

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Establishment of an Improved Model for Predicting the Broadcast Television Field Strength Received at Individual Locations	)	ET Docket No. 00-11
	)	
	)	
	)	

**MEMORANDUM OPINION AND ORDER**

**Adopted: March 31, 2004**

**Released: May 25, 2004**

By the Commission:

**I. INTRODUCTION**

1. In this Memorandum Opinion and Order, the Commission addresses two petitions for reconsideration of the *First Report and Order*<sup>1</sup> in this proceeding.<sup>2</sup> In that action, we prescribed an improved point-to-point predictive model for determining the ability of individual locations to receive an over-the-air television broadcast signal of a specific intensity through the use of a conventional, outdoor rooftop receiving antenna. This model is used to establish whether individual households are eligible to receive certain satellite home viewing services pursuant to the Satellite Home Viewer Act of 1988 (SHVA)<sup>3</sup> and the Satellite Home Viewer Improvement Act of 1999 (SHVIA).<sup>4</sup> The petitions for reconsideration challenge the process we used to establish values for signal loss quantities in the predictive model, the particular signal loss values we adopted, and our antenna height assumptions. The petitions also raise issues concerning the independence of persons who may be designated to conduct on-site reception tests, procedures to follow in determining when to test, and requirements for notification of parties as to the time and place of planned tests. This Memorandum Opinion and Order denies these petitions.

**II. BACKGROUND**

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<sup>1</sup> *First Report and Order*, ET Docket No. 00-11, 15 FCC Rcd 12118 (2000).

<sup>2</sup> Parties and pleadings are listed in Appendix A.

<sup>3</sup> Satellite Home Viewer Act, 17 U.S.C. § 119 (1988). Congress enacted the SHVA as an amendment to the Copyright Act in order to protect television broadcasters' copyright interests while simultaneously enabling satellite carriers to provide the signals of broadcast network stations to those satellite subscribers who are unable to obtain local network stations over-the-air. Congress considered these subscribers to be "unserved" by their local stations.

<sup>4</sup> Satellite Home Viewer Improvement Act of 1999, PL 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999). The SHVIA extends through December, 2004, the copyright provisions of the earlier SHVA and, *inter alia*, directs the FCC to develop certain improvements in the radio propagation prediction procedures that are the subject of this rulemaking.

2. In the *Report and Order* in CS Docket No. 98-210, *Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act*,<sup>5</sup> the Commission recommended an existing model, the Longley-Rice Version 1.2.2 model, for the specific purpose of improving the accuracy of signal strength predictions at individual locations. This model, which is known as the “Individual Location Longley-Rice” (ILLR) model, takes into account terrain variations every one-tenth of a kilometer and varies the height for predicting signal reception to account for antennas atop one-story buildings.<sup>6</sup> The Commission recommended that this ILLR model be used to predict the eligibility of households to receive distant network signals. Under copyright laws as amended by SHVA and SHVIA, an individual household is eligible to receive a distant network signal if the strength of the locally broadcast signal of that network as received at the household’s location is less than the value established by the Commission as defining Grade B service.<sup>7</sup>

3. Subsequently, in the SHVIA, Congress provided that the ILLR model is to be used as the method for making a presumptive prediction of eligibility.<sup>8</sup> The SHVIA, like its predecessor the SHVA, provides that satellite carriers may provide distant television network stations only to subscribers who cannot receive a signal of Grade B intensity or better through an outdoor, conventional stationary rooftop antenna. It specifies that the Commission’s ILLR computer model shall be used to predict whether subscriber households are eligible under this standard to receive distant television network station signals. Congress also directed the Commission in the SHVIA to conduct a rulemaking to develop an improved ILLR predictive model for reliably predicting the ability of individual locations to receive television signals of the specified Grade B intensity.<sup>9</sup>

4. In the *First Report and Order*, we adopted such an improved model. We determined that it would improve the accuracy of the ILLR model to assign certain signal loss values, in addition to those already implicit in the model, as a function of the land use and land clutter category (LULC) of the reception point.<sup>10</sup> This is done in order to take into account the effects of buildings and other land cover variations on reception of over-the-air television signals, as we were specifically directed to do by Congress in the SHVIA. We also made provisions for the introduction of further improvements in prediction accuracy in the future as additional data become available.

5. The *First Report and Order* also provided for the designation of an independent and neutral entity to select qualified, independent persons to make on-site measurements of signal intensity in individual cases of dispute over the results of the predictive model. We appointed a neutral organization, the American Radio Relay League, Inc. (ARRL), to designate the person or organization, based on the

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<sup>5</sup> 14 FCC Rcd 2654 (1999).

<sup>6</sup> The Individual Location Longley-Rice (ILLR) radio propagation model is used to make predictions of radio field strength at specific geographic points based on the elevation profile of terrain between the transmitter and each specific reception point. A computer is needed to make these predictions because of the large number of points along the profile that must be considered. Computer code for the ILLR point-to-point radio propagation model is published in an appendix of NTIA Report 82-100, *A Guide to the Use of the ITS Irregular Terrain Model in the Area Prediction Mode*, authors G.A. Hufford, A.G. Longley and W.A. Kissick, U.S. Department of Commerce, April 1982. Some modifications to the code were described by G.A. Hufford in a memorandum to users of the model dated January 30, 1985. With these modifications, the code is referred to as Version 1.2.2 of the Longley-Rice model.

<sup>7</sup> The Grade B values of signal strength are specified in 47 CFR § 73.683.

<sup>8</sup> 17 U.S.C. § 119(a)(2)(B)(ii).

<sup>9</sup> SHVIA, section 1008 which amends Section 339(c)(3) of the Communications Act of 1934 (47 U.S.C. § 339(c)(3)).

<sup>10</sup> The LULC database is provided by the United States Geological Survey. See USGS web page at <[http://edcwww.cr.usgs.gov/glis/hyper/guide/1\\_250\\_lulc](http://edcwww.cr.usgs.gov/glis/hyper/guide/1_250_lulc)>.

technical qualifications and independence of proposed testers, to conduct measurements to resolve such cases. The ARRL will designate who shall conduct the objective test of received signal intensity for verification purposes in case a satellite provider and network station cannot agree on whether a signal is of Grade B intensity and cannot agree on a person to conduct such a test.

6. EchoStar Satellite Corporation (EchoStar) and the National Association of Broadcasts and Association for Maximum Service Television, Inc. (NAB/MSTV) filed petitions requesting reconsideration of various aspects of this decision. EchoStar and NAB/MSTV filed oppositions to each other's petition, and ABC, CBS, FOX, and NBC Television Affiliates Association (Network Affiliates) filed an opposition to EchoStar's petition, as well. In addition, Network Affiliates filed a statement in support of the NAB/MSTV petition, and NAB/MSTV filed technical material supplemental to data that formed the basis of certain determinations in the *First Report and Order*.

### III. ISSUE ANALYSIS

7. The issues raised in petitions for reconsideration of the *First Report and Order* fall into two categories. First are questions regarding the predictive model we established. EchoStar Satellite Corporation (EchoStar) questions on legal grounds the process that we used to establish values for the signal loss quantities added to the ILLR model, contending that we relied unjustifiably on a study incompletely represented in the record of the proceeding. Both EchoStar and NAB/MSTV request that we change some of the values assigned to these signal loss quantities. NAB/MSTV also asks that we revise the standard values of receiving antenna heights used in the ILLR model. Second are questions regarding implementation of the on-site testing procedures contained in the statute. Both EchoStar and NAB/MSTV raise questions regarding how to assure the reliability of on-site tests and the independence of persons conducting them. EchoStar also asks that we determine whether an expedited procedure for completing on-site testing comports with the statute. EchoStar's proposal is opposed by NAB/MSTV.

#### A. ILLR Predictive Model

8. Process Used to Establish Values for Signal Loss Quantities. EchoStar asserts that we failed to comply with the Administrative Procedure Act in our implementation of the ILLR model by basing our decision on materials not contained in the record of the proceeding. Specifically, EchoStar states that we established values for signal loss quantities in the ILLR model based on the results of a study submitted in the joint comments of NAB/MSTV that was unaccompanied by underlying measurement data.<sup>11</sup> It contends that the underlying measurement data had not been made part of the public record prior to the *Report and Order*.<sup>12</sup> It argues that we should not have accepted the results of the NAB/MSTV study without independent verification of the path loss calculations, and suggests that our decisions with regard to signal loss quantities may be in error since there is nothing in the record to indicate that we independently verified the statistical analysis of the NAB/MSTV study.<sup>13</sup> EchoStar states that there is a possibility that the ILLR calculations made by NAB/MSTV contain an inherent bias. To test this possibility, it engaged the engineering firm of Hammett and Edison (H&E) to repeat the calculations for a few of the approximately 1000 individual locations analyzed by the NAB/MSTV study, and it asserts that

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<sup>11</sup> Joint comments of NAB/MSTV submitted in response to the initial *Notice of Proposed Rulemaking* in the present proceeding, pages 11-16; joint reply comments of NAB/MSTV, pages 13-14.

<sup>12</sup> Subsequent to the *Report and Order*, during the reconsideration interval, NAB/MSTV filed computer printouts of data underlying the study contained in their earlier joint comments and reply comments. Notice of Filing Supplemental Material, National Association of Broadcasters and Association for Maximum Service Television, Inc., July 24, 2000.

<sup>13</sup> EchoStar cites *St. James Hospital v. Heckler*, 760 F.2d 1460, 1467 n.5 (7<sup>th</sup> Cir. 1985) which states that "it is an agency's duty to establish the ... validity of the evidence before it reaches conclusions based on the evidence, not the public's duty to inform the agency of ... invalidities in its evidence."

variations in the results obtained by H&E demonstrate the unreliability of the NAB/MSTV data.

9. Contrary to EchoStar's assertions, our determinations of signal loss quantities for the ILLR were reasonably derived and complied fully with the provisions of the APA. The signal loss values we established for use in the ILLR model were derived by our own further analysis of both the NAB/MSTV study and another study by Rubinstein that similarly involved a large number of actual measurements of radio field intensity.<sup>14</sup> The NAB/MSTV study was described and its results analyzed in the joint comments and reply comments of NAB/MSTV, submitted in response to the initial *Notice of Proposed Rulemaking* in this proceeding. Our decisions in the *First Report and Order* found that the technical assumptions and analytical methods accurately describe how the underlying data had been examined. The methodologies used in the NAB/MSTV and the Rubinstein studies are similar, and in both cases were clearly described so that we were able to determine their applicability and the validity of their results. We were thus able to assess the significance of the tabulated results without repeating the calculations. We did in fact verify that no apparent bias was introduced from the individual measurement locations selected in the NAB/MSTV study.<sup>15</sup> We also determined that the measurement data and signal strength predictions were organized into clearly defined and non-overlapping categories, and that this organization of data was significant with respect to the type of conclusions sought. These are ordinary steps in the review of engineering and scientific studies, and we did not deem it necessary to relate routine activities of this nature in the text of the *First Report and Order*.

10. Moreover, the underlying raw data for the NAB/MSTV study, consisting of about 1000 measurements of signal intensity at individual locations, have been publicly available since well before the initial *Notice of Proposed Rulemaking* in this proceeding. About half of these measurements were placed in evidence in the matter of *CBS et al v. PrimeTime24*.<sup>16</sup> The remainder are contained in a report of field tests comparing digital and analog television transmission submitted to an FCC advisory committee.<sup>17</sup> In sum, the data has now been filed in the record in this proceeding, and EchoStar has, in fact, reviewed and utilized the raw data in its arguments,<sup>18</sup> as further discussed in the following paragraph. Thus, the provisions of the APA have been satisfied.<sup>19</sup>

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<sup>14</sup> Results of the other study were reported in an engineering journal by Thomas N. Rubinstein, and EchoStar asks that we evaluate ILLR signal losses based exclusively on the Rubinstein study. See Thomas N. Rubinstein, "Clutter Losses and Environmental Noise Characteristics Associated with Various LULC Categories," *IEEE Transactions on Broadcasting*, Vol. 44, No. 3, September 1998. However, the voluminous "raw" data underlying the Rubinstein study are not published, nor are these data necessary for the conclusions we reached in the *First Report and Order*.

<sup>15</sup> The measurement locations were points of a uniform grid in the case of about half of the data, and selected by random sampling in the remainder. The random sampling procedure was designed by an independent statistician engaged to assist in preparation of analyses presented to federal court in Miami and North Carolina for purposes of the *PrimeTime24* litigation. See note 16, *infra*.

<sup>16</sup> *CBS Inc., et al v. PrimeTime 24 Joint Venture*, U.S. District Court, Southern District of Florida, Case No. 96-3650-CIV-Nesbitt. Approximately 600 measurements conducted for this case were part of the Expert Report of Jules Cohen, which is part of the record in this case and to which Judge Nesbitt made specific reference in her decision. See Trial Tr. 152-3 (Cohen). The decision in this case and the Jules Cohen Report were filed in the Commission's SHVA proceeding in 1999, CS Docket No. 98-201.

<sup>17</sup> Association for Maximum Service Television, Inc., Cable Television Laboratories, Inc., and Public Broadcasting Service, *Field Test Results of the Grand Alliance HDTV Transmission Subsystem*, submitted to SS/WP2 Field Testing Task Force of the Advisory Committee on Advanced Television Service of the Federal Communications Commission, September 16, 1994.

<sup>18</sup> In addition to their availability from public sources, we are advised that EchoStar obtained these measurements in 1998 through discovery in a separate civil action. NAB/MSTV Opposition at page 9, footnote 3.

<sup>19</sup> *National Association of Regulatory Utility Commissioners v. FCC*, 737 F.2d 1095, 1121-22 (D.C.Cir. 1984).

11. Finally, we observe that the H&E analysis of the data fails to support EchoStar's assertion that there was an underlying bias in the NAB/MSTV submission. The differences between the H&E calculations and those of the NAB/MSTV study are due to the fact that they are made by different implementations of the ILLR model. The NAB/MSTV study's calculations were made by the ILLR computer program currently in general use for purposes of the SHVIA under arrangements that satellite carriers, including EchoStar, have made with Decisionmark Corporation,<sup>20</sup> an independent agent.<sup>21</sup> Moreover, the differences that do occur do not indicate a bias since the H&E study found some values of path loss higher and some lower than those calculated by NAB/MSTV.<sup>22</sup> Of the five calculations made by H&E, three predicted a higher signal level than those calculated by Decisionmark, and two lower.

12. Values Assigned to Signal Loss Quantities. As indicated above, in the SHVIA Congress requires us to prescribe an improved model for reliably predicting the ability of individual locations to receive signals of grade B intensity.<sup>23</sup> The SHVIA further requires that we "ensure that such model takes into account terrain, building structures, and other land cover variations."<sup>24</sup> EchoStar argues that, since Congress directs us to take buildings and other land cover variations into account, we failed to comply with the statutory mandate by setting some of the signal loss quantities to zero. It urges that the ILLR model incorporate, without reduction in magnitude, all the values derived from the Rubinstein study, as proposed in the initial *Notice of Proposed Rulemaking* in this proceeding.

13. Our analysis, based on the results of both studies, led us to give the value zero to the signal loss quantities associated with all VHF channels and to reduce the proposed values of those associated with UHF channels. The specific values we assigned as signal loss quantities provide ILLR predictions accurately reflecting the results of actual field testing. We did not ignore these losses, but rather made a considered determination that the most accurate ILLR predictions for VHF stations under certain groundcover conditions, including buildings, are made by setting the corresponding loss values to zero. Thus, we have taken the factors directed by Congress into consideration, and we have followed its direction in the SHVIA by assigning values based on thorough analysis that make the ILLR model as accurate as possible, and reject EchoStar's contention in this regard.

14. NAB/MSTV asks that we revise our assignment of signal loss quantities in the land use category "open land." It argues that the values assigned to certain subcategories of open land should be zero due to the reception conditions implied by their names. The specific subcategories identified by NAB/MSTV for loss values of zero are "Dry Salt Flats," "Beaches," and "Bare Ground" as named by the United States Geological Survey (USGS). While it is true that these names individually imply the absence of buildings and vegetation, they represent only 3 of the 10 subcategories in the group open land. This combination of USGS subcategories into the single category of open land was at the core of the technical approach proposed in the initial *Notice of Proposed Rulemaking* and subsequently adopted in the *First Report and Order*. Following this technical approach, the NAB/MSTV study analyzed field measurements grouped in this larger category, rather than in the particular subcategories of "Dry Salt Flats," "Beaches," and "Bare Ground." There is consequently no public record of an analysis to

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<sup>20</sup> Decisionmark Corp., 200 Second Avenue S.E., Cedar Rapids, Iowa 52401.

<sup>21</sup> Specific procedures for utilizing this ILLR program have since been published by the Commission in OET Bulletin 72, July 2, 2002. [http://www.fcc.gov/Bureaus/Engineering\\_Technology/Documents/bulletins](http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins).

<sup>22</sup> H&E was able to check the NAB/MSTV calculations using tabulations of raw data submitted by NAB/MSTV for inclusion in the record of this proceeding subsequent to the *First Report and Order*. These are tabulations of the data underlying the NAB/MSTV study, and are attached as Exhibits A and B to the Notice of Filing Supplemental Material, NAB/MSTV, July 24, 2000.

<sup>23</sup> 47 U.S.C. § 339(c)(3) (as amended by § 1008 of the SHVIA).

<sup>24</sup> *Id.*

substantiate a zero loss value for the particular subcategories singled out in the NAB/MSTV petition for reconsideration. In the absence of specific reliable data, we will not change the values assigned to individual land use categories from those established in the *Report and Order*.

15. Antenna Height Assumptions. NAB/MSTV also asks that we set the standard values of receiving antenna heights at 6.1 and 9.1 meters in place of the rounded values of 6 meters and 9 meters for two- and three-or-more-story buildings respectively. The receiving antenna height is a parameter of the ILLR model. We endorsed the Longley-Rice prediction procedure for the first time in the SHVA context in CS Docket No. 98-201, and recommended receiving antenna heights of 20 or 30 feet in the *Report and Order* in that docket.<sup>25</sup> Subsequently, in a technical appendix to the *First Report and Order* in the present proceeding, we converted to metric units using the whole numbers 6 and 9 meters. This practice matches the antenna height assumption of 9 meters used for analysis of DTV and analog TV service as described in "Longley-Rice Methodology for Evaluating TV Coverage and Interference," OET Bulletin 69, Federal Communications Commission (July 2, 1997).<sup>26</sup> We have found that ILLR predictions are generally not precise enough to distinguish between 6.1 or 9.1 m and the rounded values.

16. Therefore, with regard to NAB/MSTV's request that the receiving antenna heights assumed for ILLR predictions be set at 6.1 and 9.1 m in place of the rounded values of 6 and 9 m, we find that the greater heights would not produce significantly different or more accurate field strength predictions. Accordingly, to maintain consistency with the 9 m value specified for receiving antenna height by OET Bulletin 69, we will continue to specify the rounded values for use in the ILLR.

## **B. On-Site Testing Procedures**

17. The SHVIA establishes a procedure that may extend to on-site testing when a subscriber is denied satellite retransmission of a distant network station as a result of a predictive determination. Specifically, the SHVIA prescribes two steps before a test is performed. The first is the waiver request.<sup>27</sup> A subscriber who is denied satellite retransmission of the signal of a specific distant network station or stations based on a predictive determination may request a waiver from the local network affiliate. This request is to be made through the satellite service provider. In the event the local affiliate denies the waiver request, the second step is a request for an on-site test.<sup>28</sup> Having been denied a waiver, the subscriber may submit, through the satellite provider, a request for an on-site test to determine whether the subscriber receives or does not receive a signal meeting the signal intensity standard.<sup>29</sup> The satellite carrier and the network station must then select a qualified and independent person to conduct the test, following the procedures set out in the Commission's rules,<sup>30</sup> and the test must be conducted within 30 days of the subscriber's request for a test. If the test verifies the subscriber's inability to receive the locally broadcast signal at the required minimum intensity, the subscriber thereby becomes eligible for satellite retransmission of the distant network station's signal.

18. Independence of Persons Conducting Reception Tests. In its petition for reconsideration, the NAB/MSTV requests that we provide guidance about what is required for a signal intensity tester to be

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<sup>25</sup> *Report and Order* in CS Docket No. 98-210, *Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act; Part 73 Definition and Measurement of Signals of Grade B Intensity*, 14 FCC Rcd 2654 (1999).

<sup>26</sup> <http://www.fcc.gov/oet/info/documents/bulletins/>

<sup>27</sup> 47 U.S.C. § 339(c)(2) (as amended by § 1008 of the SHVIA).

<sup>28</sup> 47 U.S.C. § 339(c)(4) (as amended by § 1008 of the SHVIA).

<sup>29</sup> 47 U.S.C. § 339(c)(4)(A) (as amended by § 1008 of the SHVIA).

<sup>30</sup> See 47 C.F.R. § 73.686(d).

considered “independent,” and asks us to rule that a tester can be considered independent only if he or she is not employed by and does not have a business relationship with any satellite carrier. It argues that satellite dish installers would be inclined to find customer premises unserved in the interest of the satellite carriers who recommend them and also in the interest of the customers paying for dish installation who wish to receive the distant network signals via satellite.

19. We decline to adopt NAB/MSTV’s suggestion. In the *First Report and Order*, we appointed the American Radio Relay League (ARRL) as the independent and neutral entity that will designate the person or organization to conduct measurements if the satellite carrier and the network station are unable to agree on the selection of a tester.<sup>31</sup> We have selected an impartial, independent entity to designate qualified testers and we expect that the tester’s professionalism and any track record regarding their impartiality will be taken into consideration. We appointed the ARRL specifically because we expect it to designate persons who can make judgements with appropriate expertise and objectivity, and no one has raised a question as to ARRL’s capability to do so. We further note that a dish installer may also be the local installer of television antennas and hence have broader business interests than solely as a dish installer. Moreover, if we were to require that testers not have business relationships with any satellite carrier, and similarly with any broadcasters, application of the statute would be problematic, since many experienced technicians will have gained their technical qualifications partly through work performed for satellite companies or broadcasters. Thus, qualified persons may be unavailable in many localities if business relationships by themselves were a barrier.

20. Rather than establishing a restrictive definition or finite list of testers that may be considered “independent,” we offer as guidance, for the satellite and broadcast industries as well as for the ARRL, examples of candidate testers who may be considered independent in the SHVIA context. We recommend that testers with a one-sided affiliation, either with satellite providers or broadcast stations, be avoided unless both parties affirmatively find the tester acceptable or no other qualified tester is available. For example, an employee of either the broadcaster or the satellite carrier involved in the dispute that gives rise to the need for a test would be the least independent candidate. A contractor or consultant whose business includes measuring signal reception for cellular or land mobile radio services would be more suitable for conducting television signal intensity tests. A contractor who provides service in support of or who works for only broadcasters or satellite providers would be less independent than a contractor who provides services to neither or to both. In no event, however, should a tester receive compensation that is dependent upon the outcome of the particular test in question. We note in relation to these matters that the satellite provider and the local broadcast station may propose specific candidates to the ARRL for its consideration of their qualifications as well as independence. We recognize, however, that there can be circumstances, particularly in the smaller markets, in which the choice of qualified testers may be limited, and the parties, as well as ARRL, should show reasonable flexibility in applying the criteria. Finally, we expect that a tester that is initially agreed upon or determined by the ARRL to be qualified will conduct the test for which he or she has been designated without later objection by either party. That same tester could then be designated to conduct additional tests without further requalification unless a party raises a specific objection to his or her qualifications or practices.

21. Event Sequence for On-Site Tests. In the *First Report and Order*, we described the statutory provisions for waivers and testing with respect to the eligibility of satellite service subscribers to receive distant signals. Essentially, if the ILLR predicts that a subscriber is “served,” the subscriber may submit a request for a waiver through the satellite carrier to the network station.<sup>32</sup> If the network station grants the waiver, the subscriber is eligible to receive the distant station via satellite.<sup>33</sup> The statute further provides

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<sup>31</sup> *First Report and Order*, ET Docket No. 00-11, 15 FCC Rcd 12118, 12130 (2000).

<sup>32</sup> *First Report and Order*, *supra* at 12129.

<sup>33</sup> 17 U.S.C. § 119(d)(10)(B).

that if the waiver is denied, the subscriber may submit a request for a test to the satellite carrier.<sup>34</sup> The SHVIA's scheme contemplates that a waiver would be sought from a broadcaster,<sup>35</sup> and a test requested if the waiver is denied, with the broadcaster paying for the test if the test demonstrates that the subscriber does not receive an adequate over-the-air signal.<sup>36</sup> This provides the broadcaster the opportunity to weigh the likelihood of an adequate signal against whether it wishes to incur the testing fee in the absence of an acceptable signal.

22. EchoStar requests that in the interest of efficiency we find it permissible for satellite providers to cause field intensity measurements to be made prior to the formalities of waiver request and possible denial anticipated in SHVIA.<sup>37</sup> Specifically, EchoStar would have a field strength test occur during the same appointment with a potential subscriber as the antenna installation. Opponents argue, however, that EchoStar's proposal does not follow the three-event sequence for the procedure established in the SHVIA involving a waiver request, waiver denial, and then a request for an on-site test.<sup>38</sup> NAB/MSTV further objects that EchoStar is proposing a "secret" test conducted by persons with "a direct financial stake in the outcome."<sup>39</sup> In reply, EchoStar explains that it is not proposing a secret test and that it proposes to use only an independent qualified tester, indeed, one that is examined and designated by the ARRL.<sup>40</sup> Reiterating its concern for efficiency, EchoStar requests that we not preclude satellite service providers from conducting the test at an earlier stage in the process, "before or as soon as the consumer is predicted to be ineligible."<sup>41</sup>

23. While the procedure advocated by EchoStar may be more expeditious than the one established in the *First Report and Order*, *supra*, and may provide the protections intended by the statute,<sup>42</sup> it is not the procedure contemplated by the statute. The statute delineates a specific sequence of events preceding testing: waiver request, waiver denial, the subscriber's request for an on-site test, selection of a qualified tester by the satellite carrier and the network station, and then the on-site test, which the broadcaster must pay for if it establishes that the subscriber does not receive an adequate over-the-air signal. (See para. 17, *supra*.) As EchoStar's proposed procedure does not follow this temporal sequence specified in the statute, we deny its request.

24. Nevertheless, we believe that EchoStar has raised a valid public interest concern with the efficiency of the process used to determine SHVIA eligibility. In this regard, we note that the

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<sup>34</sup> 47 U.S.C. § 339(c)(4)(A) (as amended by § 1008 of the SHVIA).

<sup>35</sup> 47 U.S.C. § 339(c)(2) (as amended by § 1008 of the SHVIA).

<sup>36</sup> 47 U.S.C. § 339(c)(4)(B).

<sup>37</sup> EchoStar Petition for Reconsideration at 12.

<sup>38</sup> Joint Opposition of ABC, CBS, Fox, and NBC Affiliates at 15.

<sup>39</sup> NAB/MSTV Opposition at 11.

<sup>40</sup> EchoStar Reply to Oppositions at 9-10.

<sup>41</sup> EchoStar Reply to Oppositions at 9.

<sup>42</sup> The significant elements of the procedure proposed by EchoStar and those in the statute, other than their prescribed sequence, are essentially the same. The expedited procedure proposed by EchoStar presumes, of course, that an independent tester has already been identified in conjunction with previous tests in the market. If a broadcaster were then provided the opportunity to consider a waiver request, the actual day of the testing should not matter, as long as it is not later than 30 days after the date the subscriber submits a request for a test, as provided by the statute. A properly conducted on-site test would provide a valid indication of signal strength (and any consequent need for a waiver) regardless of whether the testing were done prior to or after the broadcaster's determination of whether to grant a waiver. If the satellite company determined to pay for a test regardless of the outcome, then the broadcaster's right to avoid liability for the test would not be infringed.



Commission's call center has received numerous complaints from subscribers stating that their requests for on-site signal tests have been ignored or delayed continuously by both satellite carriers and broadcast stations. The statute demonstrates a concern for prompt resolution of reception controversies, as indicated in the thirty-day time limit for on-site testing.<sup>43</sup> We note that the distant signal copyright protection provisions expire on December 31, 2004,<sup>44</sup> and that Congress is currently considering the extension of this provision of the SHVIA. Congress thus has the opportunity to adopt EchoStar's or any other modifications to these procedures when it enacts legislation to extend those provisions. In the interim, we are continuing to monitor the situation closely and expect that the satellite providers and local network affiliates will coordinate their efforts to implement the SHVIA provisions as Congress intended.

25. Finally, NAB/MSTV has requested that the broadcaster be given 10 days after a test notification to reconsider the waiver denial that led to the test request and to provide an opportunity for interested parties to observe the test.<sup>45</sup> No party has advanced a persuasive reason why a broadcaster cannot make an adequately considered judgement when first presented with a waiver request. The independently determined qualifications of the tester should obviate the need to observe every test. Moreover, such a delayed second-chance procedure would seem, in fact, to provide a broadcaster with incentive to deny all waiver requests when first presented. Accordingly, this request by NAB is denied.

#### IV. PROCEDURAL MATTER

26. Paperwork Reduction Act of 1995 Analysis. The decisions herein have been analyzed with respect to the Paperwork Reduction Act of 1995 (the "1995 Act") and would impose no new or modified information collection requirements on the public.

#### V. ORDERING CLAUSES

27. Accordingly, IT IS ORDERED that, pursuant to Sections 1, 4(i), 4(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 154(j); Section 1008 of PL 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545; and Section 119(d)(10)(a) of the Copyright Act, 17 U.S.C. § 119(d)(10)(a), the petitions for reconsideration submitted by EchoStar Satellite Corporation and by the National Association of Broadcasters and Association for Maximum Service Television, Inc. in this docket ARE DENIED.

28. For additional information concerning this matter, contact Harry Wong (202-418-2437), or Nam Pham (202-418-2438), Office of Engineering and Technology, Technical Research Branch.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

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<sup>43</sup> 47 U.S.C. § 339(c)(4)(A) (as amended by § 1008 of the SHVIA).

<sup>44</sup> SHVIA, Sec. 1003; 17 U.S.C. § 119, note.

<sup>45</sup> NAB Petition for Reconsideration at 4.