Christiansted, Virgin Islands. *See* 67 FR 5292, August 14, 2002. DTV channel 23 can be allotted to Christiansted in compliance with the principle community coverage requirements of section 73.625(a) at reference coordinates 17–44–40 N. and 64–43–40 W. with a power of 0.85, HAAT of 130 meters and with a DTV service population of 48 thousand. With this action, this proceeding is terminated.

DATES: Effective January 27, 2003.

FOR FURTHER INFORMATION CONTACT: Pam Blumenthal, Media Bureau, (202) 418–1600.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MB Docket No. 02–220, adopted December 6, 2002, and released December 13, 2002. The full text of this document is available for public inspection and copying during regular business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY–A257, Washington, DC. This document may also be purchased from the Commission's duplicating contractor, Qualex International, Portals II, 445 12th Street, SW., CY–B402, Washington, DC, 20554, telephone (202) 863–2893, facsimile (202) 863–2898, or via e-mail *qualexint@aol.com.*

List of Subjects in 47 CFR Part 73

Digital television broadcasting, Television.

Part 73 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 73—[AMENDED]

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334 and 336.

§ 73.622 [Amended]

2. Section 73.622(b), the Table of Digital Television Allotments under Virgin Islands, is amended by removing DTV channel 5 and adding DTV channel 23 at Christiansted.

Federal Communications Commission.

Barbara A. Kreisman,

Chief, Video Division, Media Bureau.

[FR Doc. 02–32287 Filed 12–20–02; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 99–325; FCC 02–286]

Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this proceeding the Commission selects in-band, on-channel (IBOC) as the sole digital technology for the terrestrial radio broadcast service. The Commission announces notification procedures that will allow AM and FM broadcasters to begin interim digital operations immediately using the IBOC systems developed by iBiquity Digital Corporation. Finally, the Commission concludes that adoption of a single IBOC transmission standard would be beneficial, and solicits industry assistance in the development of a formal standard.

DATES: Effective January 22, 2003.

FOR FURTHER INFORMATION CONTACT: Peter H. Doyle, Audio Services Division, Mass Media Bureau (202) 418–2700.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *First Report and Order* in MM. Docket No. 99–325, adopted October 10, 2002, and released October 11, 2002. The complete text of this *First Report and Order* is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY–A257), 445 12th Street, SW., Washington, DC, and may also be purchased from the Commission's copy contractor, Qualex International, (202) 863–2893, 445 12th Street, SW., Room CY–B402, Washington, DC 20554. The complete text is also available on the Internet at *http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC–02–286A1.pdf.*

Synopsis of First Report and Order

1. Introduction

The Commission initiated this proceeding in November 1999 to advance the development of digital audio broadcasting (DAB) in the terrestrial radio service. The *Notice of Proposed Rulemaking* (NPRM; 64 FR 61054, November 9, 1999) sought comment on alternatives for introducing DAB to the American public. The NPRM cited the promising preliminary results of several IBOC systems under development at the time. IBOC systems, designed to allow the simultaneous transmission of analog and digital signals within the existing AM and FM bands, had the potential to offer a seamless transition to digital technology without the need for allocation of additional spectrum. The NPRM noted, however, that IBOC technology was still unproven at the time. Therefore, the NPRM also sought comment on the use of other DAB technologies designed to operate in new spectrum.

IBOC developers made significant progress in the years following the NPRM. Two IBOC developers, Lucent Digital Radio, Inc. and USA Digital Radio, Inc., merged to form iBiquity Digital Corporation—the only remaining IBOC proponent. iBiquity has continued to develop its IBOC technology and to cooperate in an extensive independent testing program. In contrast, out-of-band DAB options do not appear viable in the near term. No new spectrum is available for an out-of-band technology, and comments in this proceeding show no broadcast industry proponent for an approach other than IBOC.

2. National Radio Systems Committee Test Program

The NPRM solicited the assistance of the private sector in evaluating candidate DAB systems. The National Radio Systems Committee (NRSC) responded with a comprehensive DAB test program. The only DAB systems submitted to the NRSC for evaluation were the iBiquity AM and FM ''hybrid'' IBOC systems. The term ''hybrid'' describes an IBOC system designed to transmit both analog and digital signals within the spectral emission mask of a single AM or FM channel. After an exhaustive testing and evaluation process, the NRSC strongly endorsed iBiquity's AM and FM IBOC systems, with AM IBOC initially limited to daytime use subject to additional testing under nighttime propagation conditions.

3. FM IBOC Test Results

The NRSC judged the audio quality of the iBiquity hybrid FM IBOC system as superior to that of analog FM. Furthermore, the NRSC reports that the hybrid digital signal is more robust than analog FM in the face of impairments such as multipath interference, co- and adjacent channel interference, and noise. Test reports cited a small increase in potential interference to the reception of first-adjacent analog signals, mainly outside normally protected FM coverage contours. The Commission agreed with the NRSC and the majority of commenters that the small increase in potential interference is an acceptable tradeoff in view of the benefits inherent in digital technology.

The NRSC's test program included an assessment of the effects of IBOC on FM subcarriers, secondary services normally used for GPS data, utility load management, foreign language programming, and radio reading services. The NRSC's report concluded that the most common digital subcarrier services, such as the Radio Broadcast Data System, would not be affected by IBOC. The NRSC recommended further testing of the effect of IBOC on analog subcarrier services such as reading for the blind. Additional tests showed that, in some circumstances, analog subcarrier receivers may receive significant new interference from IBOC operations on the second adjacent FM channel. The Commission acknowledges the importance of services such as reading for the blind, and directs broadcasters who implement IBOC to work closely with the providers of these services to resolve complaints of interference. The *First Report and Order* cautions broadcasters that interim IBOC authority may be rescinded if legitimate interference complaints cannot be resolved.

4. AM IBOC Test Results

The iBiquity AM IBOC system offers a dramatic improvement in audio quality compared with analog AM, which is limited by its inherently poor fidelity and susceptibility to noise. This improvement comes at the cost of a bandwidth reduction for the analog portion of a hybrid IBOC AM signal, and of possible new interference from the digital AM IBOC system. The NRSC tests show that introduction of the digital IBOC signal will decrease the signal-to-noise performance of receivers tuned to the host analog signal. The change would not be objectionable to most listeners, according to subjective tests. The addition of the digital IBOC signal may cause interference to the reception of first-adjacent signals; in some cases, first-adjacent interference may occur within the AM station's protected contour. The potential for first-adjacent interference prompted some commenters to suggest reducing the power of the digital sidebands by 6 dB. Other commenters strongly opposed the digital power reduction, citing the necessity of maximizing digital coverage. The Commission declined to require a digital AM power reduction, opting instead to accept the NRSC's recommendation to implement the iBiqiuity AM IBOC system as tested. In situations where interference is more likely, AM broadcasters may choose to reduce digital carrier power. Furthermore, the Commission may order such a power reduction to resolve interference complaints when the parties cannot do so. The NRSC did not test the AM IBOC system under nighttime propagation conditions, which are vastly different than daytime conditions in the AM band. Consequently, the NRSC recommended and the Commission agreed that AM IBOC should be limited to daytime use pending further testing.

5. Adoption of IBOC Standards

The NPRM listed the following ten criteria the Commission would use to evaluate a candidate digital audio broadcasting system: enhanced audio fidelity; robustness to interference and other signal impairments; compatibility with existing analog service; spectrum efficiency; flexibility; auxiliary capability; extensibility; accommodation for existing broadcasters; coverage; and affordability. The record in this proceeding demonstrates that the iBiquity IBOC systems, evaluated according to the foregoing criteria, offer the best way to advance the Commission's policy goals for digital transition. The iBiquity systems enjoy strong support from the broadcast industry, and are the only systems that could be implemented in the near future. Accordingly, the *First Report and Order* selects IBOC as the sole digital transmission technology for terrestrial broadcasters. The *First Report and Order* agrees with the majority of commenters that designation of a single IBOC standard would facilitate the efficient and orderly transition to digital radio. The Commission therefore solicits the assistance of the public in a formal standard-setting process, and notes that the NRSC has already formed an IBOC standards development working group.

6. Interim IBOC Operation

To encourage rapid consumer acceptance of the new IBOC technology, the Commission permits AM and FM broadcasters to begin interim IBOC operations immediately using the iBiquity technology. Upon approval by the Office of Management and Budget, broadcasters who initiate IBOC operation shall notify the Commission by letter. The notification letter shall include certifications that the effective radiated power of the analog signal remains as authorized, and that the station remains in compliance with the Commission's rules governing human exposure to radiofrequency radiation.

Final Regulatory Flexibility Certification

The Regulatory Flexibility Act of 1980, as amended (RFA; *see* 5 U.S.C. 601–602), requires that a regulatory flexibility analysis be prepared for notice and comment rule making proceedings, unless the agency certifies that ''the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.'' 5 U.S.C. 601(b). The RFA generally defines the term ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization,'' and ''small governmental jurisdiction.'' 5 U.S.C. 601(6). In addition, the term ''small business'' has the same meaning as the term ''small business concern'' under the Small Business Act. 5 U.S.C. 601(3). A ''small business concern'' is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). 15 U.S.C. 632.

As required by the RFA, an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the NPRM in MM Docket No. 99–325. The Commission sought written public comments on the proposals in the NPRM including comments on the IRFA. The Office of Advocacy, U.S. Small Business Administration filed comments asserting that the Commission, in the IRFA, failed to adequately consider the potential impact of digital transition on small business and did not discuss alternatives designed to minimize regulatory burdens on small entities. Specifically, SBA states that ''[B]efore concluding that analog systems must sunset, the Commission should provide data on the cost of transition and should ensure that DAB will not burden small business.'' SBA further states that the Commission should make the results of the IBOC tests public to determine viability and compatibility including any interference concerns. It suggests that ''* * * a better course of action might be to permit stations to install digital systems but only if they do not cause interference to analog systems. In this scenario, digital and analog systems would operate concurrently.'' According to SBA, the Commission ''* * * should issue additional notices of proposed rulemaking as it gleans additional information regarding the feasibility and desirability of DAB transition.'' Finally, SBA states that the Commission failed to discuss alternatives that would minimize the regulatory burden on small entities.

Although, in this *First Report and Order* the Commission takes two actions, neither of which will have a significant impact on small entities, our approach to digital implementation is consistent with that advocated by SBA. First, the Commission endorses IBOC

technology for use by AM and FM digital audio broadcasting operations. Second, the Commission authorizes interim, voluntary digital broadcasting operations for both AM and FM licensees. Only those broadcasters wishing to take advantage of this opportunity to begin digital broadcasting need comply with any notification or technical requirements. Those broadcasters choosing not to initiate such digital operations will not be materially affected. The Commission will issue a Further NPRM proposing final rules for digital audio broadcasting and will consider the impact of any final rules on small entities in connection with that further proceeding. We therefore certify that the requirements of this *First Report and Order* will not have a significant economic impact on a substantial number of small entities.

In adopting this approach, we carefully analyzed the results of the IBOC tests and we conclude that any minimal interference that might be caused is outweighed by the benefits of digital service. Such benefits will accrue to small entities as well as large businesses should they choose to implement digital operation. In addition, we adopt procedures for these voluntary operations to assure that any interference complaints are resolved quickly. Under this plan, analog and digital systems will operate concurrently, a result advocated by SBA. With respect to the potential cost of implementation, preliminary estimates indicate that that IBOC costs are not unreasonable and that use of IBOC is inherently less costly than other systems. Again, we emphasize that the interim operations adopted here are strictly voluntary and thus no broadcaster will be compelled to incur any costs. Finally, as SBA suggests, we will issue a Further NPRM to solicit comment on any final digital transition rules.

The Commission will send a copy of the *First Report and Order*, including a copy of this Final Regulatory Flexibility Certification, in a report to Congress pursuant to the Congressional Review Act. 5 U.S.C. 801(a)(1)(A). In addition, the *First Report and Order* and this final certification will be sent to the Chief Counsel for Advocacy of the SBA. 5 U.S.C. 605(b).

This document is available in alternative formats (computer diskette, large print, audio record, and Braille). Persons with disabilities who need documents in these formats may contact Brian Millin at (202) 418–7426 (voice), (202) 418–7365 (TTY), or via e-mail at *bmillin@fcc.gov.*

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. 02–32212 Filed 12–20–02; 8:45 am]

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