Comments
This is the final version of this document.

Following legal advice, we will develop a standard licence based on the principles in this document that any broadcaster can use. Alternatively, a broadcaster can offer their own licence, but confirm that it's compatible with our standard licence.

We've also made it clearer that the purpose of this process is to avoid broadcasters and manufacturers having to sign licences and do paperwork.

Summary
If the answer to the following two questions is YES, a manufacturer can use the metadata and content knowing that the broadcaster will agree to that use:

- Is the device using metadata and content in ways described in the proposed licence?
- Is the broadcaster offering the proposed RadioDNS licence?
  or
  Is the broadcaster's own licence compatible with the proposed RadioDNS licence?
Introduction

Broadcasters and manufacturers have a mutual interest in improving the broadcast radio listening experience. RadioDNS offers a technical means to accomplish this.

This is our proposal for a standard licence based on a consensus of certain uses of metadata and content distributed using the RadioDNS standards. All broadcasters and manufacturers can refer to the same licence, in a similar way to the concept of Creative Commons licences.

The licence would describe a radio broadcast device with an IP-connection where the manufacturer wants to enrich free to air broadcasts with additional metadata and content provided by the broadcasters.

This licence would not affect other uses of metadata and content - it neither prohibits nor allows them.

These example scenarios explain what is and isn't covered by the proposed licence.

Example 1 - Covered by the proposed Licence
A radio device has an FM mode, a DAB mode and an IP Radio mode. Metadata and Content is received via broadcast and/or IP using RadioDNS’ standards, and provided to the user on the radio device or a device attached to the radio device. If the radio device combines broadcast and IP systems behind one user interface, the proposed licence would apply.

Example 2 - Not covered by the proposed Licence
A website acquires metadata and content from broadcasters using the RadioDNS standards and aggregates it into a single list. The user browses a list of stations created by searching or accessing the aggregated list, on a device with no broadcast radio functionality, so can only use IP to access the Metadata and Content. This use case is not covered by the proposed licence.

Overview of proposed Licence terms
1. Metadata and content should be used to improve the radio experience for a listener using a broadcast radio device
2. Metadata and content should be presented to end-users accurately, as intended, and not modified;
3. Broadcast and streaming should be used correctly
4. Personalised metadata and content should not be prevented from reaching users
5. Broadcasters and manufacturers should follow the Implementation Guidelines
Proposed Licence terms

This is not the final wording of the proposed licence, only the principles which will be used to create the final legal wording.

1. Metadata and content should be used to improve the radio experience for a listener using a broadcast radio device

Broadcasters
- **Use:** You allow your metadata and content to be used to enhance broadcast radio as described in the Licence
- **Agreement:** If you are offering your metadata and content, you should include a link to the RadioDNS proposed licence in your metadata. If you offer your own licence, you must indicate that it's compatible with the RadioDNS proposed licence.

Manufacturers
- **Use:** Only use metadata and content to improve the functionality, look and feel of broadcast radio. You can do this on the device directly or on a device (such as a smartphone) paired with the broadcast radio device.
- **End-user use:** Don't resell or provide the metadata or content to anyone other than end-users.
- **Check:** that the broadcaster is either referring to the proposed RadioDNS licence, or has confirmed that their licence is compatible with the proposed RadioDNS licence.

2. Metadata and Content should be accurately presented to end-users

Broadcasters
- **Content:** Metadata and content will be authored according the technical specification, accurate and high quality.
- **Caching:** Use the mechanisms specified in the technical standards to set caching times for content, and set these times according to the Implementation Guidelines.
- **Data use:** Minimise the bandwidth and data volume required to transfer the metadata and content, and stay within the Implementation Guidelines.

Manufacturers
- **Cached Content:** Don't display, use or store content beyond the cache time specified by the broadcaster.
- **Content Previews:** It's OK for the device to provide previews of content in a truncated form, as long as there is an obvious way for the end user to access the original version.
- **Expired Content:** You may use an appropriate system to show a user that the previously available metadata or content has been removed due to expiry, rather than due to a system failure, but don't show the expired content.
3. Broadcast and streaming should be used correctly.

Broadcasters
- **Automatic switching:** If you are providing bearer information to enable automatic switching between broadcast and IP streaming:
  - provide time offset information for bearers, and minimise the overall delay across all bearers in line with the Implementation Guidelines
  - don't include pre-roll audio, or time-stretch/crunch your IP streams, and match audio levels and sound quality to broadcast as closely as possible.

Manufacturers
- **Costs:** Be mindful that streaming can lead to costs for broadcasters and users. When automatically selecting bearers:
  - Respect the broadcaster's preference for order of bearer use.
  - If you lose a broadcast signal, try broadcast linking options before using streaming audio.
  - Don't assume that certain types of IP connection (e.g. WiFi) will be cheaper for the user than other types (e.g. cellular/mobile networks)
  - Don't switch a user to streaming without their knowledge/consent
  - Minimise the time spent connected to streaming, as it costs broadcasters money in bandwidth and music royalty payments.
- **Sources:** It should be easy for the user to see if they are using broadcast or streaming to receive radio, so they understand why reception problems are happening
- **Streaming URLs:** Don't disclose the URLs provided for streaming audio.

4. Don't prevent personalised metadata and content from reaching users

Broadcasters
- If you want your listeners to be able to log-in or use RadioTAG, implement the Cross Platform Authentication standard.
- Provide accurate, relevant and useful information in response to all tag requests.
- You may refuse to respond to a specific user if you consider their use to be excessive.

Manufacturers
- Don't aggregate audio streams or requests for visual content, because it stops personalised content being sent to end-users.
- If you want your users to be able to log-in to their radio station, implement the Cross Platform Authentication standard.
- Only send RadioTAG requests that have originated from an end-user, and don't aggregate tag requests or responses from individual end-users.
5. Implementation Guidelines

These implementation guidelines exist mainly to protect users from excessive IP data use (which might cost them money), or to prevent users seeing metadata or content that's incorrect because it's out of date. The caching mechanisms are described in the relevant standards (TS 102 818, TS 101 499).

Broadcasters

- Metadata defined in the SPI SI document should normally be set cacheable for 720 hours (30 days).
- Metadata defined in the SPI PI document should normally be set cacheable for 12 hours for the current day document, and 1 day for all other PI documents.
- If provided, PI documents should be available for the current day and the following two days.
- Each service in an SI file will have the following elements defined; medium name; description; logos at five resolutions; all bearers, and at least one genre.
- Visuels should normally be cacheable for 24 hours.
- Visuels should not exceed 50kByte for a single image below 640,000 pixels (e.g. 800 x 800 pixels), or 150kBytes for images at or above 640,000 pixels.
- The total data required for visuals per individual user should not exceed 1.5MBytes per hour for visuals under 640,000 pixels, or 4.5MBytes per hour for visuals at or above 640,000 pixels.
- The total time difference between bearers shouldn't be more than 20 seconds.
- If you need to provide private streaming URLs which exclude pre-roll adverts and/or time-stretching, implement the Client Identification functionality, and provide an easy way for manufacturers to apply for IDs.

Manufacturers

- Never override the cache times set by the broadcaster. You can ignore the content if the cache times are set lower than the guidelines, and you can delete content if the cache is full.
Changes to Standards to accommodate the Proposed Licence

Agreement with the Proposed Licence
The SPI standard already allows a broadcaster to link to the proposed RadioDNS licence.

If the broadcaster wants to offer their own licence, a new optional attribute will be added to allow a broadcaster to confirm that their own licence is compatible with the proposed RadioDNS licence. A compatible licence will not restrict anything that the standard licence allows.

Manufacturers can use this information to decide if they want to use the metadata and content accordingly.

We should advise broadcasters that if they don't signal their licence terms by 30th June 2017, some manufacturers may choose to ignore their data because they don't know if they're allowed to use it or not.

About Rights and Licensing

RadioDNS defines open technical standards for broadcasters to distribute metadata and content. The use of open standards by itself does not constitute a licence and broadcasters retain all rights in metadata and content that they provide.

However, broadcasters, offering a free to air service, generally want to provide metadata and content for free and without explicit licensing, on the understanding that it is going to be properly used.

Processing formal licence requests is cumbersome, expensive, and mostly unnecessary. Whilst nothing in this document confers rights to use broadcaster metadata and content, this document doesn't require either party to offer or request licences.

We recommend that for broadcasters who don't want to offer their own licences, they should offer the proposed RadioDNS licence using the standardised functionality.