

DOCKET FILE COPY ORIGINAL

KELLOGG, HUBER, HANSEN, TODD & EVANS, P.L.L.C.

MICHAEL K. KELLOGG  
PETER W. HUBER  
MARK C. HANSEN  
K. CHRIS TODD  
MARK L. EVANS  
STEVEN F. BENZ  
NEIL M. GORSUCH  
GEOFFREY M. KLINEBERG  
REID M. FIGEL

SUMNER SQUARE  
1615 M STREET, N.W.  
SUITE 400  
WASHINGTON, D.C. 20036-3209  
\_\_\_\_\_  
(202) 326-7900  
FACSIMILE:  
(202) 326-7999

HENK BRANDS  
SEAN A. LEV  
EVAN T. LEO  
ANTONIA M. APPS  
MICHAEL J. GUZMAN  
AARON M. PANNER  
DAVID E. ROSS  
SILVIJA A. STRIKIS  
RICHARD H. STERN, OF COUNSEL

March 12, 2001

VIA HAND DELIVERY

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
The Portals  
445 12th Street, SW  
Room TW-B204  
Washington, DC 20554

RECEIVED

MAR 12 2001

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

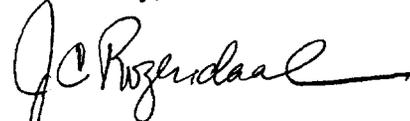
**Re: ET Docket No. 98-206/RM-9147; RM-9245; Applications of Broadwave USA, et al., PDC Broadband Corporation, and Satellite Receivers, Ltd., to provide a fixed service in the 12.2 – 12.7 GHz Band.**

Dear Ms. Salas:

Enclosed please find an original and four copies of *Comments of Northpoint Technology, Ltd. and Broadwave USA, Inc.*, in the above referenced matters.

I have also enclosed an additional copy. Please date-stamp and return it in the self-addressed envelope provided. Thank you for your assistance in this matter.

Yours truly,



J.C. Rozendaal

Enclosures

No. of Copies rec'd  
L1480DE

014

**RECEIVED**

**MAR 12 2001**

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

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**

\_\_\_\_\_  
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

)  
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 Corp., and Satellite Receivers, )  
Ltd., to Provide a Fixed Service in the 12.2- )  
12.7 GHz Band )  
\_\_\_\_\_

**COMMENTS OF NORTHPOINT TECHNOLOGY, LTD.  
AND BROADWAVE USA, INC.**

Antoinette Cook Bush  
Northpoint Technology, Ltd.  
400 North Capitol Street, N.W.  
Suite 368  
Washington, D.C. 20001

Michael K. Kellogg  
J.C. Rozendaal  
Kellogg, Huber, Hansen,  
Todd & Evans, P.L.L.C.  
Sumner Square  
1615 M Street, N.W.  
Suite 400  
Washington, D.C. 20036  
(202) 326-7900

*Counsel for Northpoint Technology, Ltd.,  
and Broadwave USA, Inc.*

March 12, 2001

|  |    |
|--|----|
| INTRODUCTION AND SUMMARY .....   | 1  |
| DISCUSSION.....  | 5  |
| I.    Auctions Are Inappropriate Where Innovative Technology Permits a New,<br>Shared Use of Already Licensed Spectrum .....   | 5  |
| A.    The Commission Should Not Auction the Right To Use Innovative<br>Technology that Squeezes New Bandwidth Out of Already<br>Licensed Bands .....                 | 7  |
| B.    Auctions Would Be Inconsistent with the Commission’s<br>Procedures to Date in This Matter .....  | 11 |
| II.   The Commission Cannot Lawfully Auction What it Calls “MVDDS<br>Spectrum” .....   | 14 |
| A.    The ORBIT Act Precludes Auctions.....  | 14 |
| B.    No One But Northpoint Submitted a Timely Bona Fide<br>Application to Provide Terrestrial Service in the 12 GHz Band .....                                      | 17 |
| C.    Northpoint Is the Only Applicant That Has Submitted Its<br>Technology for Independent Technical Review as Expressly<br>Required by Congress Last December..... | 19 |
| D.    The Commission Has a Duty to Avoid Mutual Exclusivity Where<br>Possible .....  | 22 |
| III.  The Proposed Auction of Terrestrial Licenses Would Subvert Congress’s<br>Directives To Issue Licenses Quickly in the 12 GHz Band.....                          | 26 |
| A.    The Commission Has Already Failed to Meet Two Important<br>Deadlines Set by Congress.....  | 26 |
| B.    Important Public Policy Interests Are Served by Issuing Licenses<br>to Northpoint’s Affiliates Quickly .....   | 30 |
| IV.   Comments Regarding Specific Licensing Criteria .....   | 31 |
| CONCLUSION.....  | 35 |

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

|   |   |                      |
|---|---|----------------------|
| 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    | ) | ET Docket No. 98-206 |
| Frequency Range;                              | ) | RM-9147              |
|   | ) | RM 9245              |
| 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 Corp., and Satellite Receivers,     | ) |                      |
| Ltd., to Provide a Fixed Service in the 12.2- | ) |                      |
| 12.7 GHz Band                                 | ) |                      |

**COMMENTS OF NORTHPOINT TECHNOLOGY, LTD.  
AND BROADWAVE USA, INC.**

---

**INTRODUCTION AND SUMMARY**

The Commission proposes to define a new service to be called "MVDDS" in the 12 GHz band and has sought comment on whether to auction off licenses to the highest bidder. In the circumstances at issue here, the creation of a new service is unnecessary, and auctioning off licenses would be fundamentally misguided.

The Commission is proceeding as if it were making a fresh block of spectrum available to the world. But it is doing nothing of the sort. There is no "new spectrum"

here. One company – Northpoint<sup>1</sup> – has invented, developed, tested, and patented a remarkable technology that makes possible new terrestrial uses of 12.2-12.7 GHz spectrum without causing harmful interference to the ten existing and planned satellite operators in that band. Northpoint has created new bandwidth out of thin air by re-using spectrum previously allocated to other uses, but without displacing incumbent Direct Broadcast Satellite (“DBS”) and planned Nongeostationary Satellite Orbit Fixed Satellite Service (“NGSO-FSS”) operations. This is precisely the kind of innovation that the Commission should be doing its utmost to promote. And it is precisely the kind of innovation that the Commission has sought to promote in the past, when it allowed licensees to deploy new technologies designed to harvest increased bandwidth out of already assigned spectrum.<sup>2</sup>

Instead, the Commission is considering, in effect, an auction not of spectrum but rather of the right to use a specific technology – the Northpoint technology that makes possible the provision of a new service within spectrum bands already assigned to other users. To conduct an auction in these circumstances would be to appropriate to the federal treasury much of the value of Northpoint’s technology. That would sharply discourage not only future innovation by future Northpoints but also the process of negotiation that has been critical to establishing the sharing criteria that make possible the use of Northpoint’s technology in the same bands used by DBS and NGSO-FSS services. It would postpone for many more years the delivery of local broadcast signals to rural users, and it would delay the emergence of new competitive alternatives to cable.

---

<sup>1</sup> “Northpoint” may be used in these comments to refer collectively to Northpoint Technology, Ltd., and Broadwave USA, Inc.

<sup>2</sup> See *infra* Part I.A.

Procedurally, a spectrum auction would involve an arbitrary and unconscionable change in the way the Commission has managed the 12 GHz band to date.<sup>3</sup> In the more than seven years that Northpoint has been at the Commission seeking approval to deploy its technology, Northpoint has been negotiating with the Commission's International Bureau ("IB") and with DBS and NGSO-FSS operators to establish criteria that make it possible for up to 11 participants to share the 12 GHz band. Now that Northpoint has demonstrated that its application and those of the 10 other incumbent and planned users are not mutually exclusive, it is entitled to have its applications processed under the usual and customary procedures of the IB – without an auction – together with the applications of the NGSO-FSS operators. This approach recognizes that only Northpoint's applications were filed within the relevant filing window and that no other applicant has the proven capability to provide terrestrial service in the 12 GHz band without causing harmful interference to DBS broadcasts.<sup>4</sup>

No other approach can be squared with the ORBIT Act's prohibition on auctioning spectrum used for satellite services.<sup>5</sup> No other approach is consistent with Congress's general directive to take action on petitions or applications proposing new technologies within one year,<sup>6</sup> let alone Congress's explicit directive to the Commission to license or authorize this kind of technology, in these bands, for these uses, by

---

<sup>3</sup> See *infra* Part I.B.

<sup>4</sup> See *infra* Part II.B-C.

<sup>5</sup> See Open-Market Reorganization for the Betterment of International Telecommunications Act ("ORBIT Act"), Pub. L. No. 106-180, § 3, 114 Stat. 48, 57 (2000) (codified at 47 U.S.C. § 765f); see also *infra* Part II.A.

<sup>6</sup> See 47 U.S.C. § 157(b); see also *infra* Part III.A.

November 29, 2000.<sup>7</sup> No other approach will permit the Commission and other licensees to come into compliance with the January 1, 2002, must-carry deadline of the Satellite Home Viewer Improvement Act of 1999 (“SHVIA”).<sup>8</sup> No other approach can be squared with the directive that Congress enacted into law just last December, which requires independent testing of any technology designed to provide terrestrial service in the 12 GHz band.<sup>9</sup>

In sum, the Commission’s proposed approach is bad policy. It contravenes congressional mandates and deadlines that expressly address the services that Northpoint’s technology makes possible. And it cannot be squared with familiar requirements of fair and rational administrative process.

The Commission should promptly issue waivers to permit terrestrial, point-to-multipoint video services under the existing allocation for fixed services in the 12 GHz band. And it should license Northpoint’s Broadwave affiliates to provide those services using the breakthrough technology that Northpoint invented, patented, and painstakingly validated in tests evaluated by the Commission itself.<sup>10</sup>

---

<sup>7</sup> See Rural Local Broadcast Signal Act (“RLBSA”), Pub. L. No. 106-113, § 1000(a)(9), [App. I, Tit. II], 113 Stat. 1501, 1536, 1501A-544 (1999) (enacted on November 29, 1999, as Title II of the Intellectual Property and Communications Omnibus Reform Act of 1999 (“IPACORA”)); see also *infra* Part III.A.

<sup>8</sup> See 47 U.S.C. § 338(a) (codifying in part section 1008(a) of the SHVIA, which was enacted as Title I of the IPACORA, see 113 Stat. 1501A-523, 1501A-531); see also *infra* Part III.A.

<sup>9</sup> See Launching Our Communities’ Access to Local Television Act of 2000, Pub. L. No. 106-553, App. B, Tit. X, § 1012, 114 Stat. 2762, 2762A-128, 2762A-141 through 2762A-142 (enacting section 1012 of H.R. 5548 – Departments of Commerce, Justice, and State, the Judiciary, and Related Agency Appropriations Act, 2001, as introduced on October 25, 2000); see also *infra* Part II.C.

<sup>10</sup> Of course, other technologies may be developed that will also be able to share the 12 GHz band with existing uses without causing harmful interference. When those

## DISCUSSION

### I. AUCTIONS ARE INAPPROPRIATE WHERE INNOVATIVE TECHNOLOGY PERMITS A NEW, SHARED USE OF ALREADY LICENSED SPECTRUM

The Commission states in the First Report and Order and FNPRM that to issue licenses for terrestrial service in the 12 GHz band without competitive bidding would “differ” from its “traditional process for establishing new terrestrial wireless services.”<sup>11</sup> “When a party or the Commission proposes such a service,” the Commission explains, “we generally initiate rule making proceedings both to allocate spectrum for the new service and establish service rules before we accept any applications for licenses.”<sup>12</sup>

The Commission’s “traditional process,” however, has evolved to address the more typical situation where the Commission decides, often on its own initiative, to open up an existing block of terrestrial spectrum that is either unoccupied or severely underused. Little if any coordination is therefore required between new licensees and existing ones in that band. The main administrative challenge is to decide which of many, new, would-be licensees should be permitted to operate in which geographic markets.

---

technologies are developed and proved, the Commission should approve their deployment as well. But the First Report and Order that accompanied the current FNPRM is based entirely upon Northpoint’s Technology. Nothing in the record of these proceedings indicates that terrestrial service is currently possible in the 12 GHz band (without causing harmful interference to other operations) without using Northpoint’s patented inventions.

<sup>11</sup> First Report and Order and Further Notice of Proposed Rule Making, *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, FCC 00-418, ¶ 327 (rel. Dec. 8, 2000) (“First Report and Order and FNPRM”).

<sup>12</sup> *Id.*

Here, by contrast, Northpoint's technology opens up new bandwidth in spectrum *already allocated, assigned, and used or to be used by perhaps 10 other NGSO-FSS and DBS operators*. There is no new band, and it makes no sense to speak of a "new terrestrial wireless service" distinct from Northpoint's technology. The "new service" the Commission proposes to define is no more or less than the technology itself.

The technology was developed for the specific purpose of providing new bandwidth under an umbrella of existing satellite spectrum licenses. Perhaps half of the development effort went into working out technical standards to coordinate non-interfering use of the technology with existing or prospective satellite-spectrum licensees. Throughout that process, Northpoint meticulously followed the "traditional" path the Commission uses for licensing the spectrum that satellite operators use. Northpoint could not have done otherwise – the fundamental purpose of Northpoint's technology is to make possible the coordinated reuse of satellite spectrum.

At every step of the way – until it issued its First Report and Order and FNPRM last December – the Commission itself had agreed that Northpoint's technology had to be evaluated and processed on the "traditional" licensing track for *satellite spectrum*. The proceedings to date have been conducted under the auspices of the IB pursuant to the procedures of that Bureau. It was only by conducting them there that Northpoint and the Commission were able to work out the sharing criteria that are the essential regulatory complements to Northpoint's technology. The Commission does not honor its own "tradition" in suddenly diverting these proceedings, at the last moment, to the very different Wireless Telecommunications Bureau ("WTB") auction track. To do so at this late stage is not fair, not rational, and not wise.

**A. The Commission Should Not Auction the Right to Use Innovative Technology that Squeezes New Bandwidth Out of Already Licensed Bands**

The Commission is addressing, here, an application of a type that is likely to become increasingly common in the future, as digital radio technologies continue to advance rapidly. But the application is fundamentally different from many others that the Commission has successfully addressed by auction in the past.

The “traditional” regulatory model that the Commission’s First Report and Order and FNPRM alludes to is still perfectly sound, when applied to the circumstances for which it was developed. When Personal Communications Service (“PCS”) was introduced, for example, the Commission identified the PCS block and helped the new licensees to clear the land (so to speak).<sup>13</sup> The Commission then had to choose among multiple, indistinguishable applicants, all of which planned to use essentially the same proven PCS technology.<sup>14</sup> Willingness to pay was a useful proxy to determine in whose hands the new licenses in the newly cleared space would be most valuable.<sup>15</sup> Used in the right circumstances, spectrum auctions are an excellent, efficiency-enhancing way to

---

<sup>13</sup> To make room for PCS, the Commission established rules for the relocation of the approximately 4,500 links of fixed point-to-point microwave operators. *See generally* Cramton, Kwerel, and Williams, *Efficient Relocation of Spectrum Incumbents*, 41 J. L. & Econ. (Pt. 2) at 660-669 (Oct. 1998).

<sup>14</sup> The Commission has repeatedly found that “all commercial mobile radio services are ‘substantially similar’ to each other” on both a technical and an operational basis. Third Report and Order, *Implementation of Sections 3(n) and 332 of the Communications Act*, 9 FCC Rcd 7988, 8035, ¶ 78 (1994).

<sup>15</sup> *See, e.g., FCC v. NextWave Personal Communications, Inc. (In re NextWave Personal Communications, Inc.)*, 200 F.3d 43, 54 (2d Cir. 1999) (“The FCC’s auction rules promulgated under § 309(j) have primarily a regulatory purpose: to ensure that spectrum licenses end up in the hands of those most likely to further congressionally defined objectives.”).

distribute licenses, and they are undoubtedly a marked improvement over the lottery system that preceded them.<sup>16</sup>

But Northpoint is not asking the Commission to clear any space; the whole point of its technology is to operate underneath existing licenses. Congress itself has intervened to direct the Commission to take quick action to validate and then authorize use of spectrum-reusing technologies of this kind.<sup>17</sup> The Commission does not have to choose among multiple indistinguishable applicants here; only one applicant has developed and validated the technology that can do this, and the Commission's entire analysis has been developed and framed, line by line, around that specific technology. The Commission is not called upon to decide which among many applicants can make the most economically efficient use of new spectrum. It only has to decide whether a new technology can make more efficient technical use of spectrum already licensed and already in use.

The only economic effect of conducting an auction here will be to appropriate for the Government some share of the economic value of the proprietary technology that Northpoint has painstakingly developed and validated before the Commission. For all practical purposes, the auction proceeds would represent not a fee for spectrum, but a direct levy on innovation. The Commission is not proposing to auction new spectrum here, for there is no "new spectrum." The Commission is, in effect, proposing to auction the innovation itself.

---

<sup>16</sup> See, e.g., *id.* at 51 ("The use of lotteries . . . encouraged speculation and, ultimately, failed to allocate licenses to those most likely to use them most efficiently or beneficially.").

<sup>17</sup> See RLBSA, 113 Stat. 1501A-544; see also *infra* Part III.A.

Doing so would have a devastating impact on all future Northpoints. Across the radio-wave rainbow, smart, software-controlled digital radios, new antenna geometries and configurations, and new polarization schemes now offer enormous potential for creating new bandwidth “underneath” or within existing, licensed bands. The Commission should be doing everything it can to encourage the aggressive development of such technologies.

But unless the Commission clearly and firmly changes course here, every innovator in this area will be left to wonder, “why bother?” The more innovative the technology, the more magically it extracts new bandwidth out of already-licensed bands, the more successfully it navigates the administrative shoals to work out sharing and non-interference criteria, the less likely it is to end up being brought into profitable service. By redefining each new bandwidth-expanding technology as a “new service” that uses “new spectrum,” and then auctioning off the same to the highest bidder, the Commission will sharply reduce the incentive to develop the technology in the first place. As discussed in more detail in the attached declaration of Former FCC Chief Economist Thomas W. Hazlett, “[w]hen entrepreneurs foresee the prospect of appropriation, they are less likely to invest scarce resources in discovering new wireless applications, technologies, or efficiencies.”<sup>18</sup>

The Commission itself has recognized this in the past. The Commission sought no payment when it allowed the bandwidth-expanding use of digital rather than analog

---

<sup>18</sup> Declaration of Thomas W. Hazlett, Ph.D., attached hereto as App. 1, ¶ 15 (“*Hazlett Declaration*”); *see generally id.* ¶¶ 13-25.

technology for cellular telephony.<sup>19</sup> The Commission allowed private companies to harvest bandwidth in already licensed spectrum at no charge when it authorized the use of FM subchannels for paging and other services,<sup>20</sup> and again when it authorized the use of the vertical blanking interval in television broadcasts for data transmission,<sup>21</sup> and yet again when it authorized AirCell, Inc., to provide cellular telephone service for use in general aviation.<sup>22</sup> Nor did the Commission seek payment from Fleet Call (now Nextel) when granting permission to build a national wireless network using spectrum previously used for local taxi dispatching.<sup>23</sup> The Commission has twice expanded the scope of MMDS licenses – first to boost spectrum capacity by implementing digital technologies<sup>24</sup>

---

<sup>19</sup> Second Report and Order, *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 8 FCC Rcd 7700, 7747, ¶ 111 (1993) (“[W]e are revising the cellular service rules to state explicitly that cellular licensees may provide any PCS-type services, including wireless PBX, data transmission and telepoint service, without prior notification. We believe this provides cellular licensees flexibility to offer additional services as they partially convert their existing systems from analog to digital technology.”); *see also* 47 C.F.R. § 22.901(d) (permitting cellular carriers to utilize alternate technologies, including PCS).

<sup>20</sup> *See* First Report and Order, *Amendment of Parts 2 and 73 of the Commission's Rules Concerning Use of Subsidiary Communications Authorizations*, BC Docket No. 82-536, FCC 83-154 (rel. June 22, 1983).

<sup>21</sup> *See* Report and Order, *Digital Data Transmission Within the Video Portion of Television Broadcast Station Transmissions*, 11 FCC Rcd 7799, 7799, ¶ 2 (1996).

<sup>22</sup> *See* Order, *AirCell, Inc., Petition, Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative, for a Declaratory Ruling*, 14 FCC Rcd 806, 806-807, ¶ 2 (1998).

<sup>23</sup> *See* Memorandum Opinion and Order, *Request of Fleet Call, Inc. for Waiver and Other Relief to Permit Creation of Enhanced Specialized Mobile Radio Systems in Six Markets*, 6 FCC Rcd 1533, 1537, ¶ 29, 1538, ¶ 36 (1991).

<sup>24</sup> Declaratory Ruling and Order, *Request for Declaratory Ruling on the Use of Digital Modulation by Multipoint Distribution Service and Instructional Television Fixed Service*, 11 FCC Rcd 18839, 18843, ¶ 6 (1996).

and then, two-years later to allow two-way transmissions<sup>25</sup> – both times at no charge. The Commission likewise sought no payment when it decided to allow all CMRS providers to provide fixed wireless and hybrid services.<sup>26</sup> In keeping with these precedents, the Commission should authorize Northpoint to use its innovative, spectrum-enhancing technology without trying to appropriate the value of that technology through an auction.<sup>27</sup>

**B. Auctions Would Be Inconsistent with the Commission’s Procedures to Date in This Matter**

The Commission quite correctly decided to address Northpoint’s petition for rulemaking along with SkyBridge’s original NGSO-FSS petition<sup>28</sup> in a single proceeding under the aegis of the IB.<sup>29</sup> It could not have done otherwise. Northpoint’s service, it bears repeating, will be provided on *the very same frequencies* used by as many as 10 DBS and NGSO-FSS operators. Northpoint’s technology makes this possible – but its use nevertheless requires careful coordination with satellite operators. Putting all the

---

<sup>25</sup> See Report and Order, *Amendments of Parts 21 and 74 to Enable Multipoint distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmission*, 13 FCC Rcd 19112 (1998).

<sup>26</sup> See First Report and Order and Further Notice of Proposed Rule Making, *Amendment of the Commission’s Rules To Permit Flexible Service Offerings in the Commercial Mobile Radio Services*, 11 FCC Rcd 8965 (1996).

<sup>27</sup> See *Hazlett Declaration* ¶¶ 19-20.

<sup>28</sup> See Petition for Rulemaking, *Amendment of Parts 2.106 and 25.202 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the 10.7-12.7 GHz, 12.75-13.25 GHz, 13.75-14.5 GHz, and 17.3-17.8 GHz Bands, and to Establish Technical Rules Governing NGSO FSS Operations in These Bands*, RM-9147 (FCC filed July 3, 1997).

<sup>29</sup> See Notice of Proposed Rulemaking, *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*, 14 FCC Rcd 1131, 1131, ¶ 1, 1177-1181 ¶¶ 91-98 (1998).

interested parties in the same bureau, on the same docket, and on the same procedural timetable was essential; sharing criteria would never have been worked out if they had been kept apart.

The IB generally permits applicants to demonstrate that they can share spectrum; then, once applicants have shown that their applications are not mutually exclusive, the IB awards licenses without competitive bidding. Northpoint was the *only* terrestrial applicant to participate in the IB's 12-GHz-band proceeding. Northpoint was therefore the only player to negotiate with the IB and with DBS and NGSO-FSS operators criteria for terrestrial sharing of their satellite spectrum. Northpoint alone engaged in the very lengthy and expensive administrative process required to establish that its application and the NGSO-FSS applications were *not* mutually exclusive, *i.e.*, that Northpoint's technology could operate on a co-primary basis with the NGSO-FSS systems and could operate underneath DBS licenses without harmfully interfering with them.<sup>30</sup> The Commission plainly can and should now complete the processing of Northpoint's license together with its processing of the NGSO-FSS licenses.

To switch course at this late date, and abruptly bifurcate the processing of the Northpoint and NGSO-FSS licenses, is administratively unconscionable. It represents a belated and wholly unjustifiable change in the way the Commission has managed the 12 GHz band to date. The switch cannot even be squared with the practical requirements for getting Northpoint's technology up and running. Both Northpoint and the NGSO-FSS applicants are obliged by their co-primary status to coordinate their respective build-outs

---

<sup>30</sup> *See, e.g.*, 47 C.F.R. § 101.45(a) ("The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would

and system characteristics to prevent interference with one another, and with DBS. By allowing NGSO-FSS licenses to be issued while the terrestrial licenses are bogged down in an auction, the Commission is arbitrarily tilting the inevitable negotiations over system build-out in favor of NGSO-FSS operators, to the detriment of Northpoint.

Had the Commission separated Northpoint's petition from SkyBridge's at the outset, the Commission could never have even arrived at its present proposal to auction off the "new spectrum" defined by Northpoint's technology. The NGSO-FSS applicants would have negotiated technical criteria and interference levels with DBS operators that, once enshrined in the Commission's rules, would have precluded any non-interfering deployment at all of Northpoint's technology. Keeping Northpoint firmly within the IB fold until the very end was what made possible the essential process of dialogue, testing, and technology validation.

To suddenly bifurcate things at the very end is not just unfair – it is arbitrary, capricious, and irreconcilable with well-established standards of proper administrative process. To put it bluntly, the Commission's belated proposal to bifurcate its proceedings amounts to an administrative bait-and-switch: Entice the customers into the store and engage them at length through the IB office sales force, then steer them at the last moment – when the delicate and drawn-out negotiations are all but complete – to a different department, different product, and different price.<sup>31</sup>

---

effectively preclude by reason of harmful electrical interference, or other practical reason, the *grant of one or more of the other applications.*"

<sup>31</sup> The Commission consistently assured Congress that the applications of Northpoint's affiliates were being handled together with those of the NGSO-FSS applicants; no indication was given that terrestrial licenses would be split off into a different set of proceedings. *See, e.g.*, Letter of FCC Chairman William E. Kennard to Rep. Zach Wamp (June 25, 1999) ("We anticipate making a decision in this docket later this year [1999],

## **II. THE COMMISSION CANNOT LAWFULLY AUCTION WHAT IT CALLS “MVDDS SPECTRUM”**

Auctioning innovation is bad public policy, and switching procedural horses in mid-stream is bad administrative process. In this instance, as it happens, the auction the Commission is considering would also run afoul of various provisions of federal law that prevent the auctioning of satellite spectrum, govern the acceptance of applications for filing, require the technical validation of terrestrial technologies that make non-interfering use of satellite spectrum, and set the preconditions for the Commission’s exercise of its auction authority.

### **A. The ORBIT Act Precludes Auctions**

The Commission’s current plan is to take the 12 GHz spectrum band, which indisputably is used for satellite communications, and auction off the terrestrial uses of that same spectrum. But the ORBIT Act expressly prohibits the Commission from auctioning any “spectrum used for the provision of international or global satellite communications services.”<sup>32</sup>

In its First Report and Order and FNPRM, the Commission reasoned that “the statute does not prohibit the Commission from auctioning licenses for non-satellite services,”<sup>33</sup> because Commission either has used or plans to use auctions to allocate licenses for terrestrial services in the 24 GHz, 39 GHz, and 3650-3700 MHz bands,

---

and will take action on Broadwave’s license requests as soon as the spectrum sharing issues are addressed.”); Letter of FCC Chairman William E. Kennard to Sen. Edward M. Kennedy (Aug. 4, 1999) (same); Letter of FCC Chairman William E. Kennard to Rep. Sonny Callahan (Oct. 4, 1999) (same).

<sup>32</sup> Open-Market Reorganization for the Betterment of International Telecommunications Act, Pub. L. No. 106-180, § 3, 114 Stat. 48, 57 (2000) (codified at 47 U.S.C. § 765f).

<sup>33</sup> First Report and Order and FNPRM ¶ 326.

which also may be used for satellite services.<sup>34</sup> These examples are inapposite, however. The 24 GHz band is *not* currently used for the provision of satellite services; in fact, the allocation for satellite services in that band will not even become effective until 2007.<sup>35</sup> The Commission addressed the 39 GHz band in a 1998 Report and Order that established a band-segmentation plan for non-government operations in the 36.0-51.4 GHz frequency band that designated 4 gigahertz of spectrum for fixed satellite services and 5.6 gigahertz of spectrum for terrestrial wireless services.<sup>36</sup> The 39 GHz band was put in the wireless block, *not* the satellite block.<sup>37</sup> As for the 3650-3700 MHz spectrum, the Commission has yet to schedule any auction. Moreover, the Commission reallocated the entire band to fixed and mobile terrestrial services on a primary basis, with any new FSS services on

---

<sup>34</sup> *See id.*

<sup>35</sup> *See id.* ¶ 326 n.661; *see also* Report and Order, *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, 15 FCC Rcd 16934, 16940, ¶ 8 (2000).

<sup>36</sup> *See* Report and Order, *Allocation and Designation of Spectrum for Fixed Satellite Services in the 37.5-38.5 GHz, 40.50-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations*, 13 FCC Rcd 24649 (1998).

<sup>37</sup> Although there is a pre-existing allocation for satellite services in the 39 GHz band, the band has long been used chiefly to support fixed point-to-point microwave services. *See, e.g.,* Memorandum Opinion and Order, *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*, 12 FCC Rcd 2910, 2912, ¶ 3 (1997). Whether the Commission will allow satellite service in the 39 GHz band is to be the subject of an upcoming rulemaking. *See* Order on Reconsideration, *Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations*, 15 FCC Rcd 1766, ¶ 14 (1999). In any event, no one has

a strictly *secondary* basis, explaining that “allowing FSS on an unrestrained co-primary basis would impede any potential widespread use of the band for terrestrial services.”<sup>38</sup>

Because Northpoint’s technology ubiquitously shares the exact frequencies in the 12 GHz band that are chiefly used for satellite broadcasts, the ORBIT Act’s ban on competitive bidding should apply. Even assuming that the ORBIT Act does not prohibit the use of auction for spectrum used to provide domestic satellite services,<sup>39</sup> the prohibition should apply in the present case because NGSO-FSS is indisputably an international satellite service.<sup>40</sup> By giving NGSO-FSS a primary allocation in the 12 GHz band in these very proceedings, the Commission removed any doubt that the 12 GHz band is one in which the ORBIT Act prohibits auctions. Northpoint and the satellite operators seeking authorization to use this spectrum have already gone through a lengthy process to work out co-primary sharing criteria with NGSO-FSS operators and to ensure that there will be no harmful interference with DBS broadcasts. It would be unsound to render that process a nullity by requiring Northpoint to start over again with a new process leading, not to sharing, but to auctions.

---

proposed a satellite service in the 39 GHz band that would involve ubiquitous sharing of the frequencies with terrestrial service, as Northpoint is proposing for the 12 GHz band.

<sup>38</sup> First Report and Order and Second NPRM, *Amendment of the Commission’s Rules With Regard to the 3650-3700 MHz Government Transfer Band; The 4.9 GHz Band Transferred from Federal Government Use*, ET Docket No. 98-237; RM-9411; WT Docket No. 00-32, FCC 00-363, ¶ 18 (rel Oct. 24, 2000).

<sup>39</sup> See First Report and Order and FNPRM ¶ 326 n.660.

<sup>40</sup> Northpoint believes DBS should also be regarded as an “international” or “global” satellite service for purposes of the ORBIT Act.

**B. No One But Northpoint Submitted a Timely Bona Fide Application to Provide Terrestrial Service in the 12 GHz Band**

In the context of the ongoing rulemaking proceedings, the Ku-Band Cut-Off Notice<sup>41</sup> was sufficient to put anyone wishing to use the band for any reason on notice that applications were then necessary. Only Northpoint submitted its applications before the close of the relevant filing window for the 12 GHz band – January 8, 1999.<sup>42</sup> Only Northpoint negotiated with the IB and with DBS and NGSO-FSS operators to ensure that satellite use of the spectrum would not foreclose terrestrial operations, and only Northpoint has demonstrated its ability to provide terrestrial service without causing harmful interference to satellite broadcasts.

At this point, then, Northpoint is the only party with a terrestrial application properly before the Commission. No mutually exclusive applications have been submitted to the Commission in a timely fashion.<sup>43</sup> The subsequent applications of PDC Broadband (“Pegasus”) and Satellite Receivers were filed long after the filing window had closed and did not seek waivers of the cutoff rule.<sup>44</sup> For that reason alone, the Commission must reject their applications.

---

<sup>41</sup> See Public Notice, *International Bureau Satellite Policy Branch Information: Cut-off Established for Additional Applications and Letters of Intent in the 12.75-13.25 GHz, 13.75-14.5 GHz, 17.3-17.8 GHz and 10.7-12.7 GHz Frequency Bands*, Report No. SPB-141, 1998 WL 758449 (rel. Nov. 2, 1998) (“*Ku-Band Cut-Off Notice*”).

<sup>42</sup> See *id.*

<sup>43</sup> Any complaint that the Ku-Band Cut-Off Notice did not close the filing window for terrestrial uses of the spectrum with sufficient clarity is unavailing. An agency need not make “the clearest possible articulation” that a filing window is open or closed. *McElroy Elecs. Corp. v. FCC*, 990 F.2d 1351, 1358 (D.C. Cir. 1993) (finding that applications filed in response to a Commission order were timely filed, even though the order did not explicitly state that a window for such applications was open).

<sup>44</sup> PDC Broadband Corp. Application for Licenses to Provide Terrestrial Services in the 12.2-12.7 GHz Band (FCC filed April 18, 2000); Satellite Receivers, Ltd. Application to

Pegasus's application in particular also must be denied because it is a transparent attempt to thwart competition to DBS by blocking deployment of Northpoint's technology. Pegasus's parent company is the largest independent distributor of DirecTV's DBS service. Just six weeks before filing its application to provide terrestrial service in the 12 GHz band, Pegasus's parent signed a letter to then-Chairman Kennard asserting that "adding Northpoint-type services to the band would result in ruinous interference and serious disruption of services to consumers of both DBS and NGSO FSS services."<sup>45</sup> Pegasus has continued to work with the Satellite Broadcasting and Communications Association ("SBCA") in opposing terrestrial use of the 12 GHz band.<sup>46</sup> As explained in more detail in Northpoint's May 23, 2000, Motion to Dismiss,<sup>47</sup> Pegasus seeks to block the deployment of Northpoint's innovative and competition-enhancing technology through submission of an application for a terrestrial service that, by Pegasus's own admission, it has no "specific intent" to provide.<sup>48</sup> For that reason, too, the Commission must deny Pegasus's application. Moreover, as discussed below,

---

Provide Terrestrial Television Broadcast and Data Services in the 12.2-12.7 GHz Band in Illinois, Indiana, Iowa, Michigan, Minnesota and Wisconsin (FCC filed Aug. 25, 2000).

<sup>45</sup> Letter to Chairman William E. Kennard from Satellite Broadcasting and Communications Ass'n at 1 (Feb. 28, 2000) (included as Attachment 1 to Northpoint's May 23, 2000 Motion to Dismiss Pegasus's application).

<sup>46</sup> See, e.g., Ex Parte Letter to FCC Secretary, Magalie Roman Salas, from Jeffrey H. Olson, Attorney for SkyBridge (May 5, 2000). In contrast to the vehement objections raised to the Broadwave applications, the DBS operators (including Pegasus' business partner, DirecTV) and NGSO applicants have been silent in regards to Pegasus's application. Indeed, both DirecTV and the SBCA issued "no comment" statements to the press. See *Communications Daily*, May 9, 2000, at 11.

<sup>47</sup> Northpoint Technology, Ltd., Motion to Dismiss, *PDC Broadband Corp. Application to Provide Terrestrial Services in the 12.2-12.7 GHz Band*, (FCC filed May 23, 2000).

<sup>48</sup> *Communications Daily*, May 9, 2000, at 11.

Pegasus's application should be denied because Pegasus lacks the technical ability to provide acceptable service in the 12 GHz band.

**C. Northpoint Is the Only Applicant That Has Submitted Its Technology for Independent Technical Review as Expressly Required by Congress Last December**

Neither Pegasus nor Satellite Receivers is qualified for a license because neither has technology capable of providing terrestrial service in the 12 GHz band without interfering with satellite broadcasts. No one but Northpoint has technology proven capable of sharing the very same frequencies used for satellite transmissions, so no one else has the capability actually to launch the pro-competitive terrestrial service that Northpoint is proposing

Accepting applications only from technologically qualified applicants is an important component of licensing policy – especially where, as here, terrestrial licensees will be sharing frequencies with up to 10 other satellite systems. In fact, the need to avoid harmful interference is so important that Congress passed a law on December 21, 2000, requiring the Commission to provide for independent testing of “any terrestrial service technology proposed by any entity that has filed an application to provide terrestrial service” in the 12 GHz band (not just permittees or licensees, but *applicants*).<sup>49</sup>

In fulfillment of this statutory obligation, the Commission has engaged the MITRE Corporation to conduct the required independent testing of the technology proposed by each applicant seeking permission to provide terrestrial service. MITRE asked each applicant to fill out a questionnaire describing the technology it proposes to

---

<sup>49</sup> Launching Our Communities' Access to Local Television Act of 2000, Pub. L. No. 106-553, App. B, Tit. X, § 1012(a), 114 Stat. 2762, 2762A-128, 2762A-141.

use. Northpoint promptly filled out the questionnaire and has made its technology available for testing.

Satellite Receivers, by contrast, has conspicuously failed to answer MITRE's questions and to come forward with technology of its own for testing. In a letter to MITRE dated January 31, 2001, Satellite Receivers proposes that instead of testing Satellite Receivers's technology, the Commission should set the parameters for a new service.<sup>50</sup> Satellite Receivers says it expects to operate "within those parameters" using "off-the-shelf" equipment.<sup>51</sup> This proposal is flatly contrary to the statute, which requires each applicant to come forward with non-interfering technology, not for the Commission to tell others what technology to use. Satellite Receivers' failure to come forward with technology for testing is a tacit admission that it is not qualified to provide terrestrial service in the 12 GHz band.

Such deficiencies will come back to haunt the Commission later, if it attempts to paper them over for now. The Commission has already learned the hard way not to auction spectrum to buyers who lack the resources to pay for their purchases.<sup>52</sup> It will do no better by auctioning a right to build within existing spectrum bands to buyers who

---

<sup>50</sup> Letter from Nathaniel J. Hardy to James W. Marshall (Jan. 31, 2001) (Exhibit A to the February 8, 2001 ex parte filing of Northpoint Technology, Ltd. in ET Docket No. 98-206).

<sup>51</sup> *Id.*

<sup>52</sup> Since the initial C-Block auction in 1996, there have been three re-auctions held to disperse licenses declared by the Commission to be in default. *See Fifth Report, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, 15 FCC Rcd 17660, 17738, App. A n.5 (2000); *see also* Notice of Proposed Rule Making and Order, *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, ET Docket No. 00-258, FCC 00-455, 2001 WL 10510, ¶ 37 (rel. Jan. 5, 2001).

own no technology that will let them do so. Northpoint has the technology; it has already validated its technology before the Commission; it has submitted its technology again to MITRE for the independent testing mandated by Congress three months ago; and Northpoint reaffirms its commitment to a two-year nationwide build-out.<sup>53</sup> All the rest have no technology; they are no-shows at MITRE; and they will undoubtedly embrace the Commission's proposal for a 5- or 10-year build-out requirement, or demand even more time.<sup>54</sup>

As we discuss further in Part III, Congress has instructed the Commission to do what it takes to get the technology at issue here to market quickly. Against that legal backdrop, the Commission should not be accepting license applications from

---

<sup>53</sup> See *Reauthorization of the Satellite Home Viewer Act: Hearing Before the Subcomm. On Telecommunications, Trade, and Consumer Protection of the House Comm. On Commerce*, 106th Cong., 1st Sess. 51-52 (1999) (statement of Sophia Collier, President and CEO of Northpoint Technology) (“Once regulatory approval is achieved, our service can be deployed in the first markets in as little as six months, with nationwide coverage within two years.”)

<sup>54</sup> When Local Multipoint Distribution Service (“LMDS”) licenses were auctioned, for instance, the Commission imposed an exceedingly lenient 10-year build-out requirement. See Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking, *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*, 12 FCC Rcd 12545, 12659, ¶ 266 (1997). As a result, only a handful of LMDS licensees have built facilities, and those that have are providing mostly experimental services, even though the initial auction was completed more than three years ago. See Third Report and Order and Memorandum Opinion and Order, *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*, 15 FCC Rcd 11857, 11868, ¶ 24, 11875, App. B (2000); cf. also Report and Order and Memorandum Opinion and Order, *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, 15 FCC Rcd 1497, ¶ 13 (1999) (finding, five years after auction of licenses for Interactive Video and Data Services, that “deployment of the 218-219 MHz Service has not been successful; in fact, the vast majority of licensees have yet to provide service”).

technologically insolvent applicants. It should not be auctioning licenses to such applicants. It should not be giving them 5 or 10 years to demonstrate their insolvency. The Commission has been down that road before, with insolvents of another kind. Once is enough.

**D. The Commission Has a Duty to Avoid Mutual Exclusivity Where Possible**

Even if auctions in the circumstances here were not forbidden by the ORBIT Act, or by the IB's applications deadlines, or by the need (confirmed specifically by statute in this instance) to accept applications for filing only from technologically qualified applicants, an auction still would be irreconcilable with the criteria set out in the law that created the auction authority itself. Hence, even if the Commission were to license the use of Northpoint's technology using the standard procedures of the WTB, an auction would be inappropriate.

The Commission may conduct auctions if – and only if – it accepts “mutually exclusive applications” for any “initial license or construction permit.”<sup>55</sup> The Commission's own threshold decision to “accept applications” must be exercised in a manner “consistent with” 47 U.S.C. § 309(j)(6)(E).<sup>56</sup> Paragraph (6)(E), in turn, reaffirms

---

<sup>55</sup> 47 U.S.C. § 309(j)(1).

<sup>56</sup> *Id.* Section 309(j)(1) section reads in full as follows:

If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.

Paragraph (2) exempts from auctions licenses and construction permits for public safety radio services, digital television service licenses, and permits given to existing terrestrial broadcast licensees to replace their analog television service licenses, and licenses and construction permits for noncommercial education broadcast stations and public