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Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

DEC 1 2 1990

Federal Communications Commission Office of the Secretary

In re Applications of

NATIONAL EXCHANGE SATELLITE, INC.

File Nos. 4/5-DSS-EXT-90

For Authority to Construct, Launch and Operate Space Stations in the Domestic Fixed-Satellite Service

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To: Chief, Common Carrier Bureau

Domestic Facilities Division

OPPOSITION TO REQUEST FOR EXTENSION OF TIME Radio Branch

General Instrument Corporation ("GIC"), acting pursuant to the Public Notice in Report No. 1025 of November 21, 1990, hereby opposes the request of National Exchange Satellite, Inc. ("NEXSAT") for an extension of time to construct three (3) satellites, SpotNet-1, SpotNet-2, and SpotNet-3. In the event the Commission decides to grant NEXSAT's extension request, then, in that event, GIC requests that the Commission condition that grant (and any new construction dates) on the Commission's ultimate disposition of a forthcoming rulemaking petition to require 3° spacing for C-band satellites that distribute video programming to the home satellite television market.¹

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¹ Interested members of the TVRO industry are currently engaged in discussions concerning a petition requesting a change in the orbital assignment policy. Those discussions are expected to lead to the filing of the petition by one or more members of the industry group before the end of January 1991.

GIC's Interest

GIC is a manufacturer and supplier of electronic products, systems and components for satellite television and cable television systems. For example, GIC's Videocipher division manufacturers C-band satellite video reception equipment and the VideoCipher II® and II Plus video scrambling systems.

GIC has a direct economic interest in any Commission decision concerning a new 3° spacing policy for orbital assignments. As explained below, the Commission's disposition of NEXSAT's extension request could have a direct bearing on whether the Commission does modify its orbital assignment policy for C-band satellites which distribute video programming.

Background

on or about September 15, 1987, NEXSAT filed applications requesting authority to construct, launch and operate two hybrid domestic fixed-service satellites and to construct one hybrid ground-spare. NEXSAT designated these satellites, respectively, as SpotNet-1, SpotNet-2, and SpotNet-3. NEXSAT requested an orbital assignment at 101° W.L. for SpotNet-1 and an orbital assignment at 93° W.L. for SpotNet-2. NEXSAT advised the Commission that "these locations [were] needed to assure the 'proper workings' of the spacecraft and to enable it to implement an understanding it [had] reached with the American Mobile Satellite Consortium

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that would allow mobile satellite computer link operations to be provided via a mobile satellite collocated with a NEXSAT satellite." National Exchange Satellite, Inc., 3 FCC Rcd 6992, 6993 n.3 (1988).

In its applications, NEXSAT estimated that the total preoperational cost would amount to \$504.1 million. NEXSAT
represented that it had a "firm commitment" from Burlington
Northern, Inc., its corporate parent, to supply "an amount in
excess of \$563.2 million" for purposes of constructing the
satellites. NEXSAT Applications at I-75.

NEXSAT's applications also included a proposed construction schedule. NEXSAT advised the Commission that construction on SpotNet-1 would commence in August 1989 and be completed by January 1993, that construction on SpotNet-2 would commence in July 1990 and be completed in July 1993, and that construction on SpotNet-3 would commence in January 1991 and be completed in January 1994.

By order released on December 7, 1988, the Commission granted NEXSAT's applications. The Commission's order stated that NEXSAT's authorizations would become null and void if NEXSAT did not comply with the construction schedule set forth in its applications. The Commission further stated that the construction schedule could be extended only for "good cause." 3 FCC Rcd at 6992.

Although it granted NEXSAT's applications, the Commission did not give NEXSAT the orbital assignments it had requested.

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In a companion order, the Commission assigned SpotNet-1 to an orbital slot at 135° W.L. and SpotNet-2 to 76° W.L., both of which are in the high power density segment of the orbital arc. At the same time, the Commission stated that it would entertain requests from NEXSAT to be reassigned to any available orbital slots outside the high power density arc capable of providing 50-state coverage if NEXSAT could successfully coordinate its satellites with adjacent satellite operators. Assignment of Orbital Locations, 3 FCC Rcd 6972, 6977 n.41 (1988).

In response to the Commission's invitation, NEXSAT requested that SpotNet-1 and SpotNet-2 be reassigned to orbital locations at 93° W.L. and 127° W.L., respectively. By order released on January 11, 1990, the Commission granted NEXSAT's request. Assignment of Orbital Locations, 5 FCC Rcd 179 (1990). The Commission's order, however, did not amend the construction schedule of the 1988 order, which contemplated, as NEXSAT itself had proposed, that construction on SpotNet-1 would commence in August 1989.

By letter dated February 16, 1990, the Domestic Facilities Division of the Common Carrier Bureau requested that NEXSAT certify that it was in compliance with its proposed construction schedule and that it had entered into a "non-contingent construction contract" by August 1989. The letter further requested that the certification be supported by affidavit.

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By letter dated February 22, 1990, NEXSAT responded to the Bureau's letter. NEXSAT did not and could not submit the certification requested by the Bureau. Instead, NEXSAT requested that every date in its proposed construction schedule be recalculated "to reflect the fact that it has been only since January of 1990 that the uncertainty regarding orbital assignments has been resolved" and that NEXSAT had only been able at that point "to begin in earnest to initiate steps toward construction of the SpotNet spacecraft."

By letter dated June 7, 1990, the Domestic Facilities
Division of the Common Carrier Bureau granted NEXSAT's
request. More specifically, NEXSAT was granted until October
1990 to commence construction of SpotNet-1 and until March
1991 to commence construction of SpotNet-2. Nothing was
stated with respect to the construction of SpotNet-3.

In granting NEXSAT's request for an extension of time, the Bureau expressed some skepticism with respect to the basis for NEXSAT's delay in construction:

It appears [that] the only satellite components that could have been affected by [NEXSAT's] pending request [for reassignment of orbital slots] were the antennas, whose coverage path would need to be readjusted depending on orbital location, and the travelling wave tube amplifiers (TWTAs), whose power may have needed to be adjusted depending on whether the satellite was operating on the high or low power density arcs. These components are not involved in the earlier phases of satellite construction. Rather, they are incorporated when the space station is nearing completion. In fact, the Commission regularly receives requests for authority to change transponder power and antenna coverage patterns for the satellites that are essentially complete. See, e.g., American Satellite Company, 5 FCC Rcd 1184

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(1990) (change ASC-2 orbital location and increase power level on two transponders); American Telephone and Telegraph Co., 5 FCC Rcd 1186 (1990) (add spotbeam covering Hawaii to Telstar 401 and Telstar 402); Application of GTE Spacenet Corporation for authority to increase transponder power to GSTAR 4 (File No. 11-DSS-MP/ML-90). The spacecraft bus, solar panels, tracking, telemetry and control (TT&C) components and other long-term procurement items would not be affected by a change in assignment.

Letter from James R. Keegan, Chief, Domestic Facilities
Division, to Henry Goldberg, Esq., June 7, 1990, at 2.
Although it had questions about the validity of NEXSAT's
explanation, the Bureau was prepared to give NEXSAT the
benefit of any doubt and grant the requested extension. To
assure compliance with the new schedule, NEXSAT was told to
submit copies of the construction contracts with the
Commission by October 31, 1990 for SpotNet-1 and by March 31,
1991 for SpotNet-2. The Bureau admonished NEXSAT, however,
that its "[f]ailure to respond within this time frame will
subject the authorizations for these satellites to
revocation." Id. at 3.

By letter dated October 31, 1990, NEXSAT advised the Commission that it had not executed any contracts for the construction of any of the SpotNet satellites and that another extension of time was needed for SpotNet-1 until April 30, 1991, for SpotNet-2 until March 31, 1992, and for SpotNet-3 until September 30, 1992. In trying to justify this second extension request, NEXSAT claimed that it was proposing to introduce technical innovations in its satellites and that its "discussions with potential manufacturers have been far more

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detailed and complex than is common when contracting for a more conventional spacecraft." NEXSAT did not identify the particular manufacturers with whom it has engaged in discussions. Nor did NEXSAT provide any other detail concerning its prior efforts or the basis for its assumption that the contracts could be executed within the time frame proposed by NEXSAT.

Argument

A. NEXSAT's Request Should Be Denied

1. Applicable Standard

From the beginning, the Commission has emphasized that satellite licensees must establish milestones for the construction of proposed satellites and then adhere to those milestones. Domestic Fixed Satellite Service, 77 FCC2d 956, 960 (1980) (each applicant required to demonstrate "its ability to immediately proceed with the construction and operation of the proposed domestic satellite system"); Domestic Fixed Satellite Service, 90 FCC2d 1, 2 (1982) (each applicant required to demonstrate "its ability to immediately proceed with construction and operation of the proposed The Commission's imposition of construction deadlines in the Domestic Fixed Satellite Service is consistent with the Commission's imposition of construction deadlines in other services as well. Compare Broadcast Construction Periods, 102 FCC2d 1054 (1985) (establishment of rigorous criteria in the granting of extension requests for

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broadcast stations); Land Mobile Service, 51 FCC2d 945, 986

(1975) (licensees for Specialized Mobile Radio Systems
required to occupy 70 percent of capacity within two years
from the date of authorization grant). In the case of
satellite services, as well as other Commission-authorized
services, there is an understandable concern that
authorizations be held by entities able and willing to use
them to provide service to the public on a timely basis. For
that reason, courts have routinely upheld Commission decisions
concerning the revocation of authorizations from those
entities unable to meet construction deadlines. E.g. New
Orleans Channel 20, Inc. v. FCC, 830 F.2d 361 (D.C. Cir.
1987); P & R Temmer v. FCC, 743 F.2d 918 (D.C. Cir. 1984).

The need for timely construction is particularly important in the case of satellite services. The economics and technology of satellite services are constantly shifting, and failure to impose a requirement for timely construction could lead a party to delay construction in order to await the outcome of economic and/or technological developments. This concern was articulated by the Bureau in a 1987 order which denied an extension request by MCI Communications Corporation:

The milestone schedule included in each domestic space station authorization issued by the Commission is designed to insure that licensed entities are proceeding with construction and launch of their systems in a timely manner. Requiring licensees to adhere strictly to a milestone schedule based upon the representations in their applications prevents orbital locations from being "warehoused" by licensees who have not yet decided whether to proceed with their plans. Such warehousing would

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hinder the availability of services and could possibly block entry by other entities willing and able to proceed immediately with construction and launch of satellite systems. Thus, apart from initial adjustments made immediately after grant, extensions of the milestone schedule are granted only when delay in implementation is due to circumstances beyond the control of the licensee.

MCI Communications Corporation, 2 FCC Rcd 233 (CCB 1987)

(footnotes omitted). In short, extensions in the construction schedule are to be granted "only" if the carrier can show that delay was occasioned by factors beyond its control.

No Excusable Delay For NEXSAT

NEXSAT made virtually no effort to show that the delay in its construction plans is due to circumstances beyond its control. NEXSAT's request is based entirely on a vague statement that it is hoping to introduce technological innovations and that contract negotiations have proven to be more complex than NEXSAT had previously anticipated. This explanation hardly demonstrates that delay was caused by circumstances beyond NEXSAT's control. See P & R Temmer v.

FCC, supra, 743 F.2d at 930 (applicant's business decision to use state-of-the-art equipment no basis for extension of construction deadline).

Even assuming <u>arguendo</u> that NEXSAT's business decision to introduce innovations could justify delay in construction, innumerable questions remain unanswered. Thus, NEXSAT did not identify the particular entities with whom it is conducting these negotiations, the nature or extent of prior

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negotiations, the basis for the claim that the negotiations have proven to be more complex than previously anticipated, the reason why the "complex" negotiations could not have been concluded earlier, and the basis for NEXSAT's belief that its proposed construction schedule is likely to be effectuated. It is also noteworthy that NEXSAT did not include any correspondence, affidavits, or other evidence to support its claims.²

NEXSAT's failure to provide any meaningful evidentiary support for its second extension request takes on added significance in light of the Bureau's comments in granting NEXSAT's first extension request. In its letter of June 7, 1990, the Bureau pointed out that NEXSAT's pending request for reassignment of orbital slots should have had no impact on the vast portion of the components needed to complete the early phases of satellite construction and that the reassignment could not totally explain the delay. NEXSAT's second extension request (the letter of October 31, 1990 to the Commission) does not challenge the Bureau's earlier analysis in any way. The conclusion is inescapable: NEXSAT had no basis to challenge the Bureau's earlier analysis.

NEXSAT has held authorizations for the construction of its satellites for more than two years. It has had ample time

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² The Commission's proposed briefing schedule precludes any opportunity for any party to submit comments on any supporting material which NEXSAT submits with its reply on December 20, 1990.

to develop construction plans and execute a contract. It has woefully failed to sustain its burden to demonstrate that the delay was occasioned by circumstances beyond its control.

NEXSAT's second extension request should therefore be denied.

B. In the Alternative, Deferral Warranted

If the Commission decides -- despite NEXSAT's failure to demonstrate that delay was due to circumstances beyond its control -- that the NEXSAT should not lose its satellite authorizations, then, in that event, it is requested that the Commission condition those authorizations (and the promulgation of a new construction schedule) on the Commission's disposition of a rulemaking petition (which GIC anticipates being filed before the end of January 1991) to change Commission policy to require 3° spacing for C-band satellites in the western portion of the arc that distribute video programming. This alternative request is amply justified by the public interest and the particulars of NEXSAT's second extension request.

At the outset, it is important to remember that the "cornerstone" of the Commission's "orbital assignment plan is the uniform 2° spacing policy adopted in 1983 . . ."

Assignment of Orbital Locations, supra, 3 FCC Rcd at 6972.

That policy, in turn, was premised on the Commission's desire to accommodate the numerous satellite authorizations to serve what appeared to be an overwhelming demand for new FSS satellites. See Domestic Fixed Satellite Service, 94 FCC2d 129

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WASHINGTON, D.C. 20005 (202) 789-3400 (1983). In adopting the 2° spacing policy, the Commission understood that consumers would experience more interference than would be the case if satellites were spaced further apart. See Alien Carrier Interference, 2 FCC Rcd 762 (1987). The Commission nonetheless decided that the benefits of the 2° policy outweighed the cost of increased interference.

The satellite industry has undergone dramatic changes since the Commission adopted its 2° spacing policy in 1983. The demand for new satellite capacity, especially for voice and data traffic, has abated considerably. On the other hand, there has been considerable growth in the C-band demand in the video distribution market. In addition to dishes at 9,000 cable television systems, there are now approximately three million C-band dishes at private homes.

The growth of the home satellite television market -- and the potential for even greater growth -- underlies the basis for GIC's opposition to NEXSAT's second extension request. Virtually all of the dishes for home satellite viewers have a diameter of 8 to 10 feet. There are estimates that the home satellite television market could double within the next few

³ The reduction in demand for satellite services to carry voice and data traffic contributed to the decisions by some entities, including Martin Marietta, Federal Express and Ford Aerospace, to return authorizations which the Commission had granted for the construction of new satellite systems.

^{*} Recent advances in the development of video compression techniques will undoubtedly affect this demand in coming years. For instance, GIC's DigiCipher™ system will permit a satellite transponder to carry from four to ten video signals.

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years if the dish size were reduced to about 4 feet or less.

See Cable Television Consumer Protection and Competition Act

of 1990, Report 101-682, 101st Congress, 2d Session 112

(September 6, 1990). In part, these growth estimates are

premised on an assumption that smaller dish sizes would

overcome the aesthetic concerns of homeowners and local zoning

boards.

In light of the higher power of the next generation of C-band satellites, the technology currently exists to construct C-band dishes with a diameter of about 4 feet or less.

However, since dishes of that size have a decreased ability to discriminate among competing satellite signals, their use would result in increased interference unless satellites -- especially those providing video programming in the western portion of the arc -- are at least 3° apart. A change in the Commission's spacing policy could serve the public interest by facilitating an expansion of the home television satellite market.

Given current locations of satellites, adoption of a 3° spacing policy would not require any adjustment in the orbital assignments for most satellites and only minor adjustments in other orbital assignments. One authorization that could be affected in a significant way, however, is the assignment of SpotNet-2 to 127 W.L. Hence, if the Commission were to defer consideration of the orbital assignment for that satellite, a

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3° spacing policy could be implemented with minimal impact on other authorized satellite systems.

GIC does not intend to use the instant pleading to set forth in full the benefits and feasibility of a 3° spacing policy. Rather, GIC merely wants to underscore the linkage between action on NEXSAT's extension request with Commission flexibility in changing the orbital assignment policy.

Nor should there be any concern that deferral of NEXSAT's satellite launches will be inequitable to NEXSAT. Since it has already delayed construction of its authorized satellite systems, and since it has failed to carry its burden to demonstrate that the delay was beyond its control, NEXSAT should not be entitled to use its current authorization for SpotNet-2 to frustrate adoption of a general policy that will serve the larger public interest. This is especially so since the Commission can move quickly on the anticipated rulemaking petition to minimize any delay in the construction and launch of NEXSAT's satellites.

Conclusion

WHEREFORE, in view of the foregoing, it is respectfully requested that (1) NEXSAT's extension request be denied and its authorizations for SpotNet-1, SpotNet-2, and SpotNet-3 be declared null and void, or (2) in the alternative, NEXSAT's extension request be granted with the condition that its authorizations be subject to the outcome of the Commission's

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disposition of an anticipated rulemaking petition to adopt a 3° spacing policy.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have, this <u>line</u> day of December, 1990, caused a copy of the foregoing Opposition to be hand-delivered, to the following:

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