



## GA17/08 – Minutes of the 17th RadioDNS General Assembly

15th February 2023, 14:00 – 16:30 (UTC)

### Agenda

14:00	<p><b>Welcome</b>  <b>Welcome</b> and round-table introductions from David Layer, Chair and Nick Piggott, Project Director</p> <p>NP introduced the meeting and DL  DL thanked the board, said he was stepping down as chair but will still hopefully remain on the board and also thanked Nick Piggott. DL highlighted the importance of RadioDNS within the hybrid radio ecosystem and the work that is needed in the future, including working with companies like Xperi to discover changes that can be made to make using RadioDNS more useful, also to reach out to other organisations and identify how they use RadioDNS data and what improvements can be made. DL also said he is proud of the work the TG has done in the past year, particularly with dynamic metadata.</p>
14:15	<p><b>Members' Business</b>  Ben Poor, Secretary</p> <p>BP took us through the following voting, including detailing the accounts for 2022. Members voted online and approved the <a href="#">Minutes of the 16th General Assembly</a> as well as the 2022 Accounts</p>
14:30	<p><b>RadioDNS in 2022</b>  Nick Piggott, Project Director, Ben Poor, Technical Group Chair, Andy Buckingham, System Administrator and Rosie Kendrick, Project Coordinator</p> <p>Above presented RadioDNS achievements in 2022 and members voted to approve the 2022 Steering Board Decisions.</p> <p>NP and RK talked about education:</p> <ul style="list-style-type: none"> <li>- Review of events we have attended, marketing, press releases, emails and social media.</li> <li>- NP reminded all attendees there is always an uptodate deck available</li> </ul>

online that you can use if you are introducing people to RadioDNS it is up to date and can help.

- Coverage - there have been more countries added to our coverage.
- NP talked about Mastodon and twitter and how the similarities of Mastodon to RadioDNS, Mastodon being a technical standard built on a fediverse, users join one of many universes but get to see what is posted by everyone on every server - functionally the same as Twitter, but if you don't like the way your server is being run, you can move. More info at [joinmastodon.org](http://joinmastodon.org)

BP, as head of Technical Group, gave an update on the past year of activity from and reminded us that the Technical group is only open to members and all must agree to the RadioDNS IPR policy:

- In 2022 the TG met 6 times and worked on many projects including realtime metadata pushed from a broadcaster to device or platform and extends on the already existing static metadata. He added a principle of RadioDNS standards is to look at what already works well and make it easy for people to implement, so this uses JSON markup and looks like DL+.
- Targeted audio into broadcast, targeting a listener or location with content, delivered over IP, there is an existing paper prototype but needs real world prototyping. RTBF have completed proof of concept and this project is ongoing.
- Analytics and tagging: pursued a stand alone analytics standard, but the consumer facing proposition is similar to tagging, so merged the 2. Functionality for both is very similar in the kind of data that is interchanged and now has a user benefit. As a broadcaster responding to requests there is access to some analytics now and RadioDNS offers a tutorial.
- Listener log in: Linking user with an identity to allow for personalisation. Moving away from CPA to OAuth2 as it is more stable.
- There was a minor update to add signalling to MPEG DASH and HLS streaming formats.
- New ETSI standard TS 101 499 is out soon.

Andy Buckingham's update included:

- DNS servers: DNS functionality, using a local ISP or internet provider, makes the uptime target of 100% possible and we turn around new requests in one day.
- We have global host locations, so if one location fails we still have multiple locations that can continue to host. This also makes scaling up easier and effective.
- In 2022 we looked at the quality of data within RadioDNS; to get the SI file for each registration attempt and check the bearers have relevant records in RadioDNS, then checking the other way around, ensuring every entry points back to an SI file. All SRV records are valid and pointed to the server when we make a request. Improvement seen between 2021-22 due to working with broadcasters on the quality of their data.
- AB reminded the attendees to keep DNS records up to date and notify of any bearer changes - it isn't necessary for all changes, but crucial the bearer changes are up to date. 2022 has seen a lot of automating this procedure, we can make changes quickly and get synchronised.
- Our software resources are at [Github.com/radiodns](https://github.com/radiodns) and currently there is lots of information on SI files with plans to add more functionality, we welcome any ideas for a tool that is needed.
- In 2020 RadioDNS launched a testing platform for server implementation. Updated in 2022, it has been used by a lot of members who have given excellent feedback. All testtools are at [test.radiodns.org](http://test.radiodns.org) but users must have an email address linked to a member organisation. Any problems - [feedback@radiodns.org](mailto:feedback@radiodns.org)

	<p>NP gave an update on members, we had 33 and now have 30, due to mergers and others leaving. He thanked the current members for their continued support despite financial change and explained membership analysis both globally and by type of organisation. New countries added this year are Greece (via Radioplayer), Latvia and Albania</p> <p>NP gave information on root DNS queries: we handle about 2.5million queries, we don't look at them in detail, just originating IPs of chases. We now have logging but didn't last year so we are unable to give a comparison but will be able to in the future.</p> <p>Remo Vogel (RBB) asked about HBBTV but it was agreed this should be part of a more general discussion rather than part of the General Assembly.</p> <p>Nacho Seirul-Lo Salas asked if 2.5 million requests a day is close to capacity. NP replied that we have current capacity for 30-40 million per day and as we are cloud based it isn't costly to deliver even more than that.</p>
15:00	<p><b>Steering Board 2023/2024 Election</b></p> <p>NP explained the way the steering board will be voted for as it is slightly more complex than usual. As no one has stood for Chair, an acting Chair will be decided upon by the Steering Board in the next meeting.</p> <p><b>Members voted, and the Steering Board for 2023/2024 is:</b>  Laurence Harrison, Radioplayer  Bob Heads, Frontier  David Layer, NAB  Badri Munipalla, NPR  Ben Poor, EBU  Michael Reichert, ARD  Nacho Seirul-Lo Salas  Dave Walters, BBC  Christian Winter, Cariad  John Vermeer, iHeart</p>

15:20

## RadioDNS: Supporting IP Only Devices

Discussion on the resolution to support IP-only devices.

See paper: [GA17/04 - RadioDNS: Supporting IP-only radio devices](#)

NP - introduced the paper, saying it is not a change of focus but we have seen an opportunity to make what we do more valuable for everybody. RadioDNS holds mapping info between broadcast radio and FQDNs to devices but this doesn't work if the device is IP only. You can brute force and attack our server to get this information, so FQDNs are not hidden. The purpose of our standards is to allow up to date flow of metadata and we see this is working for hybrid radio devices, but IP only devices have to go through non standard routes to keep the information up to date which seems inefficient.

We have proposed to specify the kind of people we would want to support access to the FQDN list - bona fide manufacturers or their technology providers. We would provide a list of agreed FQDNs of all of those broadcasters who have agreed and no one is opted in automatically, broadcasters must agree. Our standards will apply throughout the process.

There will be procedures to ensure safety such as policy control over who can access the FQDN list, when an application will be circulated to members and there will be a written agreement between RadioDNS and the service user. New RadioDNS users will be able to opt out of providing their FQDNs. If 25% or more of the members who are broadcasters - ie providing content - have a concern, the request for their FQDNs will be diverted to the Steering Board. Plus, members are also able to say their FQDNs are not to be shared with specific organisations, non members do not have that control, they will either be listed to all or not listed. Additionally we can use multiple FQDNs from service providers, some could be listed and some not.

A further control is implementing ClientID where you can control what users get on a service by service basis. We recommend that if ClientID isn't being used the basic metadata is still provided (logo, name and broadcast information) ClientID requires you to make an agreement with all users of data beyond a certain level and where that level is. These agreements are important and not necessarily cumbersome. Our Standard Metadata Terms of Use is a starting point for acceptable use. Alongside managing FQDN list we will also manage the Client ID.

Benefits are that the standard interface will encompass ALL connected devices, so you get more value and need not worry about metadata getting out of sync, as long as your RadioDNS metadata is right and you know who is using it, you will know it is right on all platforms. We do recognise that there are broadcasters who don't want to support connected or IP only devices in the same way they support hybrid devices. We hope that we have provided enough opt outs for those people.

This has been discussed in depth by the Board and put forward that the members vote in favour, the plan was to vote at this meeting, but we have heard back from members that they need more time in order to put forward a view, so this vote will be deferred until 18th April at the next Steering Board meeting.

Laurence Harrison (Radioplayer) said it was Radioplayer who requested the additional time as they wanted to speak to countries and territories about the proposal and the details and as there was no time pressure it felt right to request a delay. Feedback was that there was a concern about RadioDNS being about hybrid radio and where the data is going. Second query was on the details on the proposal like opt outs and how the list is managed, third query was about Radioplayer as a service provider and how they can ensure a broadcaster can have control over their data and choose to partner with organisations.

Bob Heads (Frontier) said Frontier are in favour, saying as an organisation this is a golden opportunity for broadcasters to ensure devices that have a legitimate reason to access metadata can. As a manufacturer more and more broadcasters use RadioDNS as the default method to get streaming URLs and if we include this we can be the place where we join these things together, devices with the rights can get the info they need from one central place, if we make this the de facto way of building this system.

Nicholas Bresou (MaRadio) asked a question regarding policy control, NP replied that RadioDNS is used to creating policy and applying it. The options will be clear and will be opening a dialogue rather than an opt in on the website with the ambition that a reasonable level (ie 10s) of requests would be handled this way and RadioDNS wouldn't be overwhelmed, however the criteria set will be re-examined. RadioDNS has the contact details of all users and will formalise a customer contact database.

Walter Huijten (NPO) said it would be useful to broadcasters to write up a document to detail granularity. NP replied these conversations help us with what to write in the documents, Walter replied there are probably a lot of use cases that can explain how this aim can be accomplished. NP said we can draw this up in the next couple of weeks, we would like to receive questions and will put into FAQ/guideline documents.

Christian Winter (Cariad) said he supports the change, not every device manufacturer has the luxury of a million cars driving round and although Cariad doesn't need this change he sees the scope of RadioDNS changing will mean that metadata is used by different manufacturers or apps which leads to more uptake on all sides and better products. The radio stations will understand how important it is to have correct metadata in one place.

NP asked if there are any organisations that might want to use this and asked Fergus Mellon from TuneIn if they were in favour of this change. Fergus said they support this in a similar way to Frontier; this will allow broadcast partners and device partners to benefit from cleaner connections especially when working with device partners who don't already have a hybrid set up .

NP said we want there to be consensus from the members, and asked for members to get in touch with any comments or questions.

15:50

## RadioDNS in 2023

NP outlined the education planned for 2023 with events and social media. Nick added that our coverage map needs updating regularly, if you can provide your listening figures that would help a lot.

There will be RadioDNS presence at Radiodays, NAB Radioshow, AutoTech Detroit, ABU Digital Radio Symposium, WorldDAB General Assembly and CES, hopefully on the show floor or at a fringe event, not just meeting with others exhibiting there.

The challenge has been that people want to demonstrate RadioDNS, but almost all devices are in-vehicle so there are now 2 demo systems that can be used. AB talked about the work done with Konsole to build an off the shelf demo car head unit with FM and a USB port for a DAB USB stick. It runs an android operating system that will allow navigation of stations in a list with their logos and identify the signal is DAB/FM/IP. Logos, programme info and service info will be visible. All the info is on Github to take off the shelf components and create a RadioDNS device to work with and play with.

The plan for 2023 is to produce a web based version of this demo. Tuners and radio devices will be missing, so there is the option to configure bearers, FDQN or SI file and then it will populate the service. This is in development now and will be behind the members login on the testing site. The ambition is to use this with push transport and as a great way of finding issues early on before they manifest themselves to listeners. All information will be on Github.

NP reminded the members that the Steering Board is here to serve the members, oversee plans and the project office and they are there for members to go to should they need.

Ambition for 2023 is that RadioDNS continues with 100% uptime and one day turnaround, to update the SI construction tool to see more realistically how metadata and content is presented with a better interface on it.

The Technical Group will continue with analytics and tagging, provide a working prototype for TAB as well as update and provide a proof of concept for FM, produce guidelines for listener logging.

NP asked for questions and comments as well as input on future projects for RadioDNS. Over the next year there will be more engagement with service providers and technology providers, listening to why RadDNS isn't working for them in order to make the community bigger and better.

There was a discussion on the next year for RadioDNS including David Layer (NAB) adding that exhibiting at CES 2024 would be a positive move as there were a lot of Automotive manufacturers there in 2023. Ben Poor (EBU) asked about an in-person GA next year NP replied that we will look at and understand from members if this could be an option as RadioDNS does see the benefit in this.

Members voted to approve the plans for 2023.

Nick thanked David Layer for being Steering Board Chair for the past 2 terms and thanked all the members before closing the meeting.