



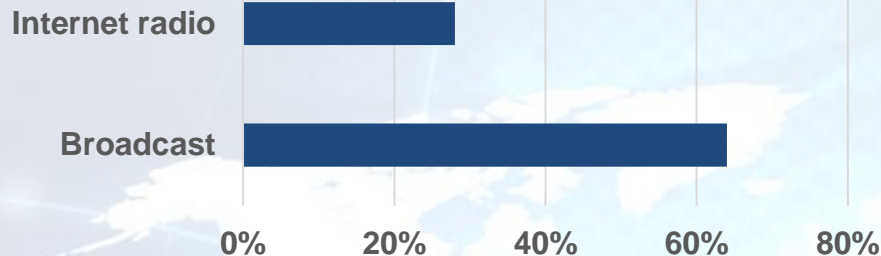
OEM Audio: Broadcast & Connected





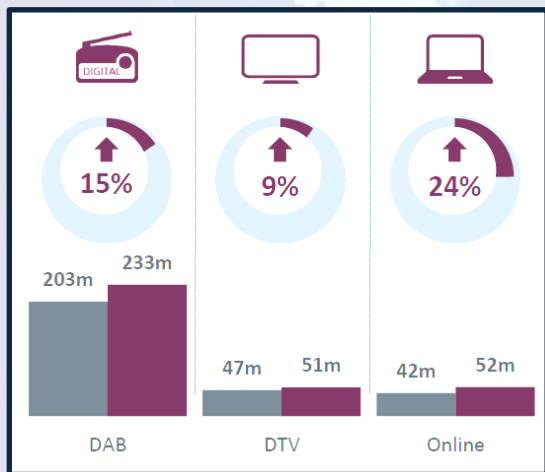
Broadcast Radio Is Still Beating Internet Listening

Source: IAB EUROPE, 2013



Across Europe only **28%** listen to internet radio compared to **64%** who listen to broadcast radio.

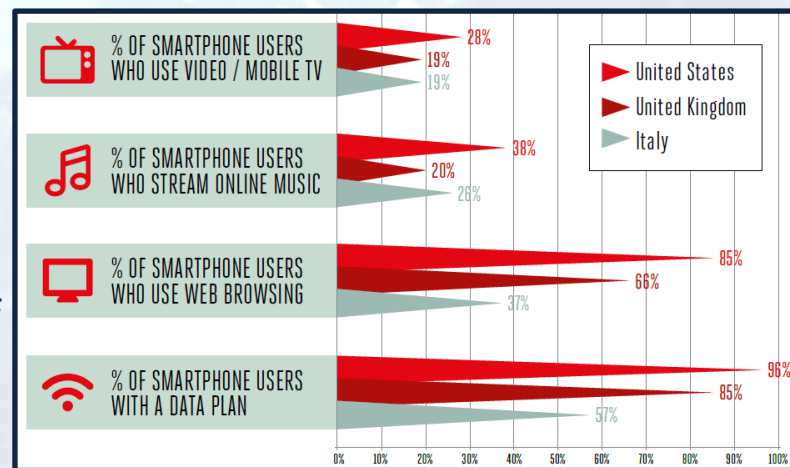
But online listening is increasing



Source: RAJAR, 2013

Online audio listening has grown **24%** in the last year.

Up to **38%** of smartphone users stream music



Source: GSMA, 2013



So, OEMs Are Offering Internet Audio



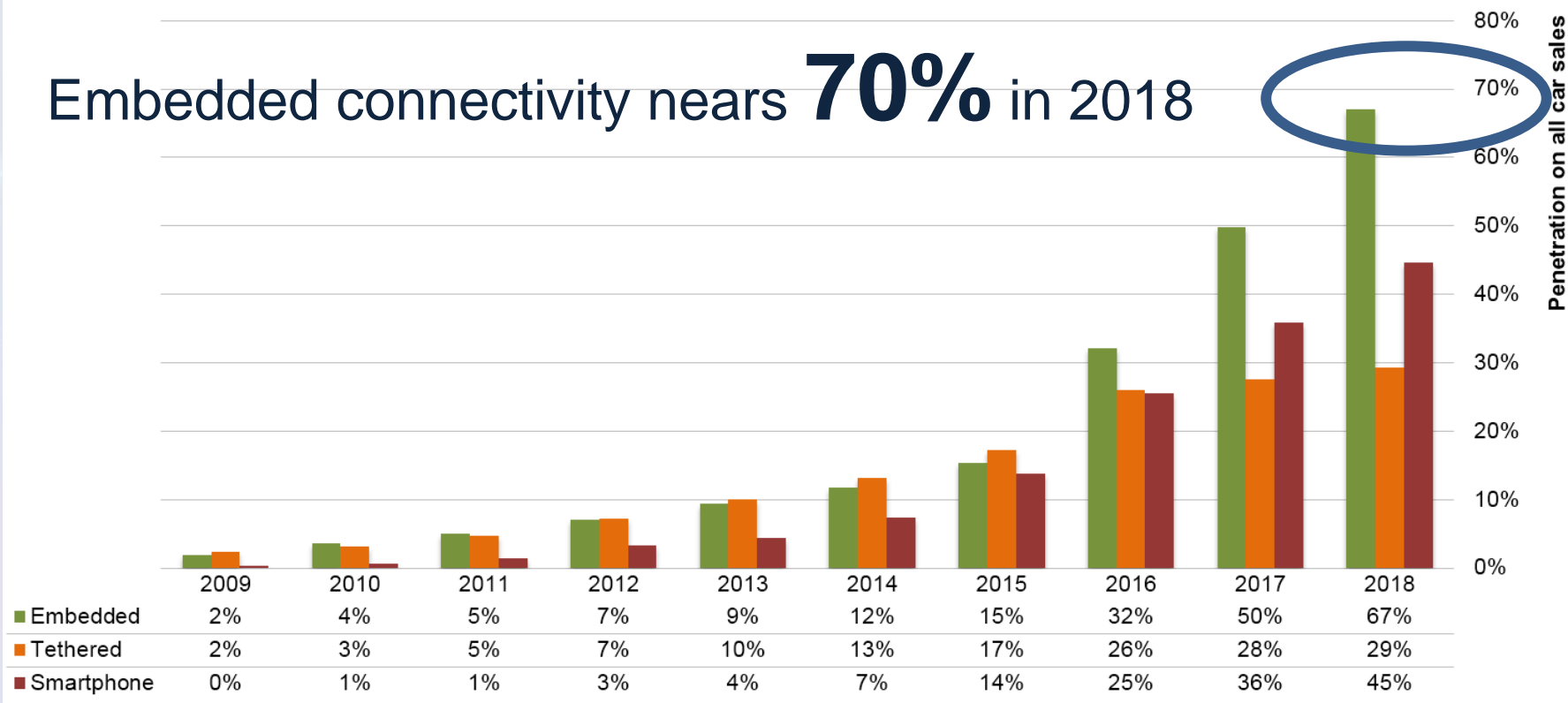
65% of OEMs in Europe offer internet audio apps.

But embedded connectivity has only **10%** penetration.



Internet Connectivity In Vehicles Is Growing

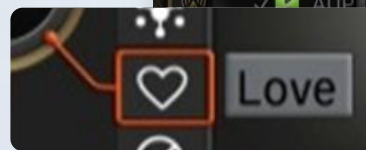
Embedded connectivity nears **70%** in 2018



Connected Vehicle Forecast - W.Europe. Source: SBD, 2013



Internet Audio: Feedback Channel



Huge content choice.

Flexible content filters.

Self-learning content based on user feedback



What Does This Mean For In-Vehicle Radio?

Internet radio usage is increasing.

Vehicle connectivity is increasing.

Will internet audio become the preferred source in car?



Problem #1: User Interface



Latest SBD User Interface Benchmarking Study revealed worrying usability statistics:

43 Seconds - average time taken to navigate to internet audio source.

5 Seconds - best time.

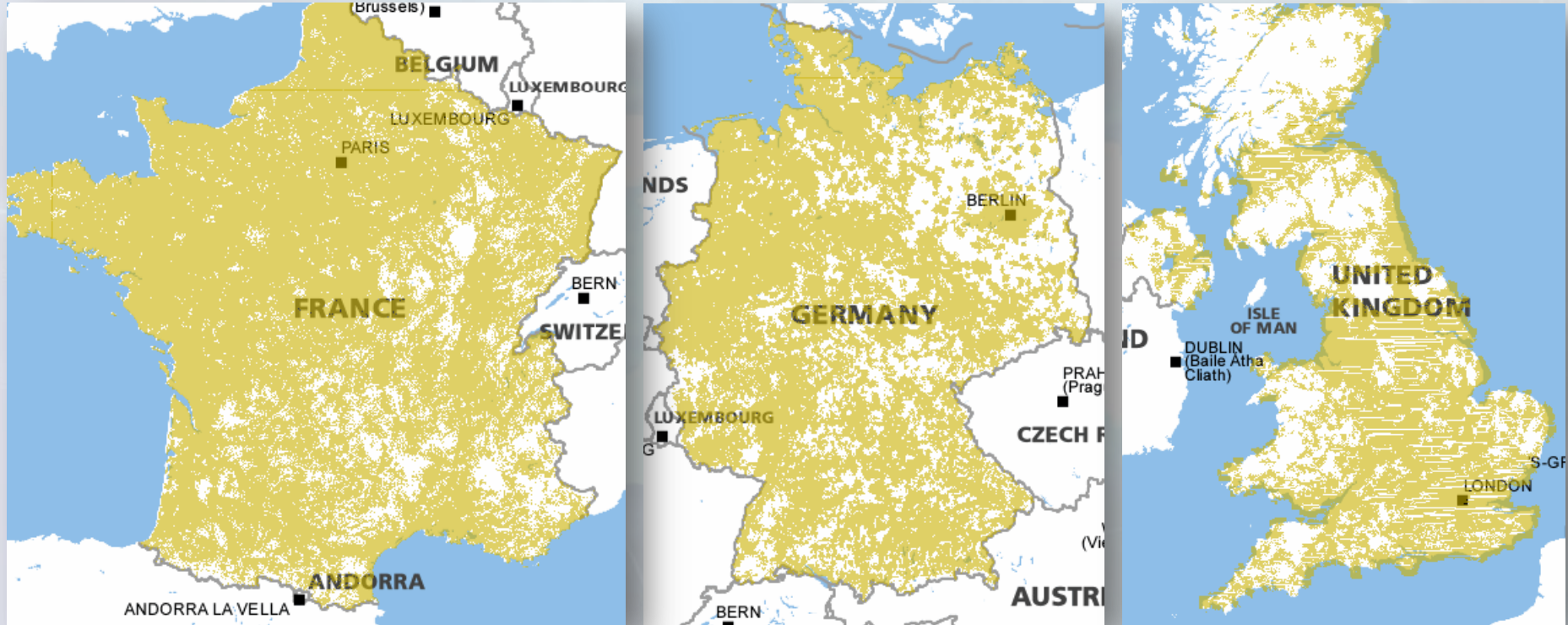
98 Seconds - worst time.

Embedded systems tend to have **best** user interface

Problem #2: Who Pays For The Data?



Problem #3: Mobile Data Coverage



Best available 3G coverage. Source: GSMA, November 2013

Streaming audio requires constant data coverage.

There are **significant gaps** in coverage.

Download services are **less affected** – eg Music On Demand, traffic, weather, news.

OEMs Offering

Connected Traffic & weather:



OEMs Offering

DAB-TPEG Traffic & weather:



Although streamed & on-demand audio services are gaining popularity, listening hours are still a fraction of broadcast listening hours.

OEMs are developing connected audio services and will continue to respond to user adoption.

For traffic, weather, news etc, the trend is for OEMs to offer connected data services rather than data receivers.

Fragmented approach to connectivity & user interface for connected audio will keep broadcast audio as the preferred source in-car for the near future.