

EBU

OPERATING EUROVISION AND EURORADIO

The evolution of Radio Services

Antonio Arcidiacono, EBU

Brussels, November 5th , 2019





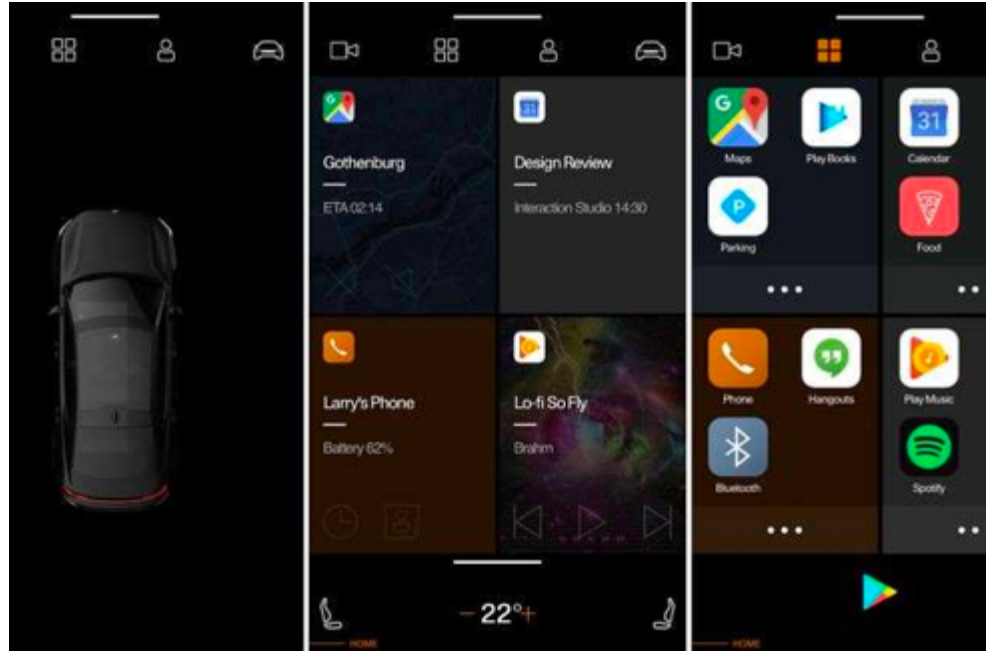
GENEVA MOTOR SHOW 2019

- Big increase in All-Electric Vehicles and alternative mobility
- Voice Control no longer unusual
- RADIO button **disappearing**
- UX still a **major** challenge
- Car usage by subscription
- Bundled data connectivity (4g/5g)
- Less "apps" on the dashboard



POLESTAR 2

- Volvo all-electric spinoff
- **Native Android infotainment system**
- Bundled **lifetime 4g/5g SIM, valid across Europe**
- **Bundled Spotify subscription**
- Very “app-like” experience, “Phone as a key” - **personalization**
- **No prominence for Radio**





BATTLE FOR THE DASHBOARD

- Underlying struggle between automotive manufacturers and platforms (e.g. Google, Apple, Amazon) for who controls access to the dashboard user experience.
- The prizes to be won include the ability to provide **additional services** within a controlled ecosystem, driven by usage data – **data is valuable**.
- Projections that the connected car market [will reach \\$155.9 billion by 2022](#)

Such a competitive landscape could **favor access by the biggest payers**

What is going to happen to **free-to-air** radio ?

Will **subscription** platforms be the winner taking all ?

How would PSM maintain the vital link to audiences ?



WHO ARE THE ACTORS?

Aggregators



XPERI



Platforms



Open Standards





WHY OPEN STANDARDS?

- Open standard => a shared language
 - **Agree on technology, compete on content**
 - **DATA can** be managed and measured;
- Open Standards = **portability** – not locked into a single provider;
- Protect against changing business models – what leverage do you have if your relationships change?
- EBU recommends the use of ETSI/RadioDNS/WorldDAB Open Standards for Digital and Hybrid Radio*

THIS IS ALREADY A GLOBAL SOLUTION



DE: 75%, UK: 92%, FR: 46%, IT: 22%, ES: 87%

AT: 92%, NL, NO, PL, RO

US: > 600 stations, Big support in Australia

Percentage of stations by reach that publish their data using open standards



Andreas Wittke

published 1. February 2018

FM, DAB+ and web: the hybrid radio in the new Audi A8

Imagine you're listening to your favorite on the radio and all of a sudden, the reception is gone – all of this becomes a thing of the past in the Audi A8. Audi blog author Andreas Wittke asked how the triumvirate consisting of FM, DAB+ and web exactly works.



ures of vehicles on this page:
mption in l/100 km: 8,0 – 5,6;
km: 182 – 145. Figures on the
-emissions vary in case of given
combination of wheels/tires. //

Everyday, it takes me about one and a half hour to drive to work. Since I'm not a morning person, I want to drive in a calm atmosphere, but also enjoy listening to the radio a bit. I like to choose radio stations that don't have this insincere happy mood, annoying jingles or stressful music that claim too much power from my sleep-ridden brain. The problem with that? I drive through rural areas in which those particular radio stations don't have any reception. That's not only annoying, but stressful too.

Christian Winter, development engineer radio at Audi



INITIATIVES

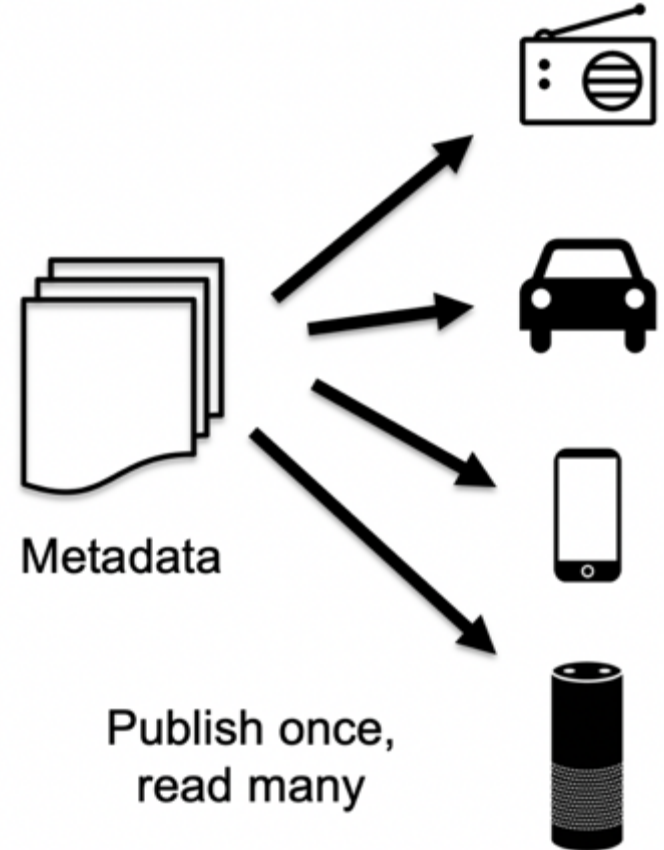


OPEN.RADIO

Promoting and implementing open standards for hybrid radio. Providing services to EBU members and tools to other broadcasters.

Promoting the use of open standards in platforms and by device manufacturers.

Working between members and industry to help improve and extend the existing open standards or create new ones.



TOOL: HYBRID DATA MANAGER



Fully supports RadioDNS Lookup, Service and Programme Information and RadioVIS text and visual feeds.



Automatically manage DNS records; Publish Programme Information and Service Information files; Easily create a simple RadioVIS service.



Deploy as a Docker container either locally or in the cloud. Allows for easy deployment, scaling and maintenance. Designed for 24/7 operation.



Supports multiple organisations running multiple services over multiple bearers (IP streaming, DAB/DAB+, FM, HD Radio).

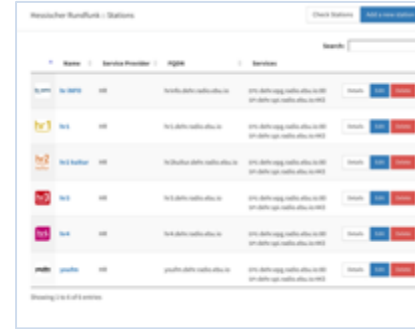


Supports responding with additional, data for clients that provide an identifier (API Key). Can be used for providing higher quality data to select partners and for analytics.



Intelligent handling of organisation and radio service branding. Automatic scaling of station logos, and publishing of logo and branding information.

SERVICES



BRANDING



SCHEDULES



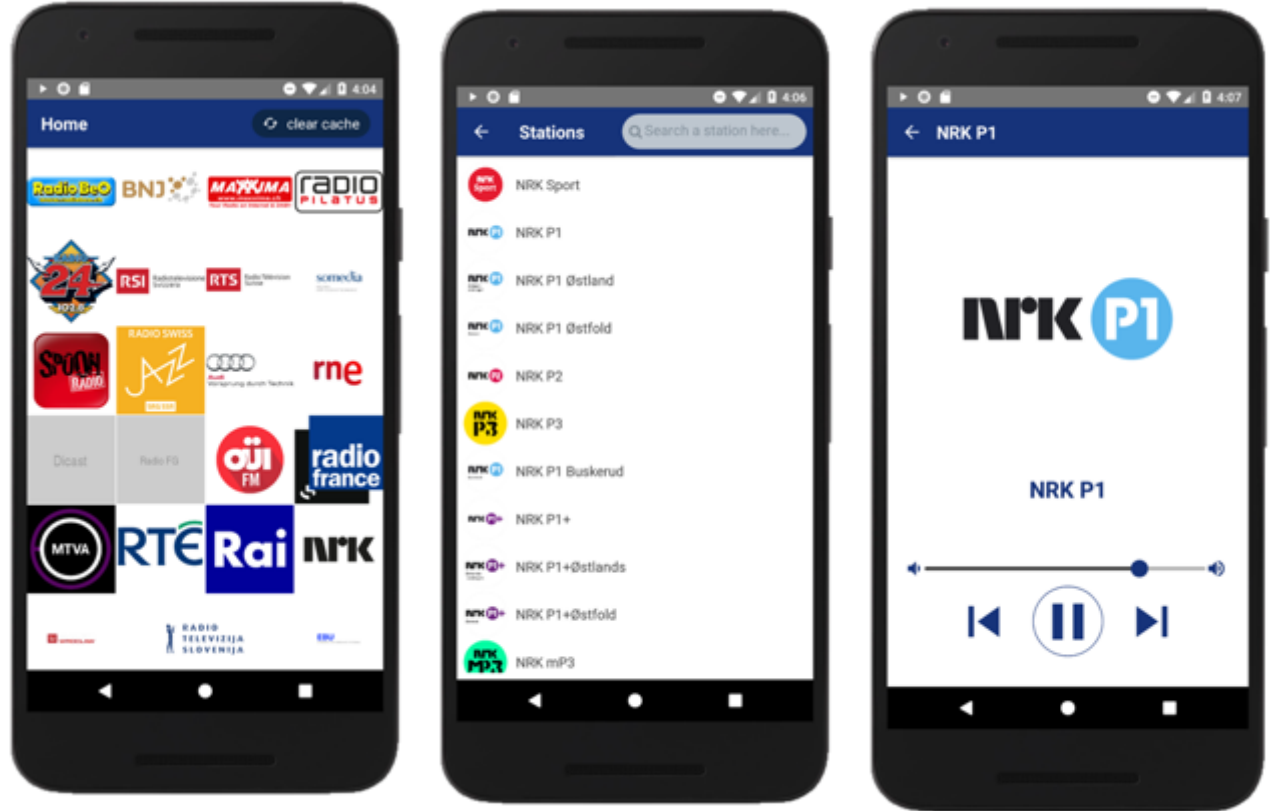
PUBLISH DATA



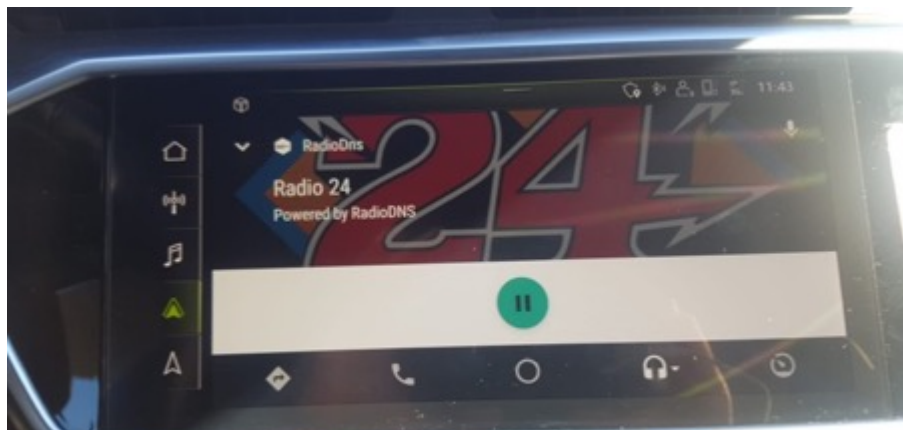
PROTOTYPE: MOBILE DEMONSTRATOR

Demonstration of how openly-standardized data can be used to drive an Android application for mobile listening.

Now released as opensource (free for anyone to download, use, and use as an example).



PROTOTYPE: ANDROID AUTO APPLICATION



PROTOTYPE: VOICE CONTROLLED RADIO

"Alexa,
play Radio
Pop..."

Single Voice Service List –
just ask for a radio station

Automatically chooses best
way to listen: **FM/DAB/IP**

Now playing
Radio Pop



PERSONALIZATION & RECOMMENDATIONS



Services you can use in your own websites, applications, OTT player products:

- **Recommendation engine:** the right content to the right user;
- **Data Scientist Platform:** explore data and craft algorithms;
- **Single Sign-On:** identify users across platforms, pause and resume playback
- **GDPR Manager:** Self-service download/removal of user data

<http://peach.ebu.io>





**“A PSM ECOSYSTEM FOR TRANSCRIPTION
AND TRANSLATION, ALLOWING CITIZENS
EASY ACCESS TO CONTENT IN THEIR
NATIVE LANGUAGE.”**

ACCESSIBILITY FOR AUDIO

- **Transcribing, translating** and **subtitling** of Audio for increased reach to Social Media platforms; Integration with Storyboard for native video?
- Transcription for creating metadata – allowing searchable and taggable audio; Speaker, topic identification; Better searchability on smart speakers;
- Multi-lingual audio services delivered to connected car platforms or mobile apps.





CONCLUSIONS ...





CONCLUSIONS

- Key time for broadcasters to embrace the possibilities with their audio services – especially for the connected car;
- Personalized services: time, content, device, language, accessibility – all opportunities for PSM.
- Broadcasters can stay competitive and lead the market if they collaborate **together**.



SOME CONSIDERATIONS ...

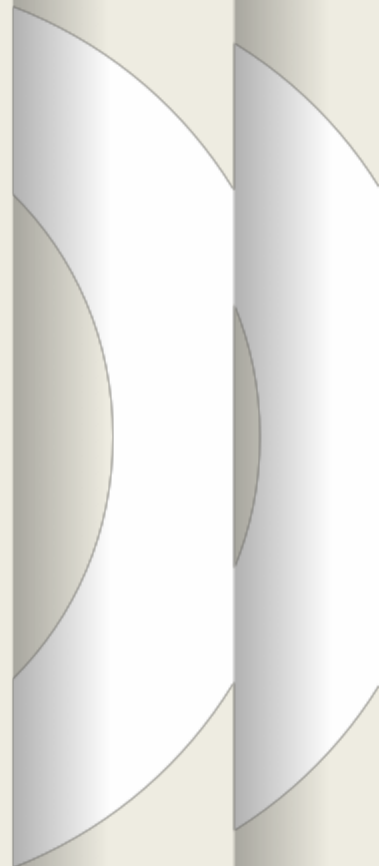
- Talk to your local car manufacturer – they want to hear from, and **collaborate** with broadcasters; They need help to understand better;
- Publish your own Hybrid Radio data – **its easy**, (practically)free, and makes your services look better in connected cars; Or use the free platform available to EBU members;
- Create your own players on different platforms: Android Automotive, Alexa, Apple Carplay, etc...**own your brand**;
- Building together: **PEACH**, **EuroVOX** – driven by **PSM** requirements;
- Align and **collaborate** with your local commercial broadcasters – digital/online lobbying, common radio player platform... a European evolution ...

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MEDIA ACTION GROUP



INFRASTRUCTURES : WHAT'S NEXT

- **Smart infrastructure - use 5G on all networks**
 - including terrestrial and satellite broadcast networks, in addition to mobile
 - for the reasons of physics: use any network / technology for what it does best
 - for economic reasons: maximise reach and impact for minimum investments
 - **the target coverage is 100% population and 100% territory**
- **Ensure that devices are brought to the market that can connect to the smart infrastructure**
 - within the global 5G ecosystem
 - Bringing the critical mass in terms of demand for 5G broadcasting
- **Ensure that the Media Industry can benefit from the smart infrastructure and have access to connected devices with guaranteed quality and zero marginal cost per additional customer**

Aligning the whole media value chain, involving all broadcasters, reach out to other sectors with similar requirements (automotive) and involve regulators and governments.



5G MEDIA ACTION GROUP

5G MEDIA ACTION GROUP (5G-MAG)



5G MAG is a cross-industry initiative with a commercial focus

The key objectives:

- Engage stakeholders in **media, automotive and telecom sectors**, including broadcasters, equipment manufacturers, terrestrial and satellite network operators, ... as well as **regulators and policy makers**.
- Identify and promote common interest of the media and automotive sectors in creating a convergent 5G infrastructure including terrestrial HPHT and satellite, in addition to cellular mobile networks, used in a collaborative way.
- Identify and address the commercial aspects aiming at
 - bringing 5G broadcast enabled equipment to the market, in particular in smartphones and cars
 - fast network rollout to achieve 100% coverage of the territory and the population
- Contribute to technical standardization and engage with the regulators

5G MAG has its own legal identity, funding, and governance

WHAT DO WE EXPECT FROM 5G-MAG?



5G-MAG will take the 3GPP standards and turn them into viable solutions for media companies. This should at least include:

- Ensuring 5G technology meets **the requirements for production and distribution** use cases
- Working to facilitate and **promote trials**
- Helping design networks which are best suited to the distribution of media using a **hybrid 5G / broadcast networks**;
- **Representing media industry** in the various 5G stakeholder groups, e.g. 3GPP and DVB for standardization; CEPT, ITU, EU Commission for regulation ...
- 5G-MAG will leverage on competitive solutions developed and standardized at 3GPP, DVB, ETSI and EBU level
- identify and address the commercial, technical, and regulatory barriers to bringing converged **5G broadcast/multicast/unicast** enabled equipment to the market => **chipset and terminal availability**





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