

New Radio Data Service Subcommittee Launched

Also consolidates the European RDS and North American RBDS standards

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WASHINGTON — Delivering a quality “metadata” experience (for example, song title, artist and album artwork for FM broadcasters) to the digital dashboard is more critical than ever for broadcasters. Now, a new collaboration between the National Association of Broadcasters and the Consumer Technology Association aims to provide a better framework to support the data delivery needs of radio broadcasters.



The National Radio Systems Committee, a technical standards-setting body cosponsored by NAB and CTA, has launched the Data Services and Metadata Subcommittee. The new subcommittee, successor to the NRSC’s Radio Broadcast

Data Systems subcommittee, is chaired by Dan Mansergh, chief technology officer for KQED Inc.

The RDS communications protocol, which allows FM radio stations to incorporate inaudible signals into their broadcasts on a 57 kHz subcarrier, was introduced in the U.S. in 1993 to add data capability but also with hopes to eventually increase revenues through non-traditional services. Since then, radio frequency subcarrier usage and wireless data distribution has grown in this country, observers say. CTA does not track how many vehicles on the road in this country have RDS capability, but it has become commonplace on newer vehicles.

One area the group plans to explore is data broadcasting applications associated with Emergency Alerts, with the goal of helping broadcast engineers understand and deploy the best alerting infrastructure possible, according to a press release.

With the creation of the new committee also comes the consolidation of the European RDS and North American RBDS Standards, according to the NRSC.

Radio World interviewed Mansergh, NAB Vice President of Advanced Engineering David Layer and CTA Senior Director of Technology and Standards Mike Bergman about the new subcommittee and what brought about the need for the change. Their emailed replies to our questions follow.

Radio World: *Why the change in subcommittees at this point, and how long has it been in discussion?*

David Layer: In 2016, the NRSC and the RDS Forum (the group which manages the European version of the RDS Standard) agreed to incorporate the provisions of the NRSC-4 Standard (originally adopted as the RBDS Standard) unique to North America into the IEC version of the RDS Standard (IEC 62106).

The NRSC has been managing the U.S. version of RDS, referred to as the RBDS Standard. The RDS Forum manages the European equivalent, and there were relatively few differences between the two standards. This consolidation of the European RDS and North American RBDS standards is a long-discussed goal and has the advantage of making all RDS/RBDS information available in a single document.

One reason that the NRSC and RDS Forum were discussing this possibility at this time is that the RDS Forum has been undertaking a significant updating and revising of IEC 62106, partly to add RDS2 to that standard. As part of this revision, the RDS standard document was split into seven separate parts, and it became clear that it would be a straightforward matter to create an additional part containing the provisions specific to North America.

Based upon this plan, the NRSC and RDS Forum worked together to create the North America-specific “Part 7” of the updated IEC 62106, and in April 2018 the RBDS Subcommittee adopted this Part 7 document and authorized its incorporation into the IEC Standard. Note that until final adoption of the IEC document by the IEC, the current NRSC-4 Standard remains in effect.

Further, broadcasters have been implementing other methods for transmitting station, artist, title and other information with the audio program, in addition to RDS. First, HD Radio with its own rich metadata capabilities, and then internet streaming, came along to supplement the broadcaster toolkit. Consequently, the work in the RBDS Subcommittee has been increasingly broadened beyond the RDS transport.

Given that the NRSC’s version of the RDS Standard will soon be retired, it was an opportune time to consider re-naming and re-chartering the RBDS Subcommittee as the Data Services and Metadata Subcommittee.

RW: *So the RBDS subcommittee is gone, but do all RBDS subcommittee standards and guidelines for RDS in this country remain in place?*

Layer: All of the documents that fell within the purview of the RBDS Subcommittee will now fall within the purview of the DSM Subcommittee. The only document that will be retired is the NRSC-4 Standard, and that will happen when the updated version of IEC-62106 is given final approval (expected to occur by the end of 2018).

***RW:** What will be the focus of the DSM subcommittee?*

Dan Mansergh: The DSM subcommittee will focus on the digital information that radio broadcasters send to their audiences via various data transmission technologies in use today. Like its predecessor, it is a technical body that will develop guidelines and standards related to these services and technologies.

***RW:** You say in the joint press release announcing the changes that “more methods are deployed to transmit data beyond RDS.” What other methods are you talking about?*

Mansergh: Since the introduction of RDS, there have been two principal additional methods employed to transmit data to radio receivers: digital radio (HD Radio in North America, with other technologies in use elsewhere) and hybrid radio (over-the-air plus internet protocol). The DSM subcommittee will consider these methods of data transmission and others that evolve over time.

Note that regarding HD Radio, while the DSM subcommittee may consider data services and metadata over HD Radio signals, the DRB subcommittee will continue to have purview over the NRSC-5 standard as well as HD Radio developments pertaining to the transmission of digital radio signals.

***RW:** Beyond the predictable broadcasting song title, artist information, station IDs, what types of things are radio stations doing with their RDS displays? For example, alarms, notifications, commercial messaging, couponing and EAS.*

Mike Bergman: Data transmission over RDS is expected to focus on basic information like station information, song title and artist and program service (including genre). There are more capabilities in the RDS technology suite, but these are the most popular with broadcasters and the ones best supported by hardware.

In addition, one of the most important bits of information sent over RDS is the program information code, since this is used to help identify a radio signal's internet information (using RadioDNS), which is used in hybrid radio receiver implementations.

***RW:** How do you envision data delivery for radio broadcasters could change in the next decade?*

Bergman: Using hybrid radio technology, one of the main improvements to terrestrial radio services will revolve around the use of interactivity with listeners. Radio has always been primarily a one-way medium, but by bringing internet connectivity to receivers, listeners will have many more opportunities to interact with radio stations.

Likewise, radio stations will have an opportunity to know more about their listeners, not just who they are but where they are, and by knowing this will have the ability to better target content and advertising that is highly relevant.

***RW:** How does DSM's work figure to impact the NAB's efforts to collaborate with automakers on the digital dashboard of the future?*

Layer: NAB's auto initiative does not presently intersect with the work of the NRSC.

***RW:** Is it possible DSM's work will have ties to any autonomous vehicle development by automakers?*

Layer: The DSM subcommittee is not likely to focus on a project strictly related to autonomous vehicle development in the near future.

***RW:** How many members make up the DSM subcommittee?*

Mansergh: You can find a list of DSM subcommittee members here:

www.nrscstandards.org/committees/dsm/dsm-member-list.pdf.

The members of the RBDS Subcommittee are generally supportive of the change and look forward to continuing their work and expanding to new areas of interest within the expanded scope of the new DSM Subcommittee.

RW: *How often will the DSM subcommittee meet?*

Mansergh: The subcommittee meets at least three times a year — at CES in January, at the NAB Show in April, and at the Radio Show in September. These are all face-to-face meetings; electronic meetings are scheduled when needed. The DSM subcommittee will establish working groups to do detailed work on specific categories, and these working groups will typically meet once per month, or more or less often as required by current activities.

RW: *Describe NAB's relationship with CTA and the importance of the two organizations continuing to work together on radio technical issues going forward.*

Layer: NAB and CTA have a long and productive relationship working together as sponsors of the NRSC. Terrestrial radio is a system, with the broadcast/transmission side and the consumer receiver side as integral and non-separable parts. Both organizations recognize this and will continue to work together for the betterment and constant improvement of terrestrial radio services.