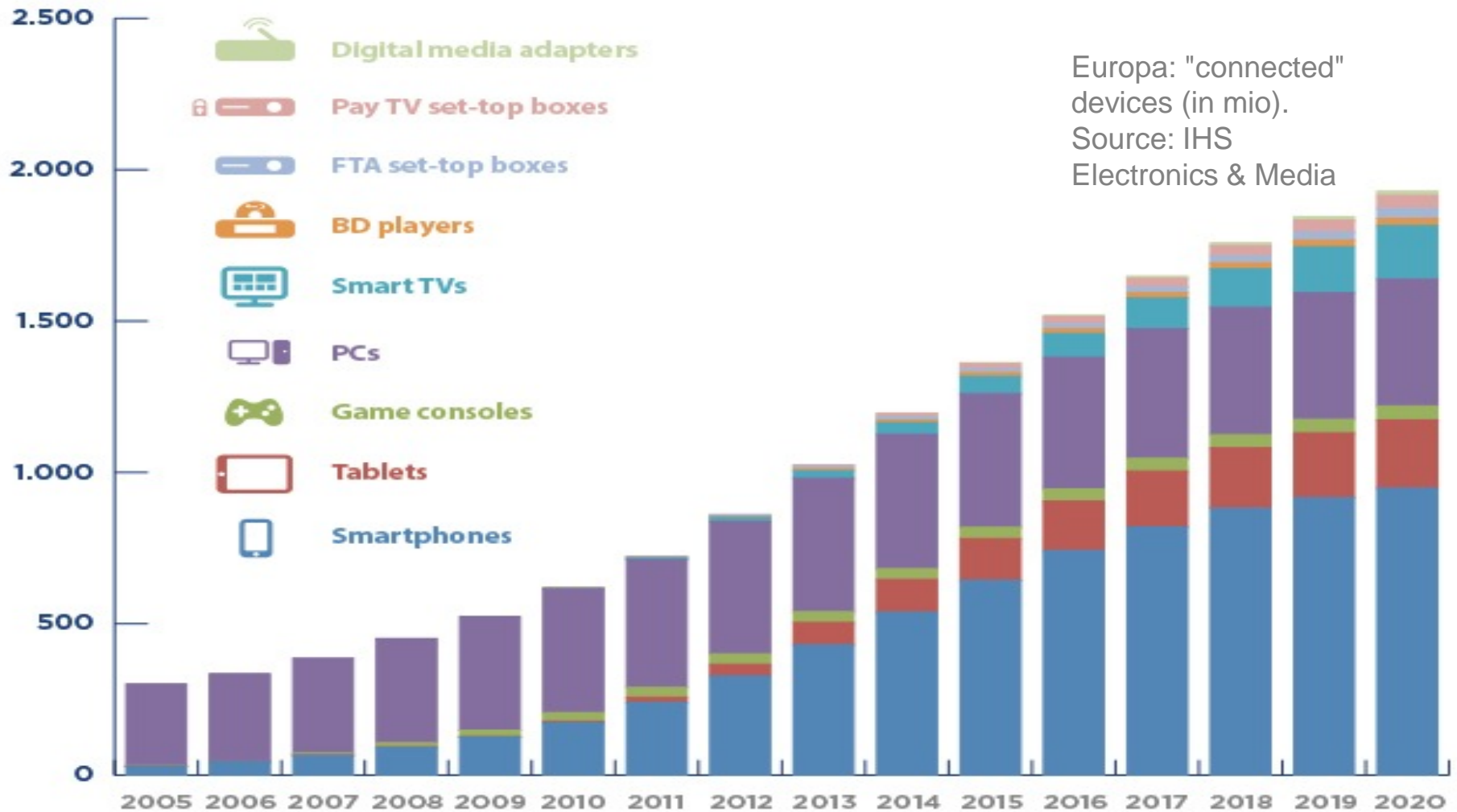




# THREE PROBLEMS



# MOBILE DEVICES AND "SECOND SCREEN"



By 2020 there will be around 2 bn connected devices across Europe  
Around 8 connected devices per broadband households in 2017



# SMARTPHONES



# SMARTPHONE IS USED FOR...

W. mornings at home
W. mornings travelling
W. at home
W. at work / school
<del>    W. travelling</del>
W. evenings at home
W. evenings travelling
Saturday
Sunday

never

Listen to Musik

Listen to Radio

total

20-39 ys.

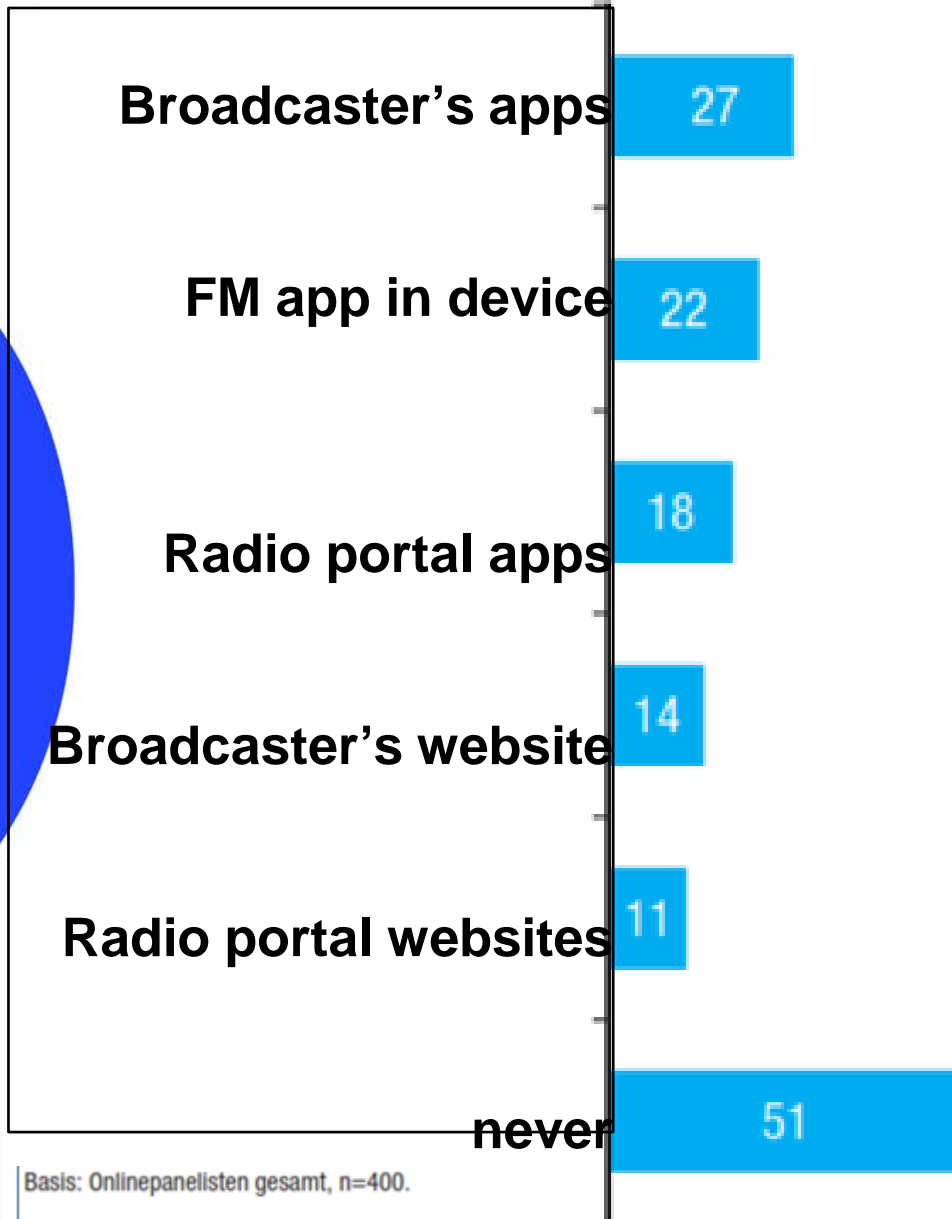
total

20-39 ys.

7	13	3	4
20	26	10	11
4	6	3	6
10	15	5	6
28	49	17	19
5	9	4	6
20	26	10	6
20	32	16	21
15	23	10	13
47	28	61	53




# HOW LISTEN PEOPLE TO RADIO ON THEIR SMARTPHONE?



First approach is via apps of broadcasters, followed by the FM app of the device and apps of aggregating radio portals.

Basis: Onlinepanelisten gesamt, n=400.

Quelle: ARD-Studie Mobile Mediennutzung 2012.



«On closer inspection it became clear that we are facing in BBC Radio seismic shifts in deep-seated behaviour that will over time fundamentally change our business»

Helen Boaden, Director BBC Radio, March 2014

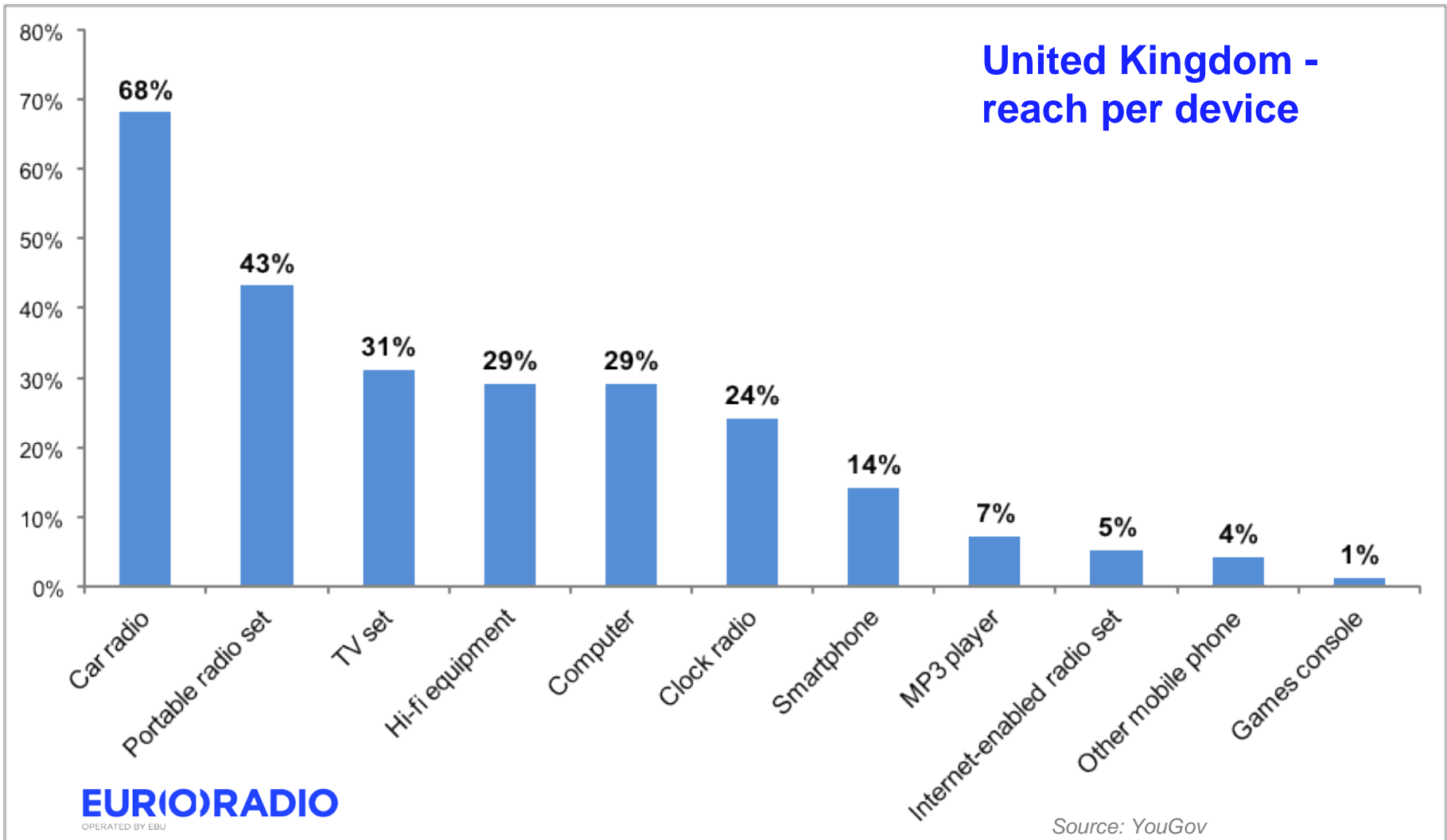




# THREE PROBLEMS



# LISTEN TO RADIO VIA...?







## THE INTERNET



1

You can  
(automated)  
car to



2

You enter your  
dynamically  
on traffic flow

4 You are connected to everything you need while you travel in a car personalized for you



stopped off  
first step and  
marks itself











# Hybrid Radio: Rundfunk UND Internet



**DAB/FM**

- Traffic Events (TEC)
- Traffic Flow Prediction (TFP)
- Dynamic Speed (DSI)
- Weather (WEA)



**Connected**

- Fuel Prices (FPI)
- Road Pricing (RPI)
- Parking Information (PKI)





# THREE SOLUTIONS ???











## The John Creedon Show

21:00 to 23:00

A mix of contemporary, Irish and international tracks to take you on a melodic journey into the evening





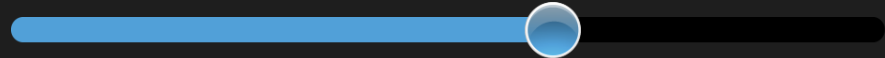
### Missed your favourite programme?

## RTE radioplayer

Now...The John Creedon Show

 Contact

 Share

LISTEN BACK

WEBSITE



◀ **Wednesday 16 April** ▶



**03:00 - RTE Radio 1 Through The Night**



**06:30 - Shay Byrne's Risin' Time**

The best music mix to start the day with news, weather, traffic and sport with Shay Byrne.

Replay ▶

On This Show >



**08:00 - Morning Ireland**

Live news, sports, weather and traffic from the country's most listened to show on radio. Presented by Cathal Mac Coille, Rachael English, Gavin Jennings and Fran McNulty.

Replay ▶

On This Show >



**10:00 - The John Murray Show**

A lively mix of entertainment, human interest and lifestyle, presented by Kathryn Thomas

Replay ▶

Programmes

Most Popular

Most Recent

Search





Swiss Pop  
+  
News RTS  
▶

Couleur 3  
+  
News SRF 1  
▶

Rete Due  
+  
News RR  
▶

SRF 1  
+  
News RSI  
▶

HÖRE DIE VOREINSTELLUNGEN.  
ES HANDELT SICH UM EINE AUSWAHL VON  
GEMIXTEN LIVE RADIOS.

FUNKTIONIERT AUF  
DEINEM COMPUTER,  
SMARTPHONE ODER  
TABLET.

KREIERE GRATIS EINEN ACCOUNT UND  
DEINE EIGENEN EINSTELLUNGEN.

- MIXE LIVE RADIO INHALTE.
- HÖRE PODCASTS OHNE SYNCHRONISATION.
- VERPASSE NIE MEHR EINE FOLGE DEINER  
LIEBLINGSRADIOSENDUNGEN!



beta

DIY .fm

⏸ ▶ ⏪ ⏩ ⚙

**RSI RETE TRE** Rete Tre  
Shagal Ch - When boys are in love 2014  
00:11

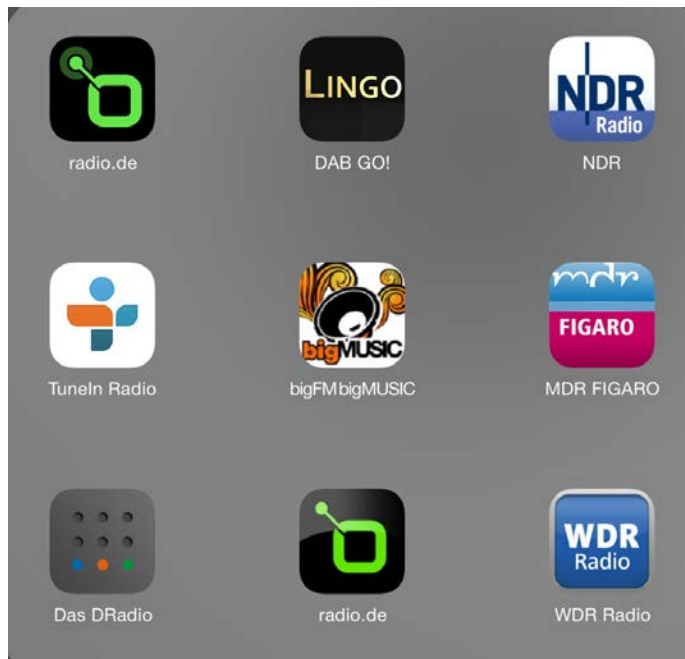
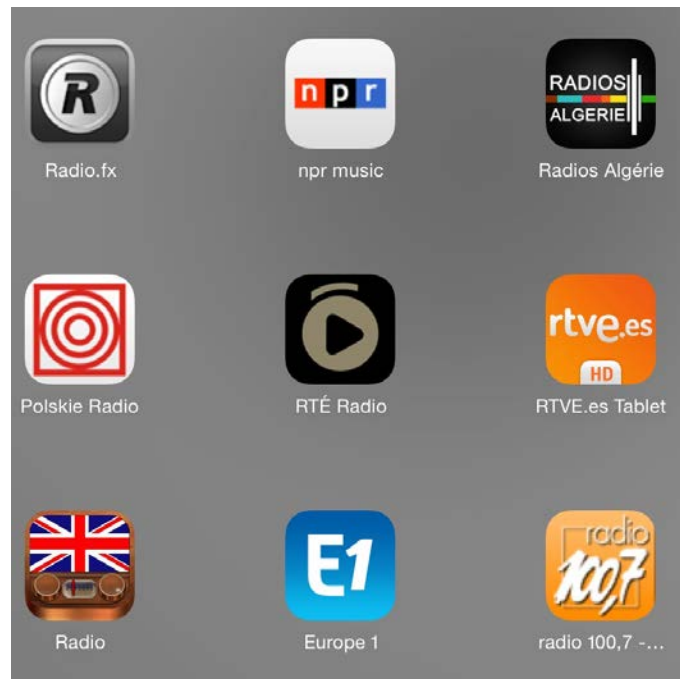
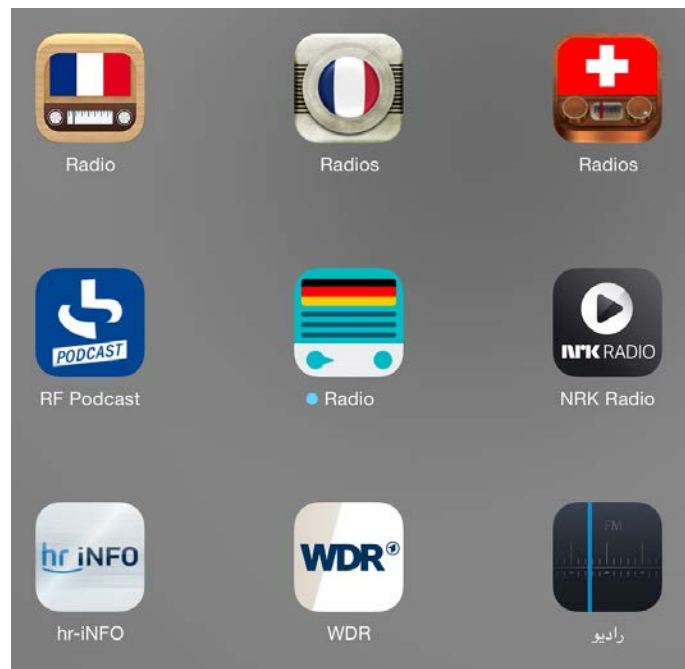
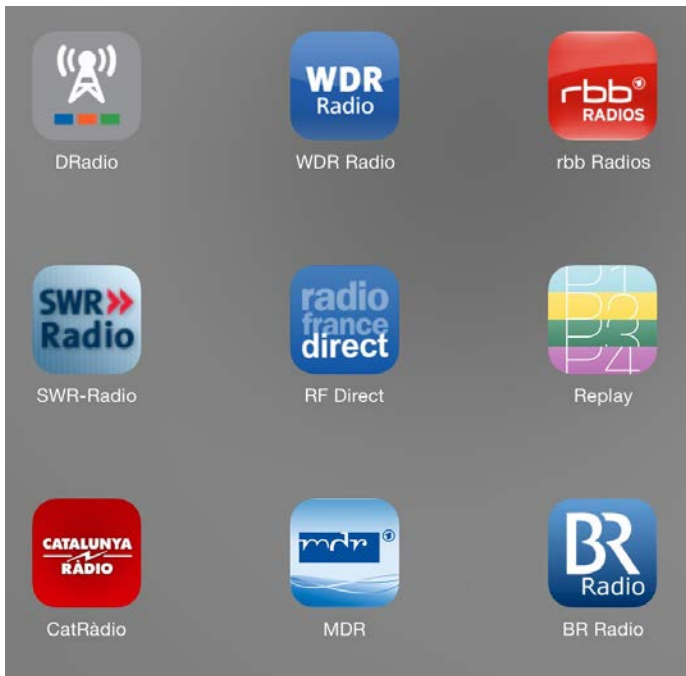
◀ [ECHO DER ZEIT] [SRF DIGITAL] [100 SEKUNDEN WISSEN] [ZUM GLÜCK IST FREITAG] ▶

feedback





# FOLLOW THE AUDIENCE



**EUR(O)RADIO**

OPERATED BY EBU

# PLANET OF THE APPS

APRIL - OCTOBER 2013



[http://www3.ebu.ch/files/live/sites/ebu/files/Knowledge/Publication%20Library/EURORADIO-Planet\\_Of\\_The\\_Apps-Report\\_2013.pdf](http://www3.ebu.ch/files/live/sites/ebu/files/Knowledge/Publication%20Library/EURORADIO-Planet_Of_The_Apps-Report_2013.pdf)

**EUR(O)RADIO**

OPERATED BY EBU





Český rozhlas  
1.540 Abonenten

✓ ABONNIERT

Startseite

Videos

Playlists

Kanäle



33:31



Český rozhlas hat ein Video hochgeladen.  
vor 7 Stunden



Sergej Rachmaninov: Koncert pro klavír  
a orchestr fis moll (SOČR)  
von Český rozhlas · 15 Aufrufe



30:04



Český rozhlas hat ein Video hochgeladen.  
vor 8 Stunden



Sergej Prokofjev: Koncert pro housle a  
orchestr g moll (SOČR)  
von Český rozhlas · 13 Aufrufe



Český rozhlas hat ein Video hochgeladen.  
vor 8 Stunden



Petr Iliič Čajkovskij: Variace na rokokové



- 



- 
**P4 Skaraborg, Sveriges Ra...**

 Seite - 5.752 gefällt das · 366 Personen wa...
- 
**Sveriges Radio**

 Seite - 30.323 gefällt das · 7.008 Personen...
- 
**Sveriges Radio P1**

 Seite - 4.232 gefällt das · 14 Personen war...
- 
**Sveriges Radio P2**


 Seite - 1.156 gefällt das
- 
**Sveriges Radio Örebro**

 Seite - 2.260 gefällt das · 689 Personen wa...
- 
**Sveriges Radio Sörmland**

 Seite - 2.968 gefällt das
- 
**Sveriges Radio Gävleborg**

 Seite - 3.628 gefällt das · 2 Personen ware...
- 
**Sveriges Radio P3**

 Seite - 1.351 gefällt das
- 
**Sveriges Radio P3**

 Seite - 7.370 gefällt das
- 
**Sveriges Radio Västernorrla...**

 Seite - 2.518 gefällt das · 0 Personen ware...
- 
**Sveriges Radio P4 Radio M...**

 Seite - 5.314 gefällt das
- 
**P4 Dalarna Sveriges Radio**

 Seite - 6.119 gefällt das · 476 Personen wa...
- 
**Sveriges Radio Sisuradio**

 Seite - 1.764 gefällt das · 36 Personen war...
- 
**Sveriges Radio Östergötland**

 Seite - 4.413 gefällt das · 443 Personen wa...
- 
**Sveriges Radio P4 Västman...**

 Seite - 3.515 gefällt das · 438 Personen wa...



## Sveriges Radio

30.323 „Gefällt mir“-Angaben · 3.090 sprechen darüber · 7.008 waren hier

-  **Gefällt mir**
- Nachricht senden**
- Wo hier**

Rundfunk & Medienproduktion  
 Officiell Facebooksida för Sveriges Radio. Denna sida är nystartad och under utveckling. För frågor, kontakta gärna yasmine.el\_rafie@sverigesradio.se eller använd "meddelande"-knappen här på

Info



Fotos



Karte



Veranstaltun...

 **Beitrag verfassen**





Sign in

News

Sport

Weather

Shop

Capital

More

Search



iPlayer Radio

Stations

Categories

Programmes

Schedule

Favourites

Playlister

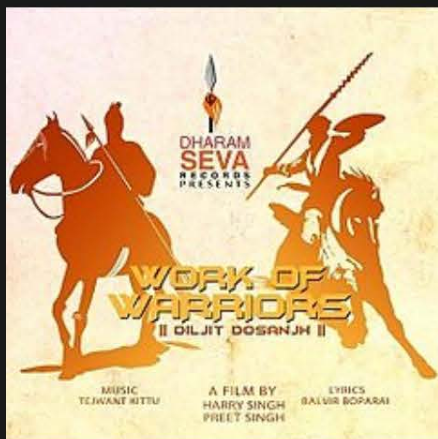
GET MORE OF THE MUSIC YOU LOVE

# playlister

## Assorted tracks

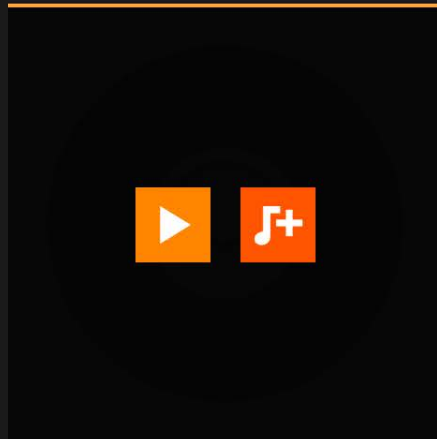


FROM



### Work Of Warriors

Diljit Dosanjh



### Tanama

Joe Driscoll & Sekou Kouyate,  
Sekou Kouyate & Joe Driscoll



### Atomic Bomb

William Onyeabor, William  
Onyeabor & Hot Chip



### I Can't Keep Up (feat. Will Heard)

Tourist

## Karnaval Radyolarında Şu Anda Çalanlar

S *super fm*Apayrı  
Emre KayaSuper 2 *fm*Gelemiyorum Y...  
Ziyet Salijoy *turk*Şeytan Tüyü  
Kenan Doğulurum Yanı...  
et SaliŞeytan Tüyü  
Kenan DoğuluBüklüm Büklüm  
Ferdî ÖzbeğenHerşey Dün Gibi  
Gün Yüksel

EFKAR

Büklüm Büklüm  
Ferdî ÖzbeğenSafe and Sound  
Capital CitiesRing My Bell  
Kate LinnBump  
Baby Blue

RetroTurk

Herşey Dün Gibi  
Gün Yüksel

kam

dim Sana  
na Şenjoy *turk*  
AkustikSana Birşey Ol...  
Yonca Lodi

Makam

Doymadım Sana  
Mediha Şen

ŞU AN ÇALAN

Save My Night  
Armin van Buuren

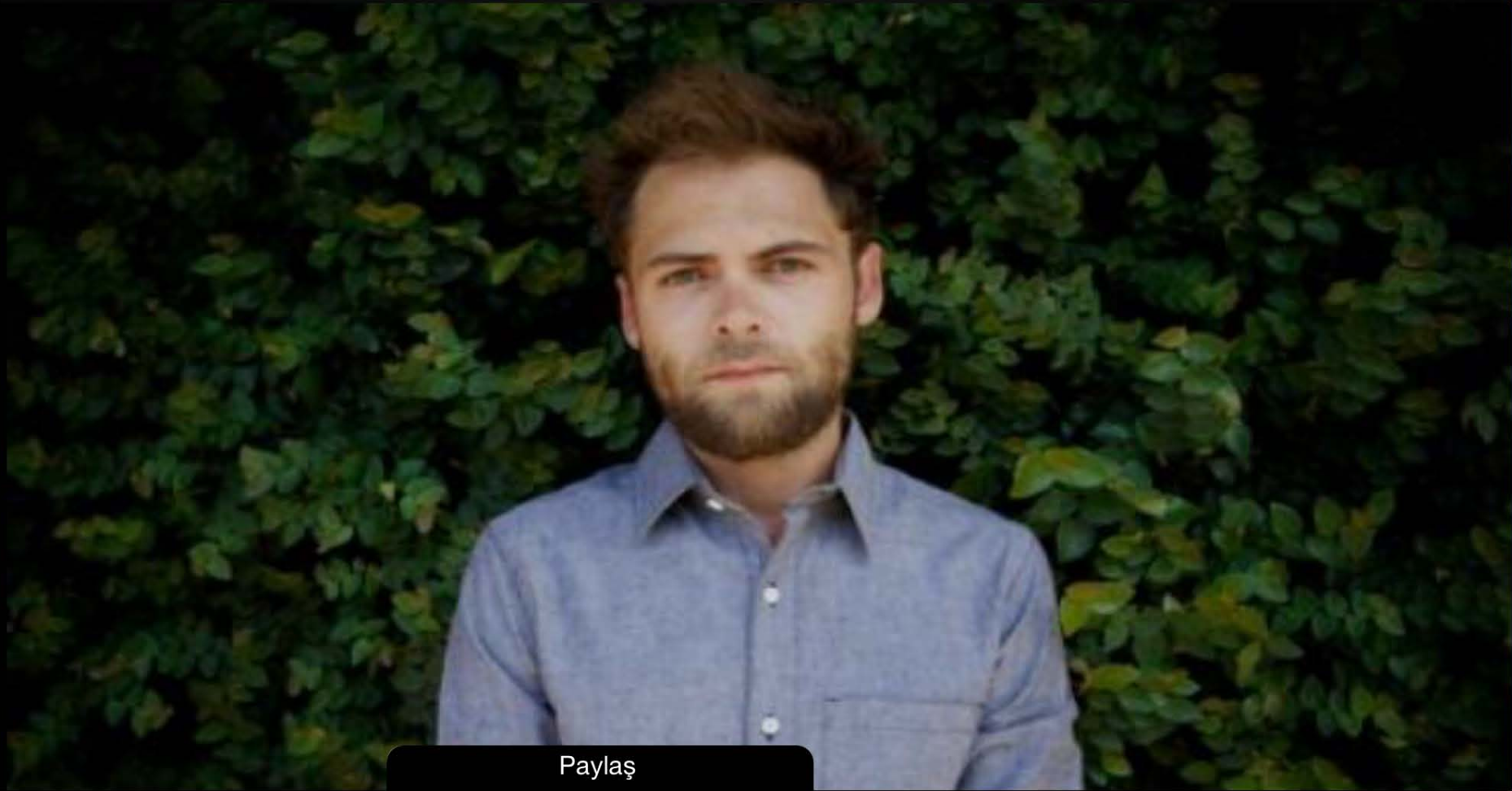
0:42 / 3:38

RADIO  
Mydonose



Önceki Şarkılar

Virgin Radio'da Şu An Çalan



Passenger

Paylaş



iTunes'dan  
İndirin



RADYOLAR



ŞU AN ÇALAN

Let Her Go  
Passenger



3:27 / 3:47



# AND: RADIO GOES VISUAL





**"An important development in the world of radio is visualization. Visual radio must find its place in an emerging media market. The experience of the 2013 Proms showed that a firm commitment by a radio broadcaster to visual radio can bear fruit. The association of video streaming with concerts broadcast on the radio is a significant element for the future."**

# LIVE / SOCIAL RADIO

Kijk live Luister live NPO 101 NPO Cultura



## Roosmarijns DJ Favorite is 'Hot Tonight' van Tokyo Police Club

Ken je 'Hot Night' van Tokyo Police Club al? Roosmarijn raadt het liedje

Lees meer

## STUUR EEN GRATIS APP'JE

Je bericht \*

Text input field for sending a message.

## TWITTER / FACEBOOK / GOOGLE+

Log in via:



## 3voor12 Radio met Roosmarijn Reijmer

Je hoort in 3voor12 Radio de allernieuwste muzikale trends, alternative tracks en de actualiteit van vandaag en morgen. Regelmatig artiesten in de studio of aan de telefoon over hun nieuwste releases, de 3na12, Essentials en concertrecensies.





Twitter tweet from djSPUD @spudje: Blijft hypocriet dat NL media (bv @3fm) nu weglopen met @thomasazier en vroeger te bekrompen waren voor dit soort muziek, muv van @Kink\_FM

Twitter tweet from 3voor12 @3voor12: Je hoorde garagerocksensatie together PANGEA in 3voor12 Radio. check hier de



rtbf.be

**ATELLA**  
**THE MONSTER**

**RTBF.BE/INFO** 16/04 - 22:15 **Etats-Unis: les taux vont rester plus bas que la normale**

**pureVISION** 22:40 **Wavre** 12° **ON AIR** 22H - 24H **Sylvestre DEFONTAINE**  
**DRUGSTORE**

Tweeter 0 J'aime 0



**EN DIRECT SUR PUREFM.BE**

FACEBOOK - DRUGSTORE TWITTER

FACEBOOK PURE FM



Drugstore - Pure FM RTBF



Drugstore - Pure FM RTBF hat sein/inr



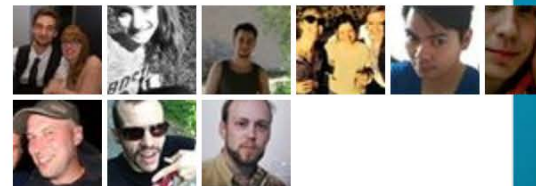
vor 9 Stunden



Drugstore - Pure FM RTBF

Vous n'êtes pas en Californie cette nuit ?

4 512 personnes aiment Drugstore - Pure FM RTBF.



Module social Facebook

12

GZWÓRKA

NA ŻYWO



SMS

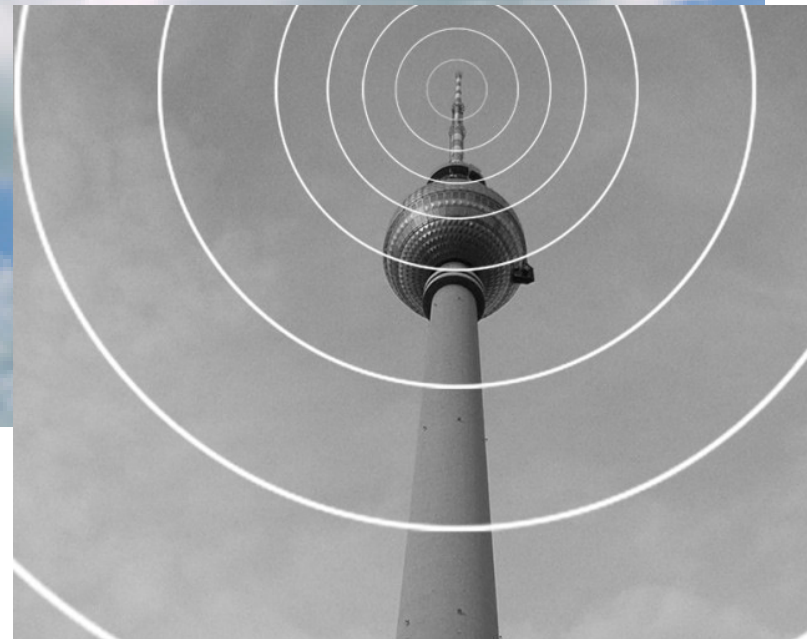
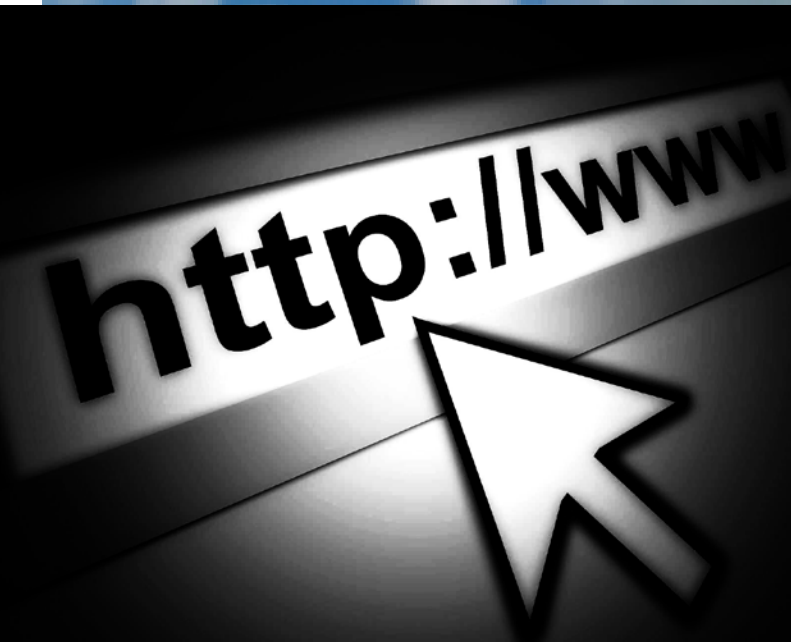
70044 (50gr + VAT)

Numer Raz na Fali

DJ Pasmó

Zaprasza:  
Numer Raz







batteries

bytes

bones

## On the receiver's side...

**Battery life, streaming via 3G:**  
6 hours, 53 minutes.

**Battery life, broadcasting  
via FM (or DAB):**  
48 hours, 12 minutes.

**= 7 times longer battery life.**



*Source: Media UK*

## What if 50 million people stream...?

# THE INTERNET WILL DO IT !?



What will be the price?

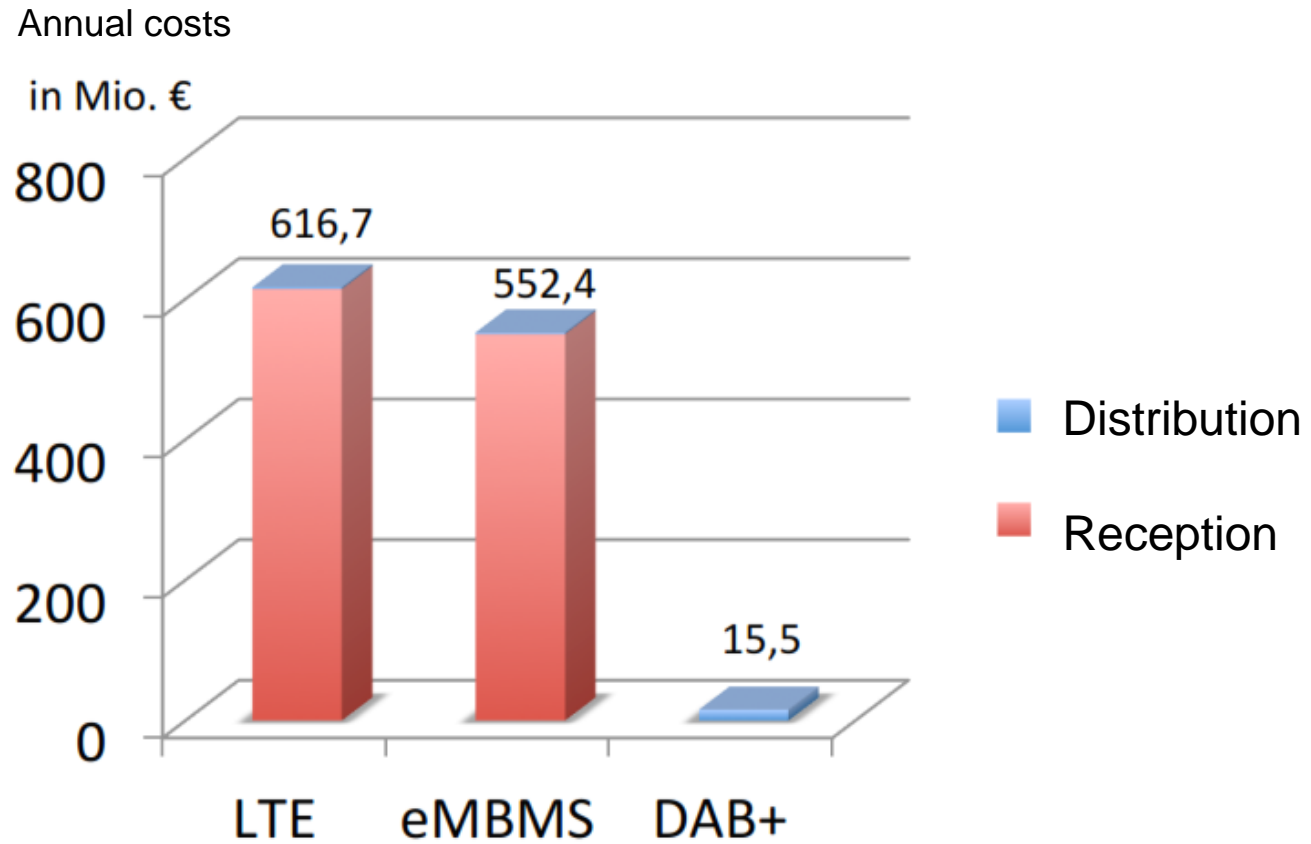


# Teracom White Paper:

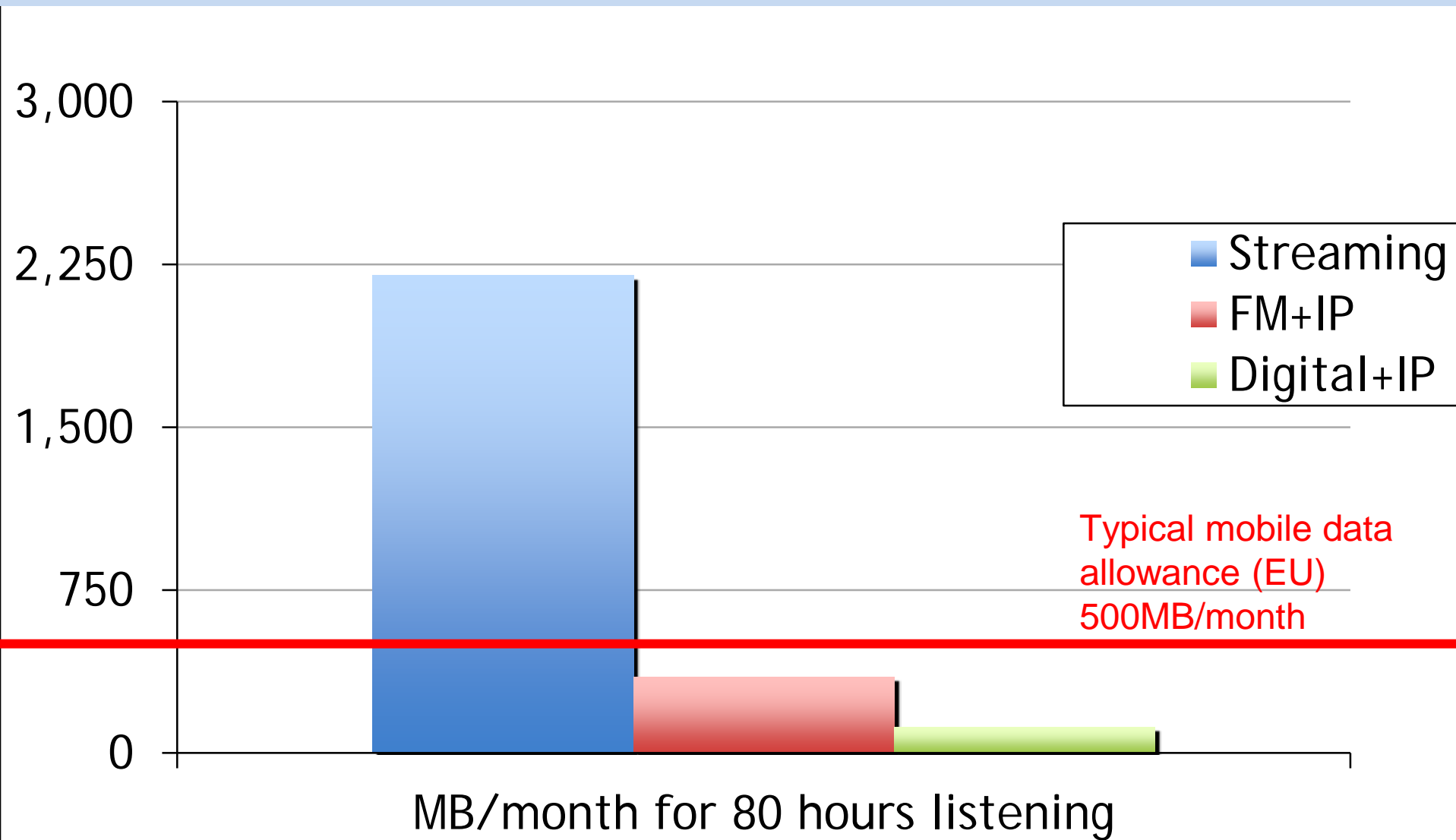
Can the cellular networks cope with linear radio broadcasting?

“In order to be considered a realistic alternative, MNOs’ prices for mobile data in Sweden must be reduced by 96 per cent.”

# Who will pay in the end??



# Broadcast v. IP Streaming







Costs



Quality



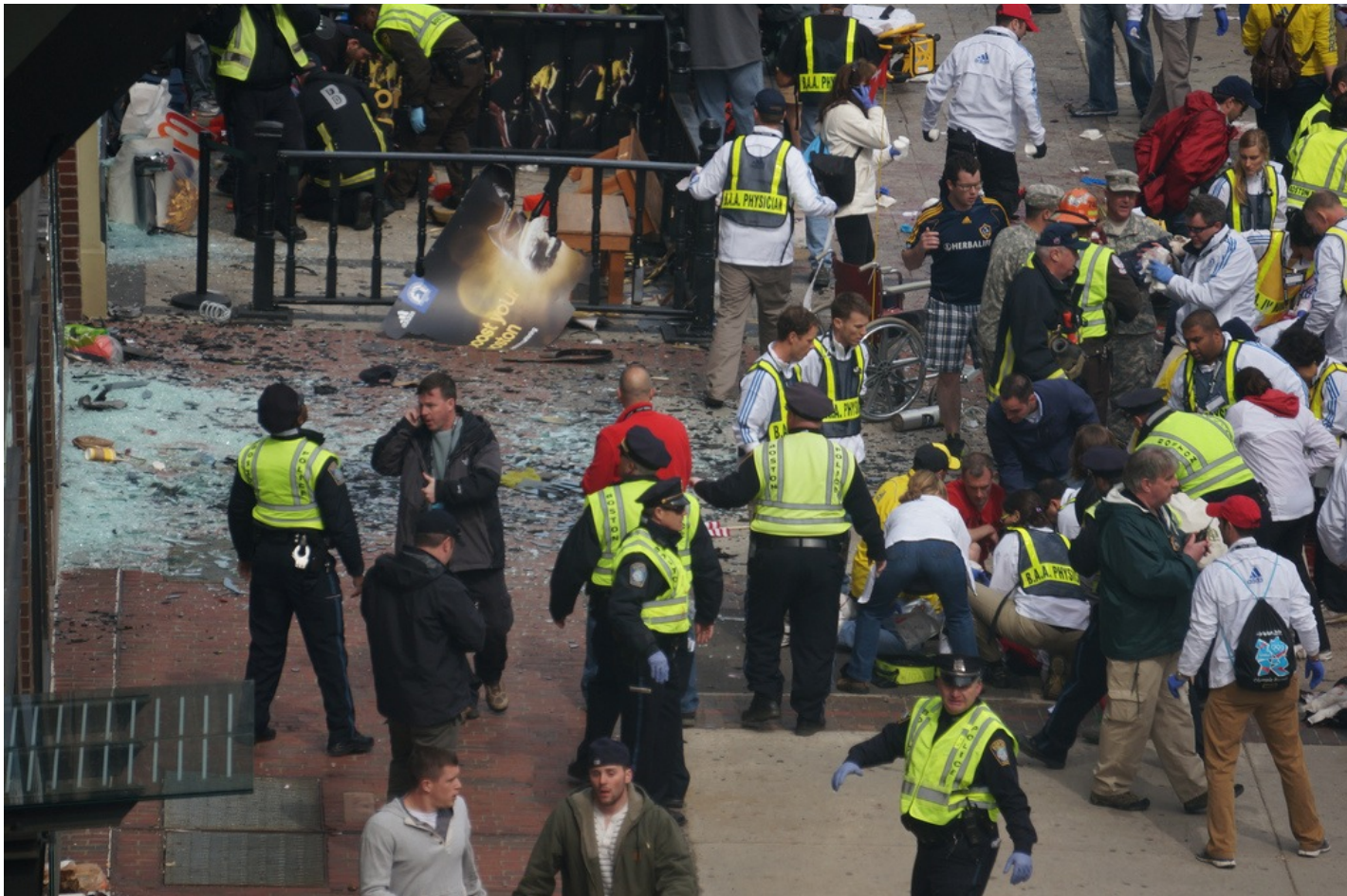
Safety

Services

Smarradio



Radio is the preferred distribution network of many governments in case of emergencies.





# Interactive/Categorised DAB Slideshow

## Categorisation



"Live"

**»SWR3 Live**

SWR3 am Mittag mit Stefanie Tücking

**Gleich kommt**

**Madonna**  
Papa don't preach



"Kontakt"

**»SWR3 Studiocam**

SWR3 Studio Cam



"Nachrichten"

**»SWR3 Nachrichten**

**Interview: "Rente ist keine Frage der Demografie"**

Wegen ihrer geplanten Zuschussrente steht Ursula von der Leyen unter Dauerbeschuss. Als Mittel gegen Altersarmut helfe dieses Modell nicht, sagt auch Sozialforscher Christoph Butterwege gegenüber tagesschau.de: "Das ist reine Augenwischerei." Und...

**Finanzreserven der Krankenkassen auf Rekordniveau**

**Beschneidung von Jungen bleibt in Berlin straffrei**

## Device Cache

"Live"

**»SWR3 Live**

SWR3 am Mittag mit Stefanie Tücking

**Gleich kommt**

**James Blunt**  
It'll be your man



"Nachrichten"

**»SWR3 Nachrichten**

**Joaquin Rodriguez vor Gesamtag bei der Vuelta a España: "Puntero" verdient Contadors Rückkehr**

Die Vuelta a España setzt die Bühne für das große Comeback von Alberto Contador aus. Die Madriener kommt an seinem Gegner jedoch nicht vorbei: Dem...

**Einmal Nationalmannschaft, heute Abmüdigkeits-Fußball-Premie ohne Vertrag**

**Kein guter Tennistag für Philipp Kohlschreiber**

"Wetter"

**Neurappin 17°C**

heute: 10°C - 17°C  
morgen: 10°C - 17°C

**Bad Liebenwerda 18°C**

heute: 10°C - 17°C  
morgen: 10°C - 17°C

**Potsdam 18°C**

heute: 10°C - 17°C  
morgen: 10°C - 17°C

"Kontakt"

**»SWR3 Studiocam**

**»SWR3 Mail ins Studio**



"Events"



# Interactive/Categorised DAB Slideshow

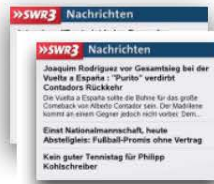
## Linking (1): Click through URL:

Device Cache

"Live"



"Nachrichten"



"Wetter"



"Kontakt"



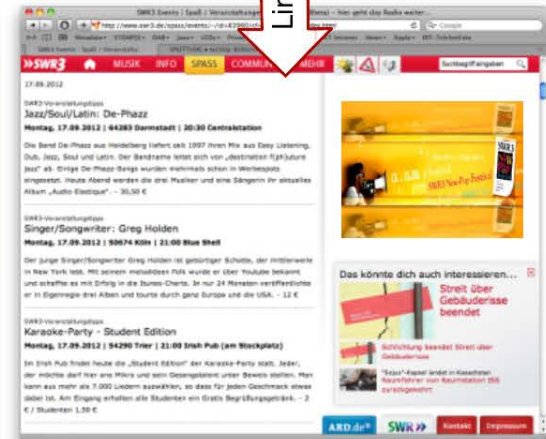
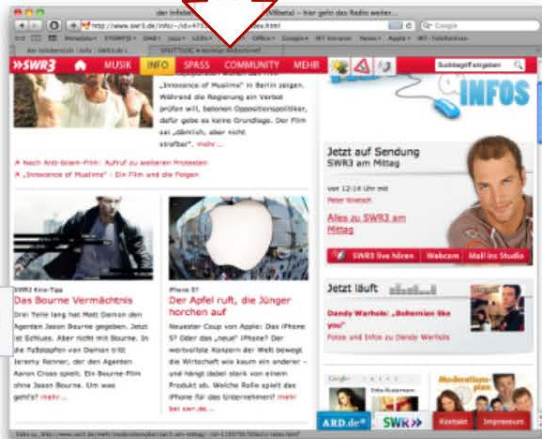
"Events"



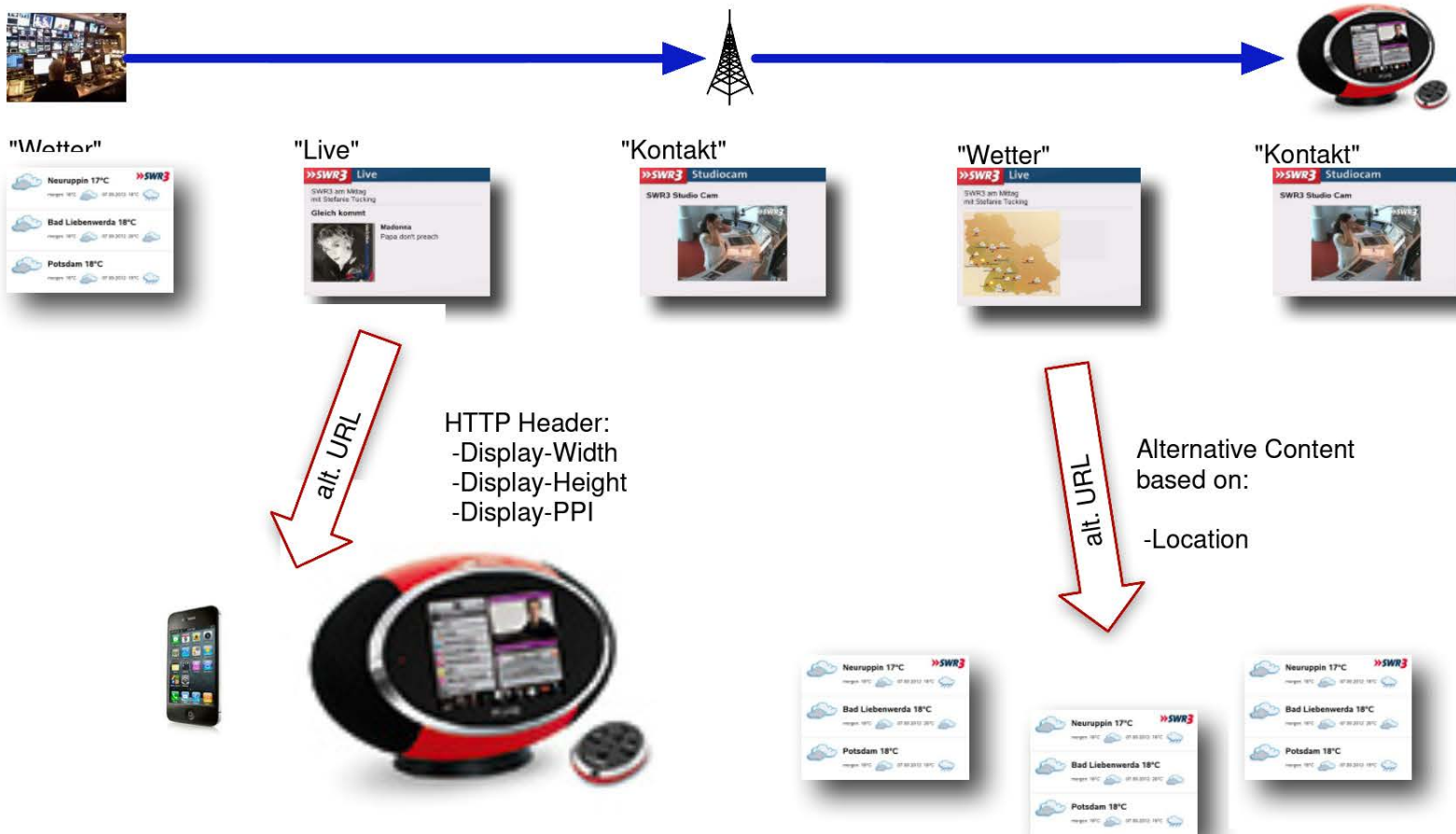
LinkURL

LinkURL

LinkURL

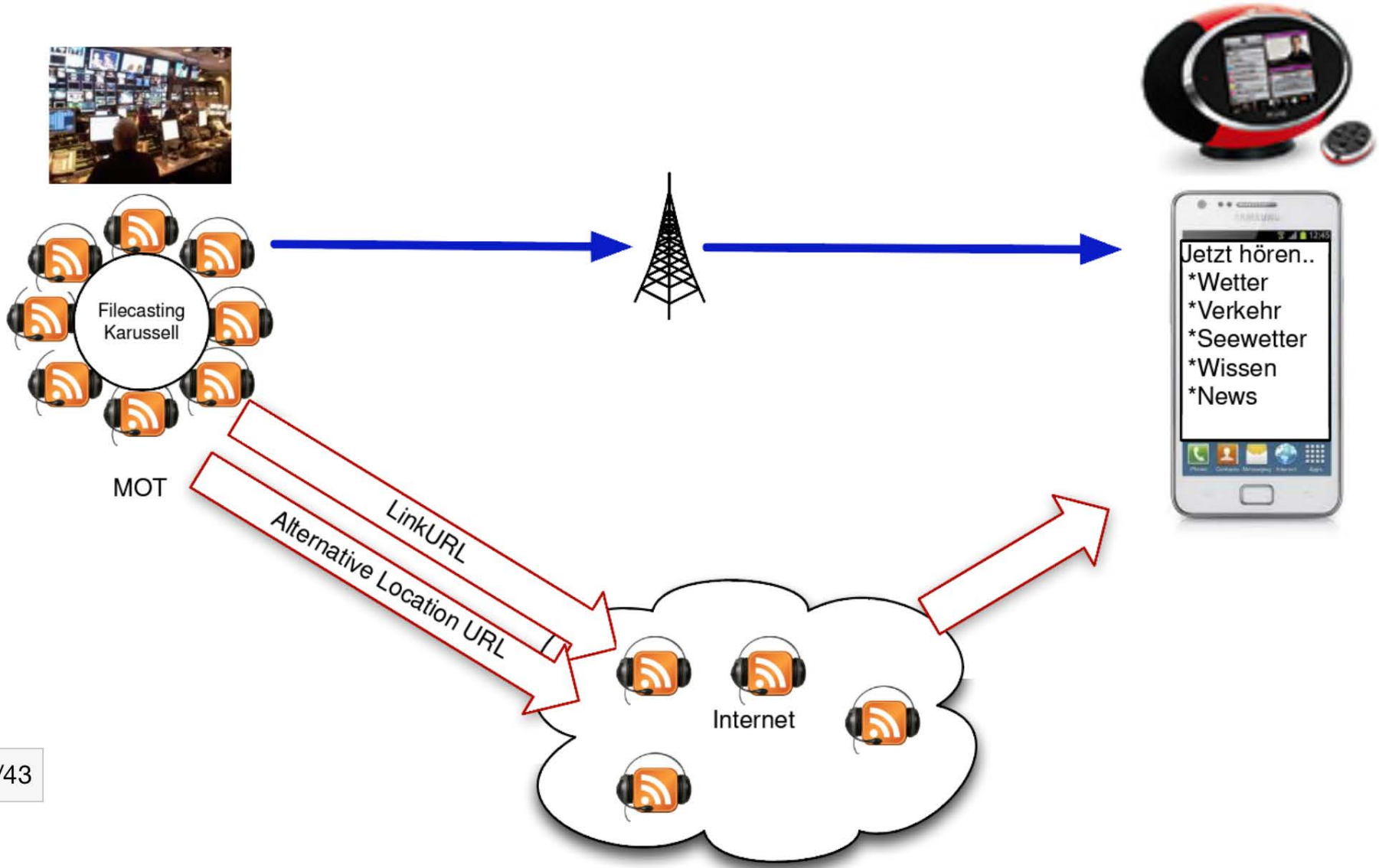


## Linkin (2): Alternative URL:





# Filecasting



Costs



Quality



Safety



Services



Smarteradio

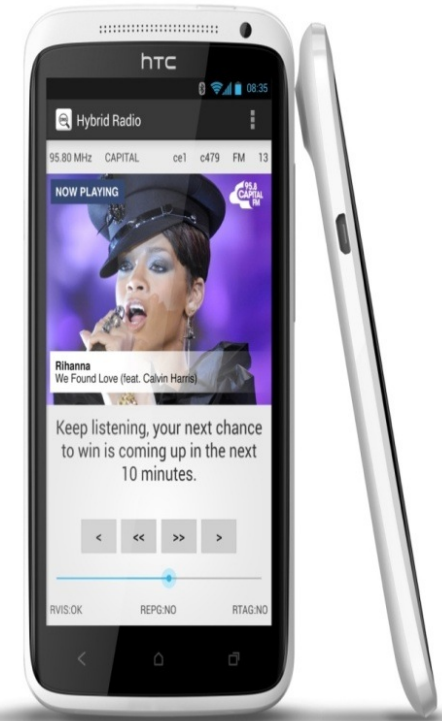
# Making broadcast look like an app



Fragmented IP radio apps



Broadcast app



**Unified hybrid app**

Standard

Automatic Service Following  
Enhanced services

**Pre-installed on the device**



# API: Application Programming Interface

Hybrid Radio app

Radio abstraction layer

Broadcast Radio Tuner

Cellular  
Modem

DAB+

FM

HD Radio

IP

# Smart Radio in Smartphones

# SMART RADIO INITIATIVE

1. **Free-to-air: Radio needs a broadcast backbone - FM, DAB, DAB+**
2. Radio has to be where the users are – above all **in mobile phones and tablets**
3. The future of radio lies in using the combination of **broadband and broadcast** – not one or the other





## 10 List of signatories

Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland (ARD), represented in 2013 by NDR, Hamburg



Arbeitsgemeinschaft Privater Rundfunk (APR), Munich, Germany



British Broadcasting Corporation (BBC), London, United Kingdom



Deutschlandradio, Cologne, Germany



European Broadcasting Union (EBU), Genève, Switzerland



Modern Times Group (MTG AB), Stockholm, Sweden



Norsk Rikskringkasting AS (NRK), Oslo, Norway



Nederlandse Publieke Omroep (NPO), Hilversum, Netherlands



P4 Radio Hele Norge AS, Lillehammer, Norway



Polskie Radio Spółka Akcyjna, Warsaw, Poland



Radio Télévision Belge Francophone (RTBF), Brussels, Belgium



REGIOCAST GmbH & Co. KG, Leipzig, Germany



RTL Belgium SA, Brussels, Belgium



Radiotelevisione Italiana S.p.A. (RAI), Rome, Italy



SKY Radio Group, Naarden, Netherlands



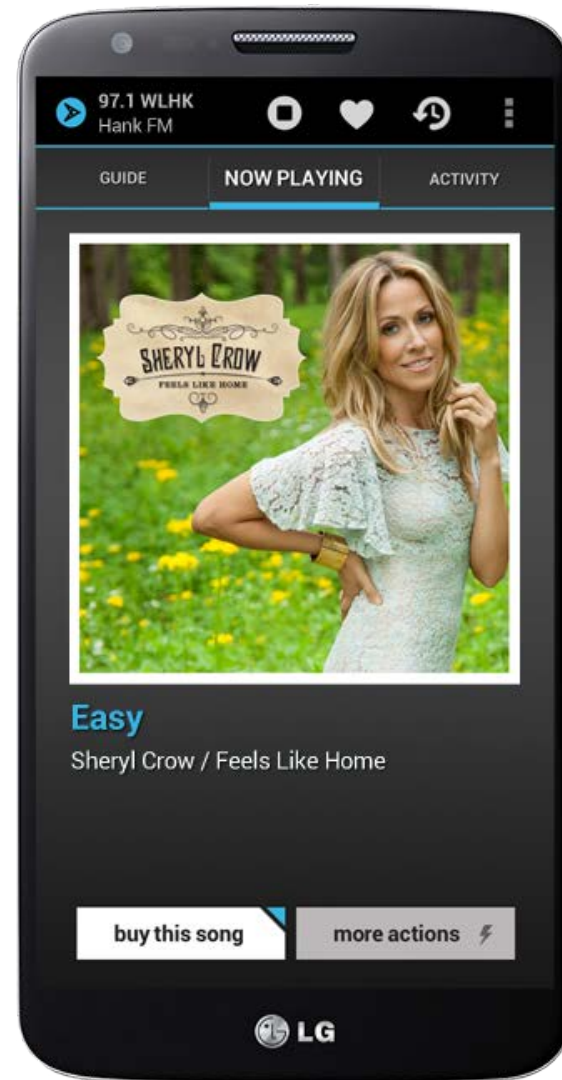
Schweizerische Radio- und Fernsehgesellschaft (SRG SSR), Bern, Switzerland

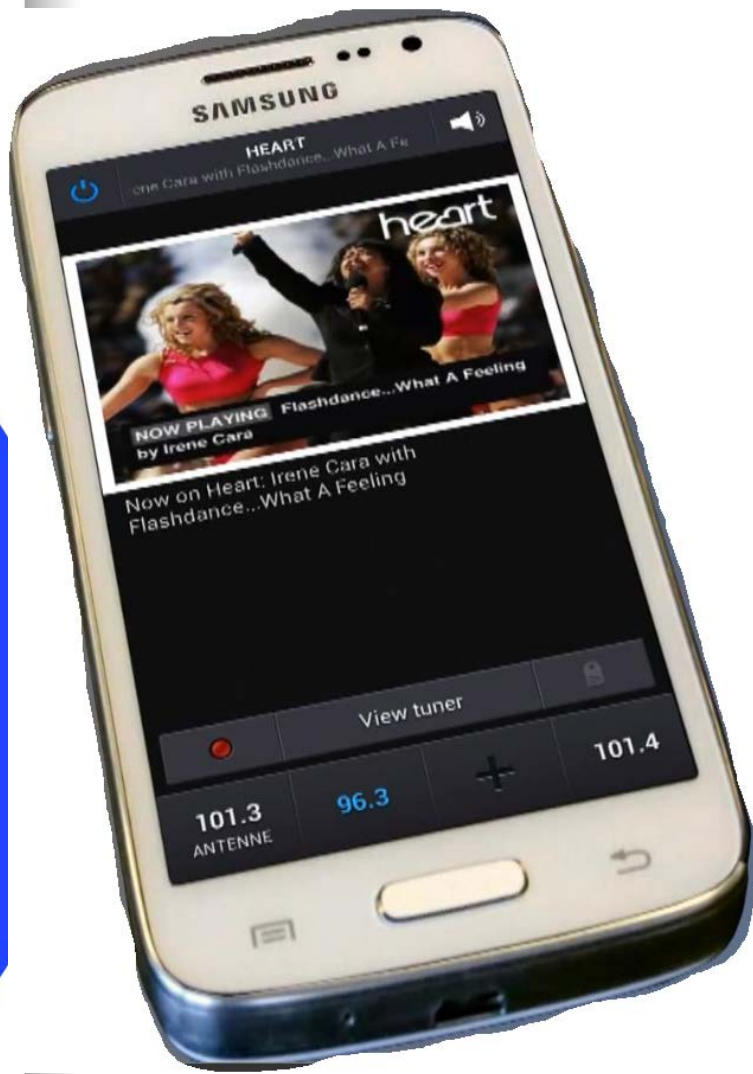


Sveriges Radio AB (SR), Stockholm, Sweden



This is a  
radio -  
You also  
can take  
calls  
with it...





## Galaxy Express 2 LTE Galaxy Core Advance Galaxy Grand 2

- first smartphones to include RadioDNS Hybrid Radio
- available in Europe via Vodafone
- Upgraded experience of integrated FM radio adds visuals, interaction and automatic switching from FM radio to internet streaming

Radio DNS





**EUR(O)RADIO**  
OPERATED BY EBU

# DIGITAL RADIO TOOLKIT

## *Key factors for the deployment of digital radio*

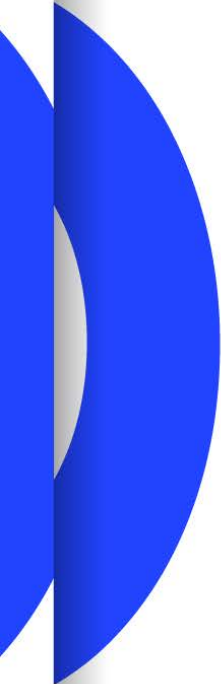
### Goals

- To identify good practices that foster the implementation of terrestrial digital radio
- To build the case for digital radio involving all the relevant stakeholders

### Fields

- Legal: licences, regulation, agents
- Economic: costs, marketing, related industries
- Offer: services, innovation, added value, competitors
- Technology: definition, scalability, spectrum
- Transition plan: switch-over process, public comms





# Your questions, please...

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