

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.**

In the Matter of

Request for Special Temporary	)	
Authorization to test for 120 days the	)	
interference caused to typical	)	
Direct Broadcast Satellite receivers	)	File No. 0418-EX-ST-1999
from the system proposed by	)	
Diversified Communications	)	
Engineering, Inc. in the	)	
12.2 - 12.7 GHz band	)	

**SUPPLEMENT TO OPPOSITION TO REQUEST FOR  
SPECIAL TEMPORARY AUTHORIZATION**

Northpoint Technology, Ltd. ("Northpoint") responds to charges made by DIRECTV, Inc. and EchoStar Satellite Corporation (collectively, the "DBS Operators") in their "Reply to Opposition to Request for Special Temporary Authorization" ("Reply") filed on January 6, 2000 with regard to the request for special temporary authorization ("STA") that the DBS Operators filed on December 1, 1999. The STA purportedly seeks to conduct additional testing with a proprietary Northpoint antenna to further test whether the Northpoint system could cause interference to Direct Broadcast Satellite ("DBS") receivers in the 12.2 - 12.7 GHz band.

**I. PROCEDURAL ISSUE.**

The DBS Operators cited a rule (47 C.F.R. § 5.56) in their request for STA but failed to meet the requirements of that rule in their application. In their Reply, the DBS Operators were correct when they stated that the rule they originally cited is no longer in effect and thus they do not need to fulfill its requirements. However, it is not necessary for the Commission to resort to procedural grounds to deny the DBS Operators' STA request. As explained below, the Commission has ample grounds to reject the pending STA application. The DBS Operators have already had an opportunity to participate in Northpoint's testing and their additional testing would prove nothing with regard to Northpoint's ability to co-exist with DBS.

**II. THE NORTHPOINT SYSTEM HAS BEEN PROVEN TO BE EFFECTIVE AND IN THE PUBLIC INTEREST.**

Northpoint's technology is an innovative system that allows satellite and terrestrial operators to share frequencies within a geographic area. The benefit of Northpoint's technology is very significant because it has the potential to unlock enormous spectrum resources that have been previously restricted to exclusive use by satellite or terrestrial services. In proceeding after proceeding throughout the 1990's the Commission has reached the reluctant conclusion that satellites and terrestrial services could not operate co-channel within the same geographic area. Northpoint's

patented technology provides a specific solution to that problem.

Northpoint has licensed BroadwaveUSA, Inc. ("Broadwave") and its 68 affiliates to make the first use of this new technology. The Broadwave affiliates have applied for licenses to create a new multi-channel video and broadband data service by sharing the 12.2 – 12.7 GHz band with DBS. The Broadwave affiliates will be strong competitors to incumbent cable providers and to the DBS Operators.

Broadwave is a particularly powerful threat to the DBS Operators because consumers could use the same antenna they now use to receive DBS services to receive the new Broadwave service which will be offered at a lower price.<sup>1</sup> The DBS Operators have consistently and vigorously opposed Northpoint, making a total of 14 opposition filings during one nine-week period alone in 1999. The basis of the DBS Operators' opposition to Northpoint has been their assertion that Northpoint will cause "harmful interference" to DBS. But the DBS Operators have never been able to make any showing whatsoever of any actual harmful interference from the Northpoint system.

The effectiveness of Northpoint technology has been demonstrated through an experimental program beginning in 1997 in Kingsville, Texas and continuing in Austin, Texas in 1998 and in Washington, D.C. in 1999. In the Washington demonstration, Northpoint operated successfully, virtually all day, every day, for two

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<sup>1</sup> The consumer would need to realign the antenna and connect it to Northpoint's proprietary set-top box.

months, including uninterrupted transmissions during Hurricane Floyd on September 16, 1999. During these experimental operations, Northpoint took literally thousands of readings of the DBS signal quality in the presence of Northpoint's terrestrial signal and has provided them to the Commission in Experimental Reports. At no time during any of Northpoint's operation was there even one showing by the DBS industry, the Commission, or any member of the public, that a specific DBS customer suffered harmful interference from Northpoint's operations. In addition, Lucent Technologies submitted a concurring report to the Commission regarding the Washington tests.<sup>2</sup> In its report Lucent described measurements made with a laboratory-grade instrument quantifying the level of interference between DBS and Northpoint in worst-case conditions. The Lucent report states that the level of interference found was "negligible in all weather conditions."<sup>3</sup> In sum, the Northpoint experimental program has demonstrated that Northpoint technology, when used according to Northpoint's patented system, is effective at achieving co-channel operation between satellite and terrestrial services in the same geographic area.

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<sup>2</sup> "On Northpoint Field Trial in Washington DC Sept - Oct 1999," Habib Riazi, Lucent Technologies, Bell Labs, October 22, 1999, attachment to *Ex Parte* Notice of Antoinette Cook Bush, filed October 25, 1999.

<sup>3</sup> *Id.*, page 14.

**III. THE DBS OPERATORS HAD THEIR CHANCE; THEIR ADDITIONAL TESTS WOULD PROVE NOTHING.**

The DBS Operators now seek an STA to demonstrate that there are *some* circumstances under which DBS Operators and terrestrial users cannot share spectrum. To demonstrate that one can break a system that works when operated properly is no showing whatsoever. Simply by leaving one's telephone off the hook, one will not receive phone calls but this does not demonstrate that the public switching network cannot work when used properly. Furthermore, the DBS Operators ignore the fact that Northpoint has no interest in placing its proprietary technology and methodology in the hands of its competitors for testing. Without this equipment, the DBS Operators' tests would be unreliable at best.

In their Reply, the DBS Operators assert that they were not allowed to participate in the Northpoint experimental trials. This is inaccurate. Both DIRECTV and EchoStar were invited to participate in Northpoint's experimental work on numerous occasions over several years. In October 1998, Northpoint offered EchoStar, USSB and DIRECTV the opportunity to participate in experimental trials in Austin, Texas. Although EchoStar did not act on this invitation, DIRECTV and USSB did. DIRECTV provided a written experimental plan that was substantially followed by Northpoint. USSB also provided written comments to the Northpoint test plan that incorporated DIRECTV's suggestions. DIRECTV then sent its Vice

President of Engineering, together with another engineer and a technician, to Austin for a planning meeting on November 5, 1998. As a result of this meeting, a series of planning calls were established between DIRECTV and Northpoint over the next eight weeks. DIRECTV's technician attended the testing in December and Northpoint performed specific tests requested by the technician in concordance with the DIRECTV engineer.

Commission staff is well aware of the DBS Operators' familiarity with Northpoint's 1999 Washington test plans. In July 1999, the Commission's Office of Engineering and Technology requested that Northpoint prepare a detailed plan and provide it to the DBS Operators, which Northpoint did. This plan became the subject of a three-hour meeting among the DBS Operators, Northpoint and Commission staff, which resulted in a specific agreement that was documented on Northpoint's experimental license. When the DBS Operators later asserted that they were not able to adequately monitor Northpoint's testing and gather their own data, Northpoint offered to operate the transmitter at the times and in the manner requested by the DBS Operators.<sup>4</sup> Both DBS providers declined this offer.

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<sup>4</sup> See, e.g., letter of Antoinette Cook Bush, to James H. Barker III, counsel to DIRECTV, August 17, 1999.

**III. CONCLUSION.**

The public interest will best be served through the introduction of another source of multichannel video programming and broadband data. The DBS Operators would like to prevent or delay the inception of additional competition and thus propose additional testing that cannot produce relevant results. Accordingly, the Commission should recognize their STA request for the delaying tactic that it is, and summarily deny it.

Respectfully submitted,



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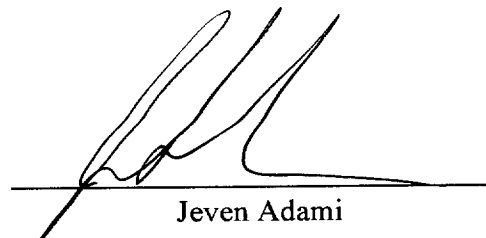
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## CERTIFICATE OF SERVICE

I, Jeven Adami, hereby certify that on this 19<sup>th</sup> day of January, 2000 copies of the foregoing Supplement Opposition to Request for Special Temporary Authorization were delivered by hand delivery or prepaid, first class U.S. mail (\*) to the following:

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