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January 6, 1992

Donna R. Searcy, Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: National Exchange Satellite, Inc.
File Nos. 4/5-DSS-EXT-90

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JAN 7 1992
DOMESTIC FACILITIES DIVISION
SATELLITE RADIO BRANCH

Dear Madam Secretary:

This letter is written to apprise the Commission of recent developments regarding construction of National Exchange Satellite, Inc.'s ("NEXSAT") domestic fixed service satellite system.

As the Commission is aware, NEXSAT entered into an agreement with TRW, Inc. Space and Technology Group ("TRW") which provided that TRW would: (1) conduct an in-depth design study (the "TRW Study") comparing the relative merits of large hybrid spacecraft with smaller satellites, including "lightsats," consistent with the basic design concept for the SpotNet satellites, and (2) depending on the results of the TRW Study, construct the spacecraft for NEXSAT. See Letter from Henry Goldberg to Donna R. Searcy, dated March 1, 1991. The TRW Study recently was completed and concludes that, rather than one large hybrid spacecraft occupying each of NEXSAT's two assigned orbital locations, two smaller hybrid satellites should be deployed at each position.

Contemporaneous with the preparation of the TRW Study, NEXSAT has engaged in a series of discussions with the EDSAT Institute ("EDSAT"), which recently concluded an exhaustive study of the present and planned needs of the national educational community for transponder capacity. EDSAT determined that, in the aggregate, the educational community's present demand for transponder capacity has grown to the point that the entire capacity of a communications satellite is needed during periods of peak use. Further, EDSAT forecasts a substantial increase in that demand during the next decade. Thus, "[a] critical juncture has been reached by [the educational community] with respect to the use of communications satellites to distribute instructional materials to students of all academic levels," and

Ms. Donna M. Searcy

January 6, 1992

Page 2

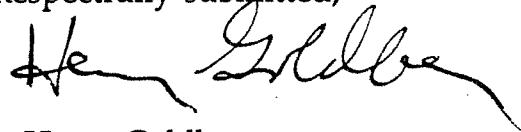
"there should be at least one dedicated national educational satellite network to serve these needs." Letter from H. Brian Thompson, Chairman, EDSAT Corporation, to Clay T. Whitehead, President, National Exchange Satellite, Inc., dated December 9, 1991, at 1 (a copy is attached hereto).

Consistent with these findings, EDSAT and NEXSAT have initiated an "in-depth, joint feasibility study of both the technical and economic merits" of the SpotNet system vis-a-vis the educational community's present and future needs. Id. at 2. According to EDSAT, any such system must include, inter alia, 50-state coverage at both C-band and Ku-band. Id. The ultimate goal of this effort is to determine how the configuration of the SpotNet spacecraft can be optimized to meet the unique needs of the educational community. Among other factors to be evaluated is that the need of the educational community for nationwide broadcast coverage, as well as point-to-point services, will require some modification of the present NEXSAT design concept.

NEXSAT will, of course, keep the Commission informed with regard to this matter. In order to accommodate this vital educational project, NEXSAT requests that it be accorded an additional 12 to 18 months within which to complete the above-described joint feasibility study and either (1) begin construction of the first of the SpotNet satellites, or (2) if need be, submit an application to the Commission seeking to modify the SpotNet construction permit in order to conform system design to EDSAT requirements and/or TRW's recommendations.

If there are any questions regarding this matter, please contact the undersigned.

Respectfully submitted,



Henry Goldberg

Jeffrey H. Olson

Attorneys for

National Exchange Satellite, Inc.

cc: James R. Keegan, Chief
Domestic Facilities Division
Cecily C. Holiday, Chief
Satellite Radio Branch
Lewis J. Paper, Esq.

National Education Telecommunications Organization

NETO

December 9, 1991

Mr. Clay T. Whitehead
President, National Exchange Satellite, Inc.
1320 Chain Bridge Road, Suite 410
McLean, VA 22101

Dear Tom:

This letter is intended to reflect the substance of our various conversations over the past several months, regarding the needs of the Nation's education community for access to a dedicated communications satellite with fifty-state coverage.

A critical juncture has been reached by various educational institutions with respect to the use of communications satellites to distribute instructional materials to students of all academic levels. In a recent study of the activities of educational users of satellite services, the EDSA'T Institute found that the aggregated transponder capacity required to meet demand for such services has increased to the point that, during peak hours of use, the educational community's needs would all but exhaust the capacity of a single communications satellite, and that this level of demand will only continue to grow. After much further study and many outreach meetings of various vested interest groups, a new organization has been formed--the National Education Telecommunications Organization (NETO)--charged with the objective of coordinating the affected community and bringing together their needs into a single, integrated management organization to help identify and fill their needs. In addition, NETO has established a separate operating subsidiary--the EDSAT Corporation--for the purpose of procuring, owning, and operating the space segment component needed to meet the demands of the NETO members.

Although NETO and the EDSAT Corporation will not hold their formal meetings until January, 1992, EDSAT believes that it is evident that there should be at least one dedicated national education satellite network to serve these needs. Based on our prior discussions, EDSAT wishes to explore whether the satellite system proposed by National Exchange Satellite, Inc. ("Nexsat") may provide the type of flexible and diverse communications capabilities that would best serve the interests of the educational community. Therefore,

Mr. Clay T. Whitehead

December 9, 1991

Page 2

we propose an in-depth, joint feasibility study of both the technical and economic merits of the Nexsat system for the educational community. This study will be most useful to the EDSAT Corporation as it develops plans and options to acquire an entire satellite system devoted to educational users and/or to acquire a critical mass of transponders dedicated to education on a more general purpose satellite system.

The study assumes that the Nexsat system will have C-band and Ku-band capacity at both the 93 W.L. and 127 W.L. orbital locations. We understand that Nexsat presently is authorized by the FCC to operate one hybrid satellite at each orbital location, although the company is exploring the potential advantages of deploying two or more separate "lightsats" at each location. At this point, EDSAT has no strong preference for one configuration or the other. Given, however, the current usage patterns of the educational community, EDSAT believes that a dedicated system must provide substantial capacity in both C-band and Ku-band to avoid premature replacement of existing terrestrial equipment; cross-strapping capability is also considered to be important.

The relative merits of various spacecraft configurations and frequency plans should be subjects of the study, both from the economic and technical perspectives. An additional area of potential cross-savings that we would wish to explore involves emerging digital compression techniques. Obviously, all configurations must be compatible with the various fiscal and service constraints under which educational institutions generally must operate.

I look forward to working with Nexsat on this study.

Very truly yours,



H. Brian Thompson

Chairman, EDSAT Corporation

HBT/cb