



RDNS02

Administration and Governance

v0.6.1 (2009-06-15)

All contributions and comments
should be sent to feedback@radiodns.org

**This document is still a work in progress and
is regularly being updated. Please ensure you have
the latest revision available from <http://radiodns.org/>**

Table of contents

Table of contents.....	2
Administration and Governance.....	3
Equivalent Organisations.....	4
Administration.....	4
Veracity of Information.....	4
Operation of RadioDNS.....	6
RadioDNS as a Separate Entity.....	6
Next Steps.....	7

Administration and Governance

RadioDNS is a technology process which standardises the lookup of an Internet domain name from standard meta-data broadcast on a variety of different radio broadcast systems. This is explained in the separate Technical Specification document. (RDNS01).

The proposed method suggests using a unique domain name (“**radiodns.org**”) to generate a globally unique namespace for lookups, and to allow those lookups to use the existing DNS (Domain Name Service) infrastructure.

There are a number of process and governance issues that arise from an aspiration to provide a globally usable system such as this:

- Who will ensure that the service is available globally and on an equitable basis to all radio broadcasters, given differences in available finance and scale?
- Who will ensure the veracity of the radio broadcasters wishing to use the service, and the configurations that they request for RadioDNS lookups?
- How will physical infrastructure be specified and financed?
- How will operating costs be decided and financed?
- Who will be responsible for the technical maintenance of the RadioDNS services and specification?

The right structure should address all of these issues, and must be in place to allow for broadcasters and manufacturers to commit to using the service.

It is important to note that the “**radiodns.org**” domain used in the technical document is purely indicative. The domain has been registered as a protective move by one of the project team, on a clear understanding that the domain will be transferred, if required, to the nominated body at cost only (approximately US\$10).

Equivalent Organisations

When considering the potential structure of such an organisation, it is useful to look at similar organisations providing similar services. IETF, EBU, ETSI, ITU etc.

One of the options may be to establish a new governance body, specifically to regulate RadioDNS. This governance body would own the relevant domain (“**radiodns.org**”) and operate using the existing DNS / domain ownership structure.

Administration

The administrative requirements of the service are twofold:

- Ensuring the veracity of the information entered to the RadioDNS servers
- Business administrative tasks; accounting, meeting arrangements, promotion/education

Veracity of Information

The veracity of the information in RadioDNS is of paramount importance. RadioDNS will be acting as a trusted root, and therefore every measure must be in place to ensure the authenticity of the data and its provider. It is essential that a domain lookup could not be tainted, intentionally or unintentionally, by a third party to divert services from the device to them and not the genuine broadcaster.

As RadioDNS operates on meta-data transmitted by the broadcaster, it is important to understand where this meta-data is derived from, and how its consistent use is enforced in the broadcasting environment. There is a fundamental assumption that this meta-data is trusted and regulated in the broadcasting environment, and that this trust and regulation can be used as the basis of extending the trust chain through RadioDNS.

In the traditional broadcast environment (VHF/FM, DAB, DRM/AMSS, HD Radio), this regulation is usually provided by government mandated regulators, who issue the appropriate service codes and are empowered to enforce their correct usage. The structure of a RadioDNS query allows for delegation to national regulatory agencies, who could be provided with the ability to manage the configurations for broadcasters in their regulatory domain. However, there remains a question

about whether national regulators would accept this additional responsibility, and it may be applicable only on a case-by-case basis. In any event, the structure of RadioDNS would have to have a clear procedure through which to identify the responsible agency in each country, and establish a verification procedure with that agency prior to offering RadioDNS services to broadcasters in that country.

The preferred approach is to elect for delegation to national regulatory bodies, who would be given appropriate administrative tools to directly access to the RadioDNS lookup tables, and manage them.

In the event of a national regulator refusing to directly administer for their territory, it would be expected for the regulator to provide an authoritative source of information against which RadioDNS own administrator could verify requests received from radio stations in that territory. Alternatively, the regulator could commit to answering requests for verification from the administrator in a timely manner.

In the event that the regulatory body is not prepared to either directly administer the domain, nor provide an authoritative source, or in the absence of a nationally mandated regulatory agency, then it may not be possible to provide RadioDNS services to radio stations in that territory.

Operation of RadioDNS

The operation of RadioDNS will incur costs, and there must be a fair and equitable method of distributing those costs between the users of RadioDNS.

The areas of expenditure are:

- Physical infrastructure – capital expenditure – servers to host RadioDNS and to respond to queries from users
- Infrastructure operating costs – power, connectivity, maintenance on the servers
- Administrative – managing delegation requests or configuration changes. Accounting and legal requirements, arranging meetings, communicating with members.
- Promotion of the service, helpdesk / education functions. Press / PR enquiries.
- Management – strategic direction and ensuring that the governing principles of RadioDNS are being adhered to.

In the event that the operation of RadioDNS can be delegated to a body such as IETF or ETSI, some or all of these costs may be absorbed by that body and recouped through their existing revenue streams coupled with an incremental stream from handling RadioDNS entries.

RadioDNS as a Separate Entity

In the event that RadioDNS cannot be readily included in the existing operations of a similar body, it may be necessary to establish RadioDNS in its own right.

The proposal is that RadioDNS would be operated on a not-for-profit/trust basis, established against a set of statutes that ensure the fair, equitable and non-preferential access to the service, and establish the procedure for verifying the authenticity of radio stations. The day-to-day administration of the organisation would follow these statutes.

The management of RadioDNS, and ensuring that the statutes are being followed, would be through elected trustees, formed of representatives from broadcasters using RadioDNS. There would be periodic meetings and elections from the membership.

RadioDNS could recoup its costs through fees charged for each radio service using RadioDNS – similar to the registration costs of a domain.

The financing of RadioDNS as a separate entity would have a different cost structure than if it were absorbed by an existing body, but the same elements would be involved.

Next Steps

There are a number of options to establish RadioDNS with the stability and trustworthiness expected by manufacturers and broadcasters.

- Establish contact with IETF, ETSI, EBU etc. to get their initial thoughts on supporting RadioDNS functionality within their existing frameworks.
- Establish contact with a small number of national regulators to get their initial feedback on managing delegated RadioDNS entries.
- Take legal advice on the proposed approach
- Establish indicative costs for the operation of RadioDNS

Expressions of interest from broadcasters and manufacturers in the RadioDNS concept are helpful in catalysing these conversations.