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Federal Communications Commission
Office of the Secretary

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JUN 13 1990

Domestic Facilities Division
Satellite Radio Branch

June 8, 1990

Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: AT&T Application for Modification of TELSTAR 4 Series Satellites
File Nos: 25-DSS-P/L-90
26-DSS-P/L-90
27-DSS-P/L-90

Dear Ms. Searcy:

Transmitted herewith for filing on behalf of GTE Spacenet Corporation is an original and required copies of its Comments in the above-captioned proceeding.

Should any questions arise, please contact the undersigned.

Sincerely,

Terri B. Natoli
Terri B. Natoli

TBN/kmc

Enclosures

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JUN 8 - 1990

Federal Communications Commission
Office of the Secretary

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

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JUN 13 1990

Domestic Facilities Division
Satellite Radio Branch

In the Matter of)	
)	
AMERICAN TELEPHONE AND TELEGRAPH COMPANY)	File Nos. 25-DSS-P/L-90
)	26-DSS-P/L-90
Application for Modification of TELSTAR 4 Series Satellites)	27-DSS-P/L-90

To the Commission:

Comments

GTE Spacenet Corporation ("GTE Spacenet") hereby submits its Comments on the above-captioned application of the American Telephone and Telegraph Company ("AT&T") and respectfully states the following:

On April 13, 1990, AT&T filed an application with the Commission to modify the licenses for its TELSTAR 401, 402, and 403 satellites ("TELSTAR 4 satellites") to permit certain technical changes to be made to those satellites. Specifically, AT&T seeks authority to:

1. Modify the Ku-Band configuration of the TELSTAR 4 satellites from the previously authorized eight 54-MHz and 12-36 MHz transponder configuration to 16-54 MHz transponders;
2. Add an independent, ground-controlled, on-board switching capability to convert any of the upper four Ku-Band transponders in either polarization into two 27 MHz transponders;
3. Extend the currently authorized power boost capability for any six C-Band and Ku-Band transponders to all 24 C-Band transponders and

the upper six Ku-Band transponders.

One of AT&T's TELSTAR 4 satellites, TELSTAR 402, is assigned to operate at 89°W.L.,¹ two degrees away from GTE Spacenet's SPACENET III satellite assigned to, and operating at, 87°W.L. As a result, GTE Spacenet is concerned about potential interference from a further modified TELSTAR 402 satellite into current and planned SPACENET III traffic.²

AT&T's new Ku-Band frequency plan assigns high-power traffic to the upper half of the frequency spectrum. This is consistent with GTE Spacenet's band segmentation and traffic assignment policy and normally would not present any additional potential interference problems. However, because under AT&T's proposed modification the upper four Ku-Band transponders would be capable of being split into two 27 MHz transponders, the potential for AT&T video interference into GTE Spacenet's co-polarized video transponders has increased. This increased interference potential arises from the additional video center frequency which will have to be avoided in coordinating the transponders that are switched into the 27 MHz mode. As a result, it is imperative that AT&T coordinate the usage of these transponders with GTE Spacenet in a way which reduces any resulting adverse interference to its SPACENET III transponders.

¹ Memorandum, Opinion, and Order, Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, FCC 88-373 released December 7, 1988.

² On June 29, 1989, AT&T filed its first modification application for the TELSTAR 4 satellites to inter alia add a C-Band spot beam for coverage of Hawaii. GTE Spacenet filed comments on August 18, 1989, expressing concern about potential interference into its SPACENET III transmissions to Hawaii and requesting assurances from AT&T that an effective coordination agreement with respect to that modification would be achieved. On March 2, 1990, the Commission granted this modification application. Order and Authorization, DA-90-279 released March 2, 1990.

As to the C-Band power boost capability for all the C-Band transponders, a capability which will permit the increase in C-Band power from 10 watts to 20 watts, GTE Spacenet has concern regarding interference into some of its sensitive single channel per carrier ("SCPC") traffic. While AT&T's previous authority permitted the power boost capability for only six C-Band transponders,³ it is unclear from the instant modification application how many of the C-Band transponders could be expected to operate in the high-power mode at any time. Because the SPACENET III satellite has been operational since March, 1988, its coordination flexibility is somewhat limited. Thus, GTE Spacenet asserts that the increase in the number of potential high-power C-Band transponders will be difficult to effectively coordinate if AT&T desires to employ this capability on transponders corresponding to GTE Spacenet's existing inflexible SCPC traffic.

In spite of the above concerns, GTE Spacenet is not herein opposing AT&T's proposed TELSTAR 4 modifications. GTE Spacenet has always advocated Commission authorization of new technological developments to better serve the public interest. Yet, simultaneously, GTE Spacenet has just as strongly advocated preservation and protection from interference of those existing services which are meeting the needs of the public today. As with AT&T's previous TELSTAR 4 modification application,⁴ GTE Spacenet is submitting these comments to urge the Commission to be cognizant of the potential interference from AT&T's proposed modifications to the SPACENET III operations, and to put AT&T on notice that careful transponder planning and coordination are necessary to ensure that GTE Spacenet's current and planned SPACENET III services are not adversely affected.

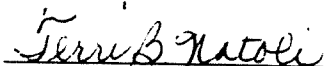
³ AT&T, Order and Authorization, FCC 88-375, released December 7, 1980.

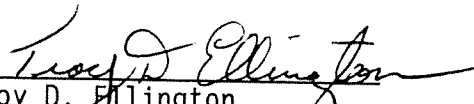
⁴ Supra, note 2.

As always, GTE Spacenet agrees to work with AT&T to ensure that an effective coordination agreement can be achieved, however, GTE Spacenet expects AT&T to recognize that because the SPACENET III satellite has been operational since early 1988 its flexibility in traffic loading and reassigning will be limited.

Respectfully submitted,

GTE SPACENET CORPORATION


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June 8, 1990

CERTIFICATION OF PERSON RESPONSIBLE
FOR PREPARING ENGINEERING INFORMATION
SUBMITTED IN THIS APPLICATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this application and the exhibits attached thereto; that I am familiar with Part 25 of the Commission's Rules; that I have either prepared or reviewed the engineering information submitted in this filing and the exhibits attached thereto; and that it is complete and accurate to the best of my knowledge.

By: *Sidney M. Skjei*
Sidney M. Skjei
Director, Engineering

GTE Spacenet Corporation
1700 Old Meadow Road
McLean, Virginia 22102

Dated this 5th day of June, 1989.