

The background of the slide is a solid dark blue. On the right side, there is a large graphic consisting of three concentric circles. The innermost circle is dark blue, matching the background. The middle and outermost circles are a vibrant red. The circles are partially cut off by the right edge of the frame.

# EBU

OPERATING EUROVISION AND EURORADIO

## **Hybrid Radio at the EBU**

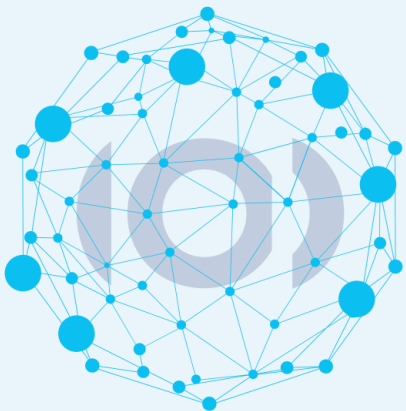
### **A quick look**

February 2021

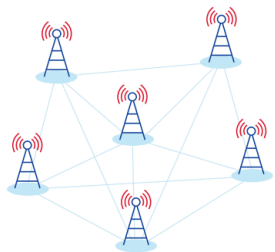
Benjamin Poor

# THE EBU COMMUNITY IN NUMBERS

The European Broadcasting Union  
is the world's leading alliance  
of Public Service Media



## COMPOSED OF



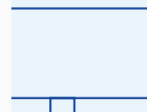
**115**  
MEMBER  
ORGANIZATIONS

IN **56**  
COUNTRIES



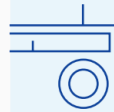
## OPERATING

**493**



TV CHANNELS

**703**



RADIO STATIONS

**593**



LOCAL WINDOWS



ONLINE SIMULCAST  
CHANNELS AND STATIONS

**1323**



EXCLUSIVE ONLINE  
LINEAR SERVICES

**267**

## PROVIDING CONTENT IN



**159**  
LANGUAGES

## TO A POTENTIAL AUDIENCE OF

**1.07**

BILLION PEOPLE





# THE EBU AND RADIODNS

- One of the founding members of RadioDNS
- Involved in the creation of the organisation, its standards and promotion to EBU members and beyond
- Hosted the RadioDNS General Assemblies since the beginning
- Recommends the use of RadioDNS hybrid radio standards to its members
- Creates tools and services for EBU members to help support this recommendation
- Currently a part of the Steering board and Technical Group



**EBU**

OPERATING EUROVISION AND EURORADIO

**R 138**

**DIGITAL RADIO  
DEPLOYMENT  
IN EUROPE**

Version 2.0

Recommendation  
Source: SP-RADIO

Geneva  
November 2017

**“Additional hybrid services be deployed alongside linear radio services to enable a seamless user experience, using RadioDNS (ETSI TS 103 270), the open solution for Hybrid Radio;”**



# WHY OPEN STANDARDS?

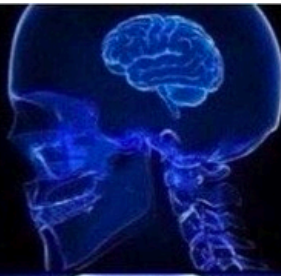
- Open standards are important to our members and the wider industry in order to foster an **interoperable** and **competitive** market
- Proprietary interfaces may rapidly solve an immediate problem and be quicker to change, but they have a reliance on a limited set of vendors
- An open standard, managed in an open and transparent way by a cross-industry body and held by a standards body are more **sustainable**.
- Long term sustainability in technology protects your investment
- Transparency and openness enables the standard to develop in a fair and balanced way
- Interoperability rewards innovation – less resources needed to implement proprietary interfaces can be used to improve functionality or reduce cost



# TOOLS AND SERVICES

- Continuing investment in developing opensource tools for our members and the wider community
- Public presence on **github.com/ebu**
- Internal innersource repositories available for our members
- An ongoing plan to provide more opensource projects across different domains, of use to our members and beyond as part of a pipeline of projects

**BEST**



**PROJECT LOGO  
LOGOS, ALL BEARERS**

**BETTER**



**+ APPS THAT USE THEM!  
+ VOICE/MOBILE/CARS**

**BETTERER**



**+ SCHEDULES/VISUALS  
+ ON-DEMAND/PODCASTS  
+ GEOLOCATION**

**MOST  
BETTERER**



**+ DYNAMIC ONAIR INFORMATION  
+ DEEP INTEGRATION  
+ TAGGING**



# RADIODNS MANAGER

**EBU**

OPERATING EUROVISION AND EURORADIO



Benjamin ▾

## RADIODNS

[My Stations](#)

[My Channels](#)

[My Clients](#)

[Service Provider](#)

## SERVICE & PROGRAM INFO

[Logo Image Repository](#)

[Station Logos](#)

[Service following](#)

[Calendar & Schedule \(EPG\)](#)

## RADIOVIS SLIDESHOW

[SlideShow Image Repository](#)





[RadioVIS Channel Images](#)

SRG-RTS :: Stations

Check Stations

Add a new station

Search:

	Name	Service Provider	FQDN	Services	
	Couleur3	RTS	couleur3.chrts.radio.ebu.io	VIS chrts.vis.radio.ebu.io:61613 EPG chrts.epg.radio.ebu.io:80 SPI chrts.spi.radio.ebu.io:443	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Espace 2	RTS	espace2.chrts.radio.ebu.io	VIS chrts.vis.radio.ebu.io:61613 EPG chrts.epg.radio.ebu.io:80 SPI chrts.spi.radio.ebu.io:443	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Option Musique	RTS	optionmusique.chrts.radio.ebu.io	VIS chrts.vis.radio.ebu.io:61613 EPG chrts.epg.radio.ebu.io:80 SPI chrts.spi.radio.ebu.io:443	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Delete</a>
	RTS-1ERE	RTS	rts1ere.chrts.radio.ebu.io	VIS chrts.vis.radio.ebu.io:61613 EPG chrts.epg.radio.ebu.io:80 SPI chrts.spi.radio.ebu.io:443	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 4 of 4 entries



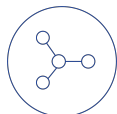
# FEATURES



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.



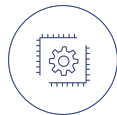
Deploy as a Docker container either locally or in the cloud. Allows for easy deployment, scaling and maintenance. Designed for 24/7 operation.



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.

# AT A GLANCE...

## SERVICES

Name	Service Provider	FQDN	Services
hr1	hr1	hr1.dns.radiovis.co.uk	hr1
hr2	hr2	hr2.dns.radiovis.co.uk	hr2
hr3	hr3	hr3.dns.radiovis.co.uk	hr3
hr4	hr4	hr4.dns.radiovis.co.uk	hr4

## BRANDING

Name	Service Provider	FQDN	Services
hr1	hr1	hr1.dns.radiovis.co.uk	hr1
hr2	hr2	hr2.dns.radiovis.co.uk	hr2
hr3	hr3	hr3.dns.radiovis.co.uk	hr3
hr4	hr4	hr4.dns.radiovis.co.uk	hr4

## SCHEDULES

Calendar	Shows
hr1	hr1
hr2	hr2
hr3	hr3
hr4	hr4

## PUBLISH DATA

Name	Service Provider	FQDN	Services
hr1	hr1	hr1.dns.radiovis.co.uk	hr1
hr2	hr2	hr2.dns.radiovis.co.uk	hr2
hr3	hr3	hr3.dns.radiovis.co.uk	hr3
hr4	hr4	hr4.dns.radiovis.co.uk	hr4

Download and try for yourself at:  
[github.com/ebu/radiodns-manager](https://github.com/ebu/radiodns-manager)



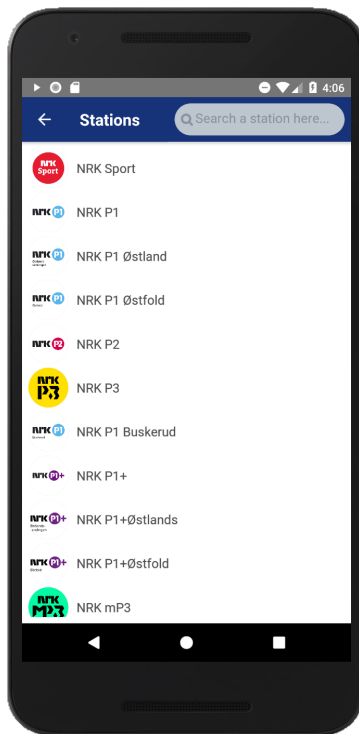
# KEY FEATURES

- Easily manage station details and schedules and publish SPI data
- Manage separate organisations
- Create and manage users and their authentication
- Logo management and automatic resizing
- Simple embedded RadioVIS service with logo sending, able to be used by an external slide content manager
- Client ID support – supply additional responses based on predefined ID
- Available as a docker image, or compile and run from source
- New version to be released soon built upon more standard frameworks

Available at: <https://github.com/ebu/radiodns-manager>



# MOBILE APP DEMONSTRATOR





# KEY FEATURES

- Simple mobile app to demonstrate the use of Openly-Standardized Hybrid Data. Developed in a week.
- Select an organization and listen online to any of their services on Android and iPhones.
- Works with Android Automotive
- Driven from data hosted within the EBU RadioDNS manager instance

Available at: <https://github.com/ebu/radiodns-mobile-demo>



## OTHER WORK

- Other projects relating to RadioVIS, used for creating and sending content relating to sports events
- Tools for integrating RadioDNS hybrid metadata with other systems and workflows
- Ongoing development possibilities for the RadioDNS manager and mobile application
- Long time use of the CPA specification (part of the proposed RadioTAG specification) as part of the EBU PEACH project



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