

STEPTOE & JOHNSON LLP

ATTORNEYS AT LAW

DOCKET FILE COPY ORIGINAL

1330 Connecticut Avenue, NW
Washington, DC 20036-1795

Telephone 202.429.3000
Facsimile 202.429.3902
www.step toe.com

Rhonda M. Bolton
202.429.6495

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MAR 12 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

March 12, 2001

Via HAND DELIVERY
Ms. Magalie Roman Salas
Office of the Secretary
Federal Communications Commission
The Portals – TW-A325
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: *In the Matter of Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range, ET Docket No. 98-206, RM-9147, RM-9245*

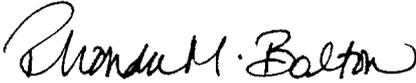
Dear Ms. Salas:

On behalf of EchoStar Satellite Corporation ("EchoStar"), enclosed please find for filing an original and eight copies (four copies for ET Docket No. 98-206 and two copies each for RM-9147 and RM-9245) of the Comments of EchoStar Satellite Corporation in the above-referenced matter.

Also enclosed is an additional copy of EchoStar's Comments which we ask you to date-stamp and return with our messenger.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Rhonda M. Bolton
Counsel for EchoStar
Satellite Corporation

Enclosures

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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12.2 – 12.7 GHz Band by Direct Broadcast)
Satellite Licensees and Their Affiliates; and)
)
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Applications of Broadwave USA, PDC Broadband)
Corporation and Satellite Receivers, Ltd. to Provide)
A Fixed Service in the 12.2 – 12.7 GHz Band)
_____)

ET Docket No. 98-206
RM-9147
RM-9245

COMMENTS OF ECHOSTAR SATELLITE CORPORATION

David K. Moskowitz
Nicholas R. Sayeedi
EchoStar Satellite Corporation
5701 South Santa Fe
Littleton, CO 80120

Pantelis Michalopoulos
Rhonda M. Bolton
Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036
202-429-3000

March 12, 2001

SUMMARY

At the outset, EchoStar notes that the Commission's initial conclusion about spectrum sharing is wrong. One need not look very far to ascertain the fallacy of the Commission's premise that two ubiquitous consumer services, one satellite and one terrestrial, can generally share the same spectrum: it is demonstrated by the Commission's own proposals in the Further Notice of Proposed Rulemaking ("*FNPRM*"). Northpoint, the principal proponent of Multichannel Video Distribution and Data Service ("*MVDDS*"), has repeatedly argued to the Commission that its system cannot satisfy anything close to the interference limit that the Commission proposes. When the principal proponent of the very service in question has strenuously argued that it cannot meet the limits that the Commission proposes to place on the service, the only conclusion that can reasonably be drawn from that argument is that that new service *cannot* share the same spectrum with Direct Broadcast Satellite ("*DBS*") services.

Nor should it come as a surprise that a ubiquitous satellite consumer service and a ubiquitous terrestrial consumer service cannot share the same frequencies. The Commission has looked long and hard at this precise question, and has concluded every single time that sharing between these two types of services is not possible. And, what is more, the Commission made these determinations to protect from interference the interests of *future* consumers, since the services in question had not yet taken off. The DBS companies, of course, serve 15 million consumers, here and now, and the same considerations that led the Commission to reject co-frequency sharing between *future* services such as Ka-band Local Multipoint Distribution Service ("*LMDS*") and Fixed Satellite Service ("*FSS*") are many times more compelling here. A departure from consistent Commission policy would therefore be especially unreasonable in this of all cases. In addition, as Commissioner Furchtgott-Roth has correctly observed, proceeding to

license a new service in this spectrum would upset EchoStar's rights and settled reliance expectations.

Nor is there any serious public interest for the Commission to consider on the other side of the balance. The motives of Northpoint, a company boasting a truly impressive government and public relations crusade, appear to be opportunistic. There is absolutely no valid reason other than Northpoint's enrichment hopes why Northpoint needs to operate its service in the DBS spectrum rather than in any of the multiple bands, spanning several GHz of valuable spectrum, allocated now to point-to-multipoint terrestrial services. Indeed, Northpoint has embarked on a quest for shifting rationales to back its request for this particular spectrum. The first reason given by Northpoint was that it envisioned its service as a complement to DBS that would provide consumers with local signals and be offered as a joint package with DBS. Without exception, however, all the DBS companies stated to both the Commission and Northpoint itself that this idea did not make sense for self-evident reasons: a combination of satellite and off-air local television had never been popular with consumers, who viewed such a satellite-terrestrial combination as decidedly inferior to cable. Having to abandon this initial rationale, Northpoint made up another – that its equipment cannot operate efficiently in any other frequency. Northpoint has never provided support for this outlandish notion, and the Commission has never tested it or even discussed it.

If Northpoint's motivation were genuinely to serve the public interest by offering consumers a new service, it could do so now (and much more quickly) by purchasing an LMDS license or indeed a wireless cable license in a band with excellent propagation characteristics, either at auction or in the secondary market. Of course, Northpoint favors free access to spectrum that someone else – EchoStar – has paid hundreds of millions of dollars for the right to

use. Northpoint is essentially asking the Commission to create for it a right that it can then turn into extremely valuable coin at the expense of the companies that have paid to acquire the same right. This is a significant private benefit, but the Commission should not accept it as a legitimate public interest consideration.

Northpoint has also been trying to impeach EchoStar's motives, arguing that EchoStar wants to stifle competition from a new entrant, which is therefore worthy of the Commission's sympathy. What EchoStar minds, however, is harmful interference from use of its spectrum, not competition from Northpoint. EchoStar can prove this: over the past few years, the Commission has proposed to designate spectrum for numerous new services that would offer the consumer exactly what Northpoint says it plans to provide – a terrestrial multichannel video programming distributor ("MVPD") offering. EchoStar has not opposed any of these proposals – indeed it has generally refrained from even participating in these proceedings. It is worth noting that none of these "wireless cable" alternatives has emerged as a truly promising MVPD option, and Northpoint does not offer to the Commission any persuasive reason why the only promising non-cable MVPD alternative (DBS service) should risk being disrupted for the sake of making room for yet another wireless cable attempt that could be accommodated elsewhere.

These points are all the subject matter of the petition for reconsideration of the Commission's order that EchoStar plans to file. At the same time, they also have a profound implication for the proposals that the Commission is considering in the Further Notice. They specifically point to an over-arching guiding principle: should the Commission proceed with licensing proponents of this "new" service in the 12.2 – 12.7 GHz band, it should do so only with the utmost caution.

The Commission should not adopt its proposal of allowing a further 2.86% increase in the unavailability of DBS service beyond the *aggregate* 10% limit established by the International Telecommunication Union (“ITU”) in connection with sharing between geostationary (“GSO”) and non-geostationary (“NGSO”) satellite services. That limit was established on the basis of an ITU determination about the levels of reliability and performance that DBS providers and consumers have the right to expect. Expanding the possible increase in unavailability by allowing another 2.86% for Northpoint to consume would take DBS performance levels a notch below that protected by the ITU. This would not only contravene an international agreement that the U.S. championed, it would require the renegotiation of the power limits on NGSO systems that flow from that agreement.

There is at least significant doubt, based on Northpoint’s own submissions, that Northpoint can meet even the liberal limit proposed by the Commission. Unfortunately, however, this is not to say that, should the Commission proceed, Northpoint would not deploy a system anyway. Northpoint may find it profitable to do so because of the “Trojan horse” of “mitigation,” which may nullify whatever harmful interference limit the Commission adopts. Essential to Northpoint’s proposal is its peculiar brand of mitigation – Northpoint’s plan to visit DBS subscribers whose television service suffers harmful interference and to offer to “mitigate” such interference by building structures around the consumer’s dish or moving the dish. The Commission should confirm once and for all that this plan is illegal as it would make the consumer’s DBS reception *secondary* to Northpoint’s service.

Of course, Northpoint cannot seriously plan to inform the subscriber that the DBS service is primary and that therefore a consumer has the right to reject shielding or relocation of his/her dish and to instead force Northpoint to shut down its transmitter. If any rational

consumer were to receive that information, he/she would automatically reject Northpoint's proposal. For Northpoint's plan to make any sense for Northpoint, it must be accompanied by the false implication that the consumer is under compulsion to accept the mitigation. The Commission should reject a plan that can only work for Northpoint if the consumer is misled into thinking his/her DBS service is secondary. While such mitigation might be conceivably appropriate where the question is interference into a handful of commercial radio links (or into a transmitter), it is on its face an inconceivable solution for interference into the reception by consumers of a ubiquitous subscription service. Shielding or relocating the transmitter of the secondary terrestrial service should be the only acceptable form of mitigation, as it is the only remedy that respects the primary status of the DBS service.

Should the Commission proceed with licensing a new service in the band, the Commission should open a processing window for accepting applications. However, the principle of caution translates itself most obviously in the following rule: the Commission should not willy-nilly unleash a nationwide roll-out of this untested service on top of an existing ubiquitous service by opening a processing window for the entire country. Rather, the Commission should start with a single local market that should not be among the nation's 50 largest markets. The launch of terrestrial service in that market would allow the Commission to observe the extent of the disruption suffered by DBS customers in real-world conditions. The Commission would also be able to assess how much bidders value the terrestrial uses of the spectrum, and whether the new service proposed by Northpoint has any prospect to become commercially viable, since it would be irrational to risk sacrificing the quality of DBS service nationwide in order to make room for another wireless cable failure.

Every company that has not been found by the Commission or a court to possess market power in a relevant market should be eligible to apply for the new service. In that respect, the *FNPRM* engages in some gratuitous speculation about whether companies such as EchoStar should be barred from applying for the licenses. There is no basis for such a bar. Not only has the Commission never found EchoStar to possess market power in any relevant market; both the Commission and the Department of Justice have concluded emphatically that EchoStar lacks such power. Where even a substantiated analysis of competition such as that underlying the 30% horizontal cable cap was recently rejected as inadequate by the D.C. Circuit, it is inconceivable that the Commission should preclude EchoStar from participating in the new service based on no evidence at all.

In the event of mutual exclusivity that cannot be avoided in any other manner, *see* 47 U.S.C. §309(j)(6), the Commission is required to resolve it by competitive bidding. In structuring an auction, however, the Commission should take into account an important qualification: EchoStar has already paid for this spectrum. EchoStar has paid more than \$50 million at an FCC auction to purchase its license at 148° W.L. and more than \$680 million to purchase MCI's license for 110° W.L., which MCI had purchased at auction for that amount. Under the Commission's new spectrum flexibility policy, EchoStar's dearly-won spectrum rights should extend to any use of the spectrum, whether satellite or terrestrial, that does not cause harmful interference into any other DBS licensee. Licensing another terrestrial provider would contravene the spectrum flexibility policy and infringe these rights. If the Commission were to proceed with licensing nevertheless, requiring EchoStar to pay on top of the payments it has made already to make terrestrial use of the spectrum to which it has purchased the rights would be an unjust double-payment.

At a minimum, therefore, the Commission should set aside a significant portion of the 12.2–12.7 GHz band (no less than 250 MHz) for terrestrial use by interested DBS licensees (the set-aside portion could be further segmented between the two DBS licensees that have built satellite facilities). While DBS licenses should not have to pay for terrestrial use of the remaining spectrum either, they should at least be eligible for a discount off the auction price at an auction for that spectrum. This discount should be no less than the largest discount afforded by the Commission for Designated Entities (45%). Such a discount is fully justified, since *any* payment for spectrum to which a licensee has already purchased the rights is by definition an overpayment.

When introducing a new service in spectrum that is already used, the Commission has routinely made provision for payment to the incumbents to cover the cost of relocating or disrupting their operation. Such payments should be required here. Indeed, EchoStar notes that the Commission has openly encouraged private payments from wireless auction winners to UHF broadcasters to induce those broadcasters to evacuate the 700 MHz band, even though the broadcasters have paid nothing for their rights to the spectrum and are required by statute to evacuate the spectrum anyway. In these circumstances, it would appear to be unreasonable not to require payment to the incumbent for disruption of its operations where the incumbent (unlike the broadcasters) has paid for the spectrum and (again unlike the broadcasters) has a full-blown license to use the spectrum. The Commission should provide that these payments would be funded from the auction proceeds. Of course, even such payments *might not be enough* to compensate EchoStar for what Commissioner Furchtgott-Roth accurately sees as trespass on EchoStar's settled reliance interests, and EchoStar reserves the right to assert these interests in any appropriate forum.

Should the Commission require a payment to incumbents from the auction proceeds, EchoStar commits to use all of these funds for the purpose of reimbursing EchoStar subscribers that suffer harmful interference from the Northpoint service. Should the Commission reject this proposal, it should at least provide for the creation for a fund from the auction proceeds that will be administered by an independent trustee and be used directly to reimburse DBS subscribers that fall victim to interference from the new service.

Finally, the Commission should take drastic measures to preempt any motive on the part of the new licensees to enrich themselves by trading in spectrum that someone else has made valuable. Because such a motive is very much possible here, the Commission should go beyond its normal prohibition against trafficking in bare licenses. The Commission should prohibit any transfer of a license or transfer of control over a licensee until all of the licensee's facilities in all of its license areas are fully built and operational.

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**Before the
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Washington, D.C. 20554**

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Corporation and Satellite Receivers, Ltd. to Provide)	
A Fixed Service in the 12.2 – 12.7 GHz Band)	

To: The Commission

COMMENTS OF ECHOSTAR SATELLITE CORPORATION

EchoStar Satellite Corporation (“EchoStar”) hereby submits its comments on the Commission’s development of rules to govern a new terrestrial fixed Multichannel Video Distribution and Data Service (“MVDDS”). The Commission has initially determined that such a terrestrial service can generally share on a non-interference basis the same spectrum as Direct Broadcast Satellite (“DBS”) television, a service enjoyed today by 15 million households. The Commission has proposed certain interference constraints on this new service, and asks several questions about the rules that should govern it.

I. THE BACKDROP FOR THE PRESENT RULEMAKING – THE COMMISSION’S ERRONEOUS CONCLUSION REGARDING SPECTRUM SHARING

The Commission’s *Report and Order* in this proceeding will create an unparalleled spectrum sharing regime, crowding *three* ubiquitous consumer services – DBS, non-geostationary satellite orbit (“NGSO”) fixed-satellite service (“FSS”) systems and the new MVDDS service– in the 12.2–12.7 GHz band.¹ Achieving a framework that would allow sharing between the first two of these services was extraordinarily difficult, indeed it became possible because of the nature of NGSO satellites: as these satellites rotate on low-earth orbits around the earth, they can hand off service from one to another, thus allowing NGSO operators to control interference into DBS systems. This capability, matched by significant concessions by the DBS operators, allowed a consensus that then formed the basis of an International Telecommunication Union (“ITU”) determination: NGSO operators can operate in the spectrum subject to power limits ensuring that the increase in unavailability of DBS links never exceeds a 10% increase in the unavailability of the DBS service. Thanks to this hard-to-reach compromise, Commission was able to conclude that there was “an adequate basis to adopt rules governing co-frequency operation of NGSO FSS systems in certain frequency bands.”²

¹ And that does not even include the private operational fixed services that use the spectrum today. See *In the Matter of Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission’s Rules to Authorize Subsidiary Terrestrial Use of the 12.2 – 12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2 – 12.7 GHz Band*, First Report and Order and Further Notice of Proposed Rulemaking, ET Docket No. 98-206, RM-9147, RM-9245, FCC 00-418 (rel. Dec. 8, 2000), at ¶¶19-253 (“*Report and Order and FNPRM*”).

² See *id.* at ¶ 20 (describing efforts at the international level to resolve NGSO FSS/GSO FSS and NGSO FSS/BSS spectrum sharing issues).

In this already strained sharing environment, the Commission has now concluded that a third ubiquitous consumer service, without any meaningful capability of handing off the service among a fleet of transmitters, can share the spectrum with DBS. This conclusion is wrong. By Northpoint's own admission, the service proposed by Northpoint cannot comply even with the liberal limit on harmful interference proposed by the Commission. The Commission's conclusion is inconsistent with *repeated* holdings by the Commission that co-frequency sharing between ubiquitous satellite and terrestrial services is not feasible. And the Commission's decision would infringe EchoStar's rights and upset its settled reliance expectations.

A. Northpoint's Own Statements Call Into Question Its Ability to Meet Even The Commission's Liberal Interference Limit

There can be no rational basis for a conclusion that the new service can generally share with DBS when the only example of the service before the Commission cannot meet even the liberal constraints the Commission proposes to place on the service. Throughout the debate regarding permissible limits for DBS unavailability due to MVDDS operations, Northpoint unwaveringly objected to any proposal requiring Northpoint to comply with the aggregate 10% unavailability cap set by the ITU.³ In fact, there is at least significant doubt based on Northpoint's submissions that its system could comply with a 10% limit on unavailability

³ See, e.g., Letter from Antoinette Cook Bush, Northpoint, to FCC, with attached "Response to DirecTV," at 29 (dated Mar. 17, 2000) (claiming that ITU Recommendations exclude Northpoint from the NGSO FSS allocation); Letter from Sophia Collier, Broadwave, to Donald Abelson, Chief – International Bureau, FCC, and Dale Hatfield – Chief, Office of Engineering and Technology, FCC (dated Sept. 13, 2000) (advocating use of the Commission's UHF-VHF broadcast rules for allocating additional digital television channels as the standard for assessing harmful interference from Northpoint's system, rather than the ITU standard).

increases even if Northpoint could use the entire 10% limit by itself (*i.e.*, apart from any interference caused by NGSO systems).

It thus appears that Northpoint's system cannot comply with the 12.86% aggregate unavailability limit proposed by the Commission (inappropriately liberal though this standard may be). There is no other system before the Commission that can meet that limit either.⁴ In the face of these facts, it is unreasonable to conclude that a service incapable of meeting the interference limits proposed by the Commission can share the spectrum without causing harmful interference. The Commission is putting the horse before the cart when it proposes rules for a service that cannot meet the proposed limits to begin with.

B. The Commission's Conclusion Inexplicably Departs from Its Precedent

Nor should it come as a surprise that sharing between two ubiquitous consumer services, one satellite one terrestrial, is not feasible. The Commission has reached that conclusion many times. For example, in the proceeding establishing Local Multipoint Distribution Service ("LMDS"), the Commission concluded that "co-frequency sharing between either GSO/FSS or NGSO/FSS ubiquitously deployed terminals and LMDS with its ubiquitously deployed subscriber terminals, is not feasible at this time."⁵ The Commission reached the same determination when it decided to relocate the digital electronic message service ("DEMS") from

⁴ The systems proposed by the two other applicants appear to be identical from the interference standpoint to that proposed by Northpoint.

⁵ *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd. 19005, ¶ 27 (1996) ("*LMDS Order*").

the 18 GHz band. And as recently as June of last year, the Commission adopted a further Order segmenting the 18 GHz Band between terrestrial fixed services, the downlinks of geostationary fixed satellite service (very similar to the DBS downlinks for purposes of interference analysis), and non-geostationary satellite services.⁶ In doing so, the Commission emphasized that:

[t]he vast majority of the commenters agreed with our tentative conclusion that co-frequency sharing between terrestrial fixed service and ubiquitously deployed FSS earth stations in the 18 GHz band is not feasible, and that the public interest would be best served by separating these operations into dedicated sub-bands. We continue to believe that separation of these operations into different dedicated sub-bands is an effective frequency management technique to resolve problems of coordinating terrestrial fixed service links with ubiquitously deployed satellite earth stations.⁷

Finally, the Commission reached the same conclusions with respect to the idea of co-frequency sharing in the 39 GHz Band, noting that there “is wide support for the premise that the types of fixed and satellite services likely to be offered in spectrum above 36 GHz will not be able to share the same spectrum blocks.”⁸ “Against this backdrop,” the Commission concluded

⁶ *In the Matter of Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, Report and Order, IB Docket No. 98-172 (rel. June 22, 2000).

⁷ *Id.*, ¶ 17.

⁸ *In the Matter of Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz*, Report and Order and Second Notice of Proposed Rulemaking, 12 FCC Rcd. 18600, ¶ 8 (1997); *see also In the Matter of Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, Memorandum Opinion and Order, 14 FCC Rcd. 12428, ¶ 49 (1999).

“that some form of band segmentation will be required to accommodate planned services in the spectrum above 36 GHz.”⁹

Here, in contrast, the Commission recognized that “[n]ot all services can easily coexist in the same frequency band” but concluded nonetheless that MVDDS could share spectrum with DBS. In doing so, the Commission did not identify any difference between MVDDS on the one hand, and LMDS, DEMS, and the 18 and 39 GHz bands on the other hand – much less a difference that warranted deviation from the Commission’s repeated and consistent determinations in the latter proceedings that co-frequency sharing between ubiquitous satellite and terrestrial services is infeasible.

There is no such difference: in most of the proceedings cited above, the Commission concluded that a ubiquitous terrestrial service cannot share the spectrum with service from (or to) geostationary satellites located in a southerly direction above the Equator, just like DBS satellites. If there was any validity to Northpoint’s simplistic notion that the northerly origin of its transmissions would avoid harmful interference into DBS, that notion would have been valid in those cases too. In other words, if Northpoint’s theory were valid the Commission doubtless would have concluded in all of these proceedings that sharing between point-to-multipoint terrestrial and GSO services is feasible because GSO satellites are located approximately in a southerly direction and terrestrial towers can be cited approximately in a northerly direction. Instead, the Commission concluded invariably that sharing was infeasible. That conclusion was sound in those proceedings and remains sound here.

⁹ *Id.*

For this reason, the very premise underlying this rulemaking is wrong. While this is the appropriate subject matter of the petition for reconsideration of the Commission's action that EchoStar plans to file, it also dictates a principle that should guide the Commission in the Further Notice: if at all, the Commission should proceed with the utmost caution.

II. THE COMMISSION'S PROPOSAL IS INCONSISTENT WITH THE RIGHTS AND REASONABLE RELIANCE INTERESTS CREATED BY ITS LICENSING REGIME

DBS licensees acquired their spectrum usage rights at a time when sharing of DBS spectrum with a ubiquitous terrestrial service was not contemplated. EchoStar paid hundreds of millions of dollars for these rights. As Commissioner Furchtgott-Roth correctly observed in his separate statement accompanying the *Report and Order and FNPRM*, the amount DBS licensees paid for licenses was partly based on the licensees' "expectation of certain interference protection" and "expectation regarding the range of technological options with which the spectrum might be developed."¹⁰ DBS licensees subsequently designed their systems to maintain a certain degree of reliability for DBS customers based upon these reasonable expectations of interference protection, and also further invested billions of dollars in developing the DBS licenses based on these expectations.

But the Commission now proposes to change the rules on DBS licenses, prompting Commissioner Furchtgott-Roth to observe further:

DBS licensees paid for one set of rights – exclusive use of space stations in these bands with expectations of certain inference protection – but are now only entitled to a diminished version of

¹⁰ *Report and Order and FNPRM*, Separate Statement of Commissioner Harold Furchtgott-Roth Approving in Part, Dissenting in Part, at pp. 188-89.

those rights. This change has come without compensation for the alterations in interference protection or the reduced range of technological possibilities or the expenses incurred by GSO DBS in acquiring and developing the licenses.¹¹

DBS licensees acquired the right to be the primary service providers in the 12.2 – 12.7 GHz band, and consequently, reasonably expected that the Commission would not authorize any other service in that band that would create harmful interference to DBS service in accordance with the Commission’s rules. In reliance on this reasonable expectation, DBS operators invested billions of dollars developing their DBS licenses on top of the more than \$700 million that EchoStar has paid to acquire these licenses. In further reliance on this expectation, designed their DBS systems to provide a certain level of reliability to DBS customers. Yet, notwithstanding the expectations of and reliance by DBS licensees, the Commission has changed the rules, now finding it appropriate to “define a permissible level of *increased* DBS service outage that may be attributable to MVDDS . . .”¹² The Commission has recognized that “reliance on Commission rules or policies may create equitable interests under certain

¹¹ *Id.* at 189. While there has been debate as to whether the spectrum rights that arise from an FCC license rise to the level of full-blown property rights that may not be taken without just compensation, courts long ago recognized that spectrum rights, even if less than property, are “more than a mere privilege or gratuity.” L.B. Wilson, Inc. v. FCC, 170 F.2d 793, 798 (D.C. Cir. 1948). *See also Reuters Ltd. v. FCC*, 781 F.2d 946, 950 (D.C. Cir. 1986) (setting aside the rescission of a spectrum license based on reasoning that a properly granted radio license is a vested interest); *Orange Park Florida T.V., Inc. v. FCC*, 811 F.2d 664, 674 (D.C. Cir. 1987) (broadcast license, while not indefeasible property, is a protected property interest); *see also In the Matter of Principles for Promoting Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, FCC 00-401 (rel. Dec. 1, 2000), at ¶ 22 (“While individuals cannot ‘own’ spectrum pursuant to a statute, a license to use spectrum confers certain rights to use the spectrum, which we have referred to as ‘spectrum usage rights.’”).

¹² *FNPRM*, ¶ 267 (emphasis added).

circumstances.”¹³ The Commission is presented here with just such a circumstance, given the reasonable expectations as to protection from interference, and reliance by DBS operators on those expectations, as embodied by DBS operators’ significant investment in their DBS licenses.

The threat of harmful interference from the Northpoint service is far from academic. Northpoint’s operation could cause irreparable injury to a myriad of consumers (even under Northpoint’s flawed calculations, 2% of DBS subscribers, meaning currently approximately 300,000 households, would be affected), and to the reputation of DBS providers themselves. EchoStar believes that a very significant reason why consumers subscribe to DBS is its reliability, and has invested heavily to ensure the level of reliability that the ITU too has decided to protect. There is no question that Northpoint’s operation will increase the occurrences of loss of picture or other phenomena such as freeze framing for many subscribers (no fewer than 2% of the total, and in EchoStar’s view many more than that); the only questions in dispute are by how much and how many. If consumers start experiencing picture loss and/or freeze framing more often, they may feel that their expectations from the DBS service have been frustrated, that DBS is less of a viable alternative for cable, and indeed may migrate to cable. Even if Northpoint were to shut down after causing harmful interference, nothing can sufficiently compensate for this type of consumer disappointment, which will undoubtedly be communicated to other consumers. Nor can the harm to the DBS operator and its reputation be remedied, as such consumers may feel let down by the DBS provider, and may not know that the reason for the interference is beyond EchoStar’s power to control.

¹³ *In the Matter of Implementation of Section 309(j) of the Communications Act – Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses*, 14 FCC Rcd. 8724, ¶ 12 (1999).

In fact, the trespass of EchoStar's rights goes even further than this. Under the Commission's new spectrum flexibility policy, EchoStar's spectrum rights to the 12.2—12.7 GHz band extend to terrestrial use of the spectrum as well, provided that such use does not interfere with any other DBS licensee.¹⁴ Licensing other companies to put the same spectrum to such use directly infringes these rights. In short, DBS operators not only have vested interests that must be protected, but also equitable interests created by reasonable reliance on the Commission's representation of a certain degree of protection from interference for DBS through the Commission's rules and policies. Courts have repeatedly held that the government may not, through changes in laws or rules, renege on promises and defeat such interests without compensating the holders of such interests. *See, e.g., United States v. Winstar Corp.*, 518 U.S. 839 (1996).

III. THE COMMISSION SHOULD NOT ADOPT A PROPOSAL ALLOWING A FURTHER INCREASE IN THE UNAVAILABILITY OF DBS SERVICE BEYOND THE AGGREGATE LIMIT ESTABLISHED BY THE INTERNATIONAL TELECOMMUNICATION UNION

In the face of the Commission's repeated and consistent determinations that co-frequency sharing between ubiquitous satellite and terrestrial services is infeasible, the burden of proving otherwise should be heavy, and nothing less should be required of MVDDS than what the NGSO operators have agreed to after years of intense international negotiation – the 10% aggregate limit on increased unavailability inclusive of NGSO and terrestrial interference. A

¹⁴ *See generally In the Matter of Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, FCC 00-401 (rel. Dec. 1, 2000); *In the Matter of Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Notice of Proposed Rulemaking, WT Docket No. 00-230 (rel. Nov. 27, 2000).

10% aggregate limit as the level of protection needed for DBS operators has been authoritatively determined in a recent ITU recommendation that was not only supported, but indeed *championed* by the United States.¹⁵ As EchoStar has previously explained to the Commission, while the 10% aggregate limit on increased unavailability was determined on the occasion of interference from non-GSO satellite systems into DBS systems, the necessary basis of that limit is a finding that the DBS operators should not be asked to accept more than a 10% *aggregate* increase in unavailability from all additional sources of interference.¹⁶ That finding applies with equal force to any MVDDS proposal. Yet the Commission has proposed an approach under which “MVDDS interference could contribute 2.86% unavailability in *addition* to the aggregate 10% caused by NGSO FSS operations.”¹⁷

A. The Commission’s Proposal Ignores the Basis of the ITU’s Recommendation

The Commission’s departure from the ITU’s finding is flatly inconsistent with U.S. international good faith and obligations. The 10% unavailability increase limit adopted by the ITU for interference into DBS operations applies fully, not only to non-geostationary satellite

¹⁵ Recommendation ITU-R BO.1444.

¹⁶ See Ex Parte Letter of EchoStar Satellite Corp. (filed Oct. 24, 2000) summarizing presentation regarding *Wireless Telecommunications Bureau Seeks Comment on Broadwave Albany, L.L. C. et al. Request for Waiver of Part 101 Rules*, Public Notice, DA 99-494 (rel. Mar. 11, 1999) and *Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range and Amendment of the Commission’s Rules to Authorize Subsidiary Terrestrial Use of the 12.2 – 12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates*, ET Docket No. 98-206, Notice of Proposed Rulemaking, FCC 98-310 (rel. Nov. 24, 1998); see also Ex Parte Letter of EchoStar Satellite Corp. and DIRECTV, Inc. (filed Nov. 8, 2000) in same dockets.

¹⁷ *FNPRM* at ¶ 268 (emphasis added).

(“NGSO”) systems, but also to the proposal of Northpoint Technology and its affiliates (collectively “Northpoint”) to use the band for MVDDS operations.

The ITU actions regarding interference from NGSO systems into DBS were *explicitly* premised on a decision of the ITU about the level of performance and quality of service needed by DBS systems and the amount of decrease in this quality that DBS operators can be asked to accept. The ITU specifically found that a DBS operator “should be able to control the overall performance of a network, and to provide a quality of service that meets its C/N performance objectives,” and that, to allow this, “there needs to be a limit on the aggregate interference a network must be able to tolerate from emissions *of all other networks.*”¹⁸ The Commission’s proposal that Northpoint is not subject to the 10% cap on aggregate unavailability increase directly interferes with these ITU findings, since the DBS operators would not be able to ensure the level of performance and quality of service that was the explicit basis of the ITU actions. Indeed, to preserve that level of protection would require an international renegotiation of the power flux density limits on NGSO systems that were embedded in a recent ITU rule – a rule binding on the United States by international treaty. In addition to the direct tension between the Commission proposal and the ITU findings, these findings (including the level of service quality required for DBS) were not only supported but actually championed by the United States. Thus, the Commission’s decision to undermine them would deal a severe blow to U.S. faith and credibility in the most important international communications forum.

¹⁸ Recommendation ITU-R BO.1444, *considering further* (a) and (b) (emphasis added) (“ITU Recommendation”).

The relevant ITU actions are Recommendation ITU-R BO.1444 and RR Article S22, both recently approved in the World Radiocommunication Conference of 2000. The immediate *result* of these actions was to derive a limit on the interference that NGSO systems could permissibly cause to DBS operations and to determine resulting power flux density limits on NGSO systems operating in the DBS band. To support its proposal, the Commission must rely on a narrow reading of this *result* for its argument that these actions apply only to NGSO systems and that, therefore, the Commission can freely accommodate, at Northpoint's pleasure, Northpoint's avowed intention to cause additional interference to DBS systems beyond the 10% aggregate cap adopted by the ITU.

This narrow reading ignores the basis of the ITU actions, however. These actions were based on an ITU decision about the needed performance objectives of DBS systems and the level of erosion of this performance that DBS systems can be asked to accept. To conclude that this was the premise and goal of the ITU actions, one does not need to resort to inference or look to the deliberations underlying the actions. Rather, that premise was explicitly embedded in the ITU-voted documents, and close review of these documents will suffice to show the flaw in the Commission's proposal.

The ITU went through a three-step process to reach the resulting power limits it developed for NGSO systems. *First*, it approved specific performance objectives for the DBS systems; *second*, it made a decision about how much erosion of those performance objectives would result in DBS system performance that is still acceptable from a quality of service standpoint; and *third*, it developed power flux density levels for NGSO systems that preserve that DBS level of performance. All three of these determinations are *spelled out* in the ITU Recommendation. In the ITU's words, its actions were based on its findings: "that the BSS and