

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)
)
Amendment of Part 73 of the)
Commission's Rules To Permit) RM-9395
the Introduction Of Digital Audio)
Broadcasting in the AM and FM)
Broadcast Services)

To: The Mass Media Bureau

**STATEMENT OF
NATIONAL PUBLIC RADIO, INC.**

Pursuant to Section 1.405 of the Commission's Rules, 47 C.F.R. § 1.405, National Public Radio, Inc. ("NPR") hereby submits its Statement on the above-referenced petition for rulemaking proposing rules to govern the introduction of terrestrial digital audio broadcasting ("DAB") in the AM and FM radio bands. See Public Notice, Report No. DA 98 2244, File No. RM-9395, rel. Nov. 6, 1998 [hereinafter "USADR Petition"].

NPR is a non-profit membership corporation that produces and distributes noncommercial educational programming through approximately 600 public radio stations nationwide. Among its award winning programs are *All Things Considered*[®], *Morning Edition*[®], *Talk Of The Nation*[®], and *Performance Today*[®]. NPR also operates the Public Radio Satellite Interconnection System and provides representation and other services to its member station licensees.

NPR has a long-standing and significant interest in DAB, dating to the initiation of the

Commission's Advanced Television proceeding,¹ in which NPR urged the Commission to consider the spectrum needs of advanced radio systems.² In response to the Notice of Inquiry that followed,³ NPR urged the Commission to utilize its resources to support and facilitate the transition to digital radio broadcasting.⁴ The Commission, in turn, recognized the importance of digital technology to the long term viability of radio broadcasting and pledged its support.⁵ While the subsequent pursuit of an In-band/On-channel ("IBOC") approach to DAB has failed to produce an effective transmission standard, there has been strong interest among a number of technology companies and considerable progress, particularly in the last two years.

Based on this history, NPR can only support a rulemaking proceeding to further the development of an effective DAB transmission standard. DAB offers the promise, as USA Digital Radio Partners ("USADR") notes, of "vastly improved service to the public" through "enhanced sound fidelity, improved robustness, new radio features and the ability to provide enhanced auxiliary services." USADR Petition at 14. With virtually every other means of electronic mass media transitioning to or otherwise deploying digital technology, it is essential for public radio

¹ Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, Notice of Inquiry, MM Docket No. 87-268, 2 FCC Rcd. 5125 (1987).

² Comments of National Public Radio, Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, MM Docket No. 87-268, at 2-7, filed Nov. 18, 1987.

³ Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services, Notice of Inquiry, GEN Docket No. 90-357, 5 FCC Rcd. 5237 (1990).

⁴ See Comments of National Public Radio, Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services, GEN Docket 90-357, filed Nov. 13, 1990.

⁵ Notice of Proposed Rulemaking and Further Notice of Inquiry, GEN Docket No. 90-357, 7 FCC Rcd 7776, 7778 (1992).

broadcasters, in particular, to be able to exploit the benefits of digital technology to further its Congressionally sanctioned, public interest mission.⁶

While NPR supports the initiation of a proceeding to further the development of digital radio, NPR does not support a number of the specific elements of the USADR petition that address matters that are not ripe for consideration or that could foreclose due consideration of alternative approaches to DAB if IBOC proves infeasible or so burdened with compromises that the benefits of a digital transition are fundamentally undermined.

First, IBOC may not be the best means of implementing digital radio, and there is no basis for concluding at this time that IBOC, as opposed to some other system of digital audio broadcasting, is in the public interest. As a purely technical matter, IBOC is not the best approach to introducing DAB because of the bandwidth limitations and often significant levels of interference that exist between and among stations. Indeed, the efforts of some of the country's leading technology companies have so far failed to prove the technical feasibility of IBOC DAB in real world conditions. NPR recognizes the significant and complex challenges associated with introducing a frequency assignment plan in new spectrum, however, and believes that the proponents of IBOC technology should be given a full and final opportunity to demonstrate the effectiveness of an IBOC DAB system. Nonetheless, rather than embracing IBOC DAB as necessarily in the public interest, the Commission must acknowledge at this time the possibility that it may not prove technically feasible.

Second, it is premature to establish implementing rules, including a plan for the transition from analog to digital broadcasting. As a general matter, establishing administrative rules in

⁶ See 47 U.S.C. § 396(a).

advance of a technical standard is neither necessary to the development of such a standard nor an effective use of the Commission's resources since the technical standard(s) that ultimately evolve(s) may well dictate different implementing rules.

Specifically with regard to interference protection criteria, however, the Commission should recognize that the competing IBOC DAB proposals will likely require greater interference protection than is currently afforded under the Commission's rules. The Commission should therefore be especially cautious about introducing new broadcast services⁷ or relaxing the existing interference standards.⁸ In any event, it is premature to establish specific DAB protection criteria based on one IBOC proponent's design.

Third, the Commission should refrain from adopting evaluative criteria that, individually or as a whole, operate arbitrarily to favor a particular transmission standard. As a general matter, while it is essential to develop a set of criteria to evaluate the competing systems, the Commission should take care to assure that the criteria do not operate categorically to exclude consideration of otherwise potentially meritorious IBOC systems. Rather, the process for evaluating potential systems should be sufficiently open so that the positive and negative attributes of individual systems can be assessed to permit the most meaningful system-to-system comparison.

More specifically, USADR proposes as a criterion that "[t]he DAB system should include

⁷ See Statement of National Public Radio, Inc., Petition for Rulemaking To Establish A Microstation Radio Broadcasting Service, Docket No. RM-9208, Proposal for Creation of the Low Power FM (LPFM) Broadcast Service, Docket No. RM-9242, at 7, filed April 27, 1998.

⁸ See Reply Comments of National Public Radio, Inc., 1998 Biennial Regulatory Review -- Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules, MM Docket No. 98-93, at 2-4, filed Dec. 4, 1998.

both AM and FM transmission."⁹ To the extent USADR is proposing that each DAB system must incorporate a single, comprehensive AM and FM transmission standard, or that separate AM and FM transmission standards must come from a single proponent, NPR opposes such a dispositive criterion. The objective should be to achieve the best possible technical quality, and, ultimately, it may be appropriate to adopt separate AM and FM systems established by two IBOC DAB proponents as a "grand alliance" IBOC DAB system.

Fourth, and as a related matter, in advance of the completion of real world testing of the existing IBOC systems, it is premature to adopt the USADR IBOC DAB system as the definitive legal standard for DAB in the United States.¹⁰ The initiation of a rulemaking proceeding to establish a technical standard and, eventually, the associated implementing rules ordinarily presupposes an open inquiry into the matter to be addressed. Unless the technical feasibility of IBOC DAB and the superiority of USADR's system are established under real world circumstances, there is no basis for adopting USADR's IBOC DAB system as the sole, legally acceptable standard for DAB in the United States at this time.

Finally, the USADR petition proposes a process for the identification and evaluation of potential IBOC DAB system that relies on notice and comment administrative rulemaking to determine the best IBOC technical standard -- a process of questionable efficiency in these circumstances. Assuming such a process would elicit all the relevant information, it would require a significant expenditure of the Commission's engineering and administrative resources to assure proper scrutiny of the relevant information.

⁹ See USADR Petition at 102.

¹⁰ See id. at 101-104.

NPR believes that the Commission's resources can be more effectively utilized within the DAB Subcommittee of the National Radio Systems Committee ("NRSC"), a private industry technical forum jointly established by the Consumer Electronics Manufacturers Association ("CEMA") and the National Association of Broadcasters ("NAB") to facilitate the development of an IBOC DAB standard. The procedures developed by the NRSC DAB Subcommittee for evaluating proposed IBOC systems rely on self-certification by the individual system proponents,¹¹ but they assume the participation of one or more independent testing agencies.¹² By serving a neutral, officiating role, the Commission, perhaps through its Office of Engineering and Technology, can assure a full and fair examination of all of the proposed IBOC DAB systems. Such an approach can also maximize the benefits associated with private industry standards setting, while expediting the relevant regulatory review and, ultimately, implementation of the best possible IBOC system.

Notwithstanding the foregoing, the USADR petition presents the Commission with an important opportunity to further the development of digital radio broadcasting. Without embracing the particular details of the USADR proposal discussed above, the Commission can and should utilize its resources to assure that potentially effective IBOC DAB systems are adequately considered. The Commission should also consider, on an ongoing basis, how its interference protection policies affect the future availability for IBOC DAB use of the spectrum

¹¹ See NRSC, DAB Subcommittee, IBOC System Test Guidelines, Docket No. RM 93-95, at 4, filed Dec. 12, 1998.

¹² Included among the Goals of the DAB Subcommittee is the following: "(f) To indirectly participate in the test process, by assisting in selection of (one or more) independent testing agencies . . . to insure that the [self] testing as defined under Goal (e) is executed in a thorough, fair and impartial manner." Id., Appendix F, DAB Subcommittee Goals & Objectives.

currently allocated to analog radio broadcasting.¹³ Otherwise, all the efforts of the affected private parties and of the Commission during the past decade may be for naught, and a transition to a digital radio future may depend on the allocation of new spectrum.

For the foregoing reasons, NPR supports the initiation of a proceeding to further the development of a DAB technical standard. In order to assure a prompt and effective resolution of the DAB technical standard issue, however, it urges the Commission not to embrace the particular elements of the USADR petition noted above.

Respectfully Submitted,

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¹³ See notes ⁷⁻⁸, supra, and accompanying text.

CERTIFICATE OF SERVICE

I, Gregory A. Lewis, hereby certify that a copy of the foregoing Statement of National Public Radio, Inc. was sent this 23rd day of December, 1998, by first class mail, postage prepaid to the following:

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