



ELECTRONIC FILING

October 16, 2002

FEDERAL COMMUNICATIONS COMMISSION
Experimental Radio Service
P.O. Box 358320
Pittsburgh, PA 15251-5320

Subject: Request for Modification of Special Temporary Authority
Licensee: Alcatel USA Marketing
Call Sign: WB9XRN
File Number: 0331-EX-ST-2002

Dear Sir or Madam:

Alcatel USA Marketing would like to modify their existing Special Temporary Authority to operate two Ku-band satellite earth stations. The modification consists of adding a point of communication to SES Americom Satellite AMC-6 at 72 degrees west longitude. All equipment models and locations will remain the same and this change will not cause an increase in transmit power. The radiation hazard study originally provided remains valid. All points of contact also remain as before. Additional technical details are provided in attached Exhibit A.

Alcatel USA will be still be performing real-time satellite link testing of their DVB equipment using a hub earth station located in Montreal, Canada and two US based transmit-receive VSATs, located in Plano, TX and Miami, FL. These tests will be used for product demonstrations to customers.

Alcatel USA would like to commence transmission to AMC-6 by October 22, 2002 and is not requesting an extension of the original STA. Comsearch respectfully requests the FCC to expedite the approval of this STA request. If you have any questions please call.

Sincerely,
COMSEARCH

Kenneth G. Ryan
Director, Spectrum Management Services
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Exhibit A – Request for Modification of STA Technical Parameters

SPACE SEGMENT

Satellite

The Satellite used for the demonstration network is SES-Americom AMC-6, located at 72 degrees Longitude West

The main parameters of the transponder used are given below:

Transponder Parameters

1	Transponder	16N
3	Uplink Center Frequency	14320 MHz
4	Uplink Polarization	Vertical
5	Downlink Center Frequency	12020 MHz
6	Downlink Polarization	Horizontal
7	Available Bandwidth (T_BW)	36 MHz

Frequency Plan

The frequency plan is illustrated below. It consists of four Return Link (RL) carriers transmitted by the Satellite Terminals (MF-TDMA mode) and one Forward Link (FL) carrier transmitted by the HUB.

Operating Center Frequencies (MHz) :

Item Description	Ku U/L	Ku D/L	L-Band Rx
FL Forward Link (Montreal)	14318.875	12018.875	1268.875
RL7 RL Carrier 7	14332.492	12032.492	1282.492
RL8 RL Carrier 8	14333.428	12033.428	1283.428
RL9 RL Carrier 9	14334.364	12034.364	1284.364
RL10 RL Carrier 10	14335.300	12035.300	1285.300

Carrier Information

The characteristics of the Return and Forward Link QPSK carriers are given below:

Return Link Carriers Characteristics (Transmitted by Satellite Terminals) : RL 7,8,9,10.

Description	Value	Unit
Symbol Rate	624	kS/s
Coding	Rate ½	---
Information Rate	384	kbit/s
Carrier Spacing	1.5 x Symbol Rate = 0.936	MHz

Forward Link Carriers Characteristics (Transmitted by the HUB Montreal) : FL

Symbol Rate	8.0	MS/s
Coding Rate	$\frac{1}{2}$	---
Bit Rate	7.3725	Mbit/s
Occupied BW	1.35 x Symbol Rate = 10.80	MHz

SATELLITE TERMINALS (SIT)

SIT Location	Azimuth Angle	Elevation Angle
Miami	161.68	58.51
Plano	139.84	43.30

Terminal EIRP Requirements

The terminal EIRP requirements have been determined by link budget analysis. The following table describes the terminal ODU characteristics and EIRP requirements for each location.

SIT Location	ODU Antenna	ODU SSPA	ODU EIRP (384 kbit/s)
Miami	1.2m	2 watt	44.5 dBW
Plano	1.2m	2 watt	41.9 dBW