Approved by OMB 3060–0678

Date & Time Filed: Oct 29 2004 3:01:29:350PM File Number: SES–MOD–INTR2004–03025

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu: KA-313 Modification to add 8.1m Vertex

Name:	Telenor Satellite, Inc.	Phone Number:	301-838-7739
DBA Name:		Fax Number:	301-838-7752
Street:	1101 Wootton Parkway	E-Mail:	bruce.henoch@telenor-usa.com
	10th Floor		
City:	Rockville	State:	MD
Country:	USA	Zipcode:	20852 –
Attention:	Mr Bruce A Henoch		

Name:	Bruce A. Henoch	Phone Number:	301-838-7739
Company:	Telenor Satellite Services, Inc.	Fax Number:	301-838-7752
Street:	1101 Wootton Parkway	E-Mail:	bruce.henoch@telenor-usa.com
	10th Floor		
City:	Rockville	State:	MD
Country:	USA	Zipcode:	20852-
Contact	Assistant General Counsel	Relationship:	Legal Counsel

CLASSIFICATION OF FILING 17. Choose the button next to the classification that applies to this filing for (N/A) b1. Application for License of New Station both questions a. and b. Choose only one (N/A) b2. Application for Registration of New Domestic Receive-Only Station for 17a and only one for 17b. O (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration al. Earth Station b5. Assignment of License or Registration a2. Space Station b6. Transfer of Control of License or Registration O (N/A) b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States (N/A) b10. Other (Please specify)

17c. Is a fee submitted with this application		
• If Yes, complete and attach FCC Form	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
• Governmental Entity • Noncomme	rcial educational licensee	
• Other(please explain):		
17d.		
Fee Classification CGX – Fixed Satellite 7 Station	Transmit/Receive Earth	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a modification please enter only the file number:	
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:
KA313		SESMOD2002091901633

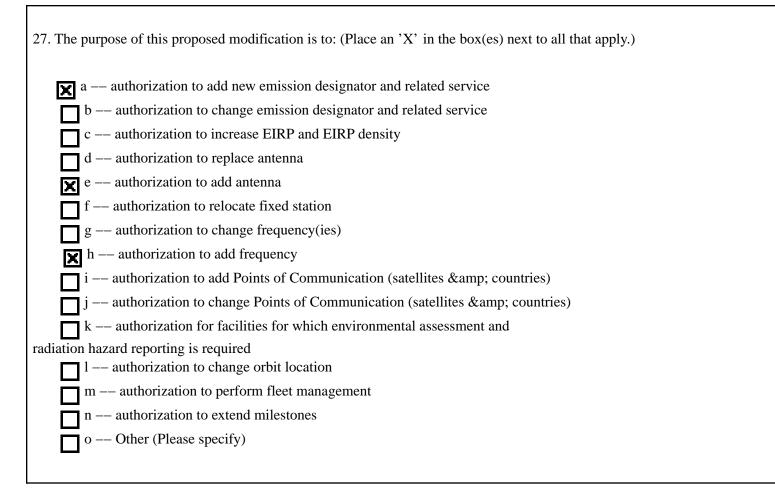
TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	e or use the following type(s) of service(s): Select all that apply:
a. Fixed Satellite	
b. Mobile Satellite	
c. Radiodetermination Satellite	
d. Earth Exploration Satellite	
e. Direct to Home Fixed Satellite	
f. Digital Audio Radio Service	
g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network	Public Switched Network O N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all a	applicable frequency band(s).
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper: (Please specify addition	onal frequencies in an attachment)

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
a. Fixed Earth Station
• b. Temporary–Fixed Earth Station
o c. 12/14 GHz VSAT Network
O d. Mobile Earth Station
• e. Geostationary Space Station
• f. Non–Geostationary Space Station
• g. Other (please specify)
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit–Only Receive–Only N/A
"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION



ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.				● Yes ● No RadHaz Report				
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	iutic	al en	rout	e or	•			
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No	0	N/A		
30. Is the applicant an alien or the representative of an alien?	0	Yes	۲	No	0	N/A		
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	۲	No	0	N/A		
32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	0	Yes	۲	No	0	N/A		

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than
one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign
government or representative thereof or by any corporation organized under the laws of a foreign country?

34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or Ownership Statement foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.

O Yes O No O N/A

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O Yes	● No
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	● No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	● No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	O Yes	● No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	• Yes	O No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.

42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.



O No

Yes

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

VSAT hub antenna.

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

Individual

Unincorporated Association

- Partnership
- Corporation

Governmental Entity

Other (please specify)

45. Name of Person Signing	46. Title of Person Signing
Bruce A. Henoch	Assistant General Counsel

-->

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth St	ation Site				
E1: Site Identifier:	Southbury LES	E5. Call Sign:	KA313		
E2: Contact Name	Guy White	E6. Phone Number:	203-262-5020		
E3. Street:	2120 River Road	E7. City:	Southbury		
		E8. County:	New Haven		
E4. State	СТ	E9. Zip Code	06488		
E10. Area of Operat	tion:	Continental U.S.			
E11. Latitude:	41 °27 '6.3 "N				
E12. Longitude:	73 °17 '16.4 "W				
E13. Lat/Lon Coord	linates are:	ONAD-27	● NAD-83	O N/A	
E14. Site Elevation	(AMSL):	36.6 meters			

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two–degree spacing policy.	• Yes • No	O N/A
--	------------	-------

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O ^{Yes}	O ^{No}	● ^{N/A}
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:						
E21. Common Name:	E22. ITU Name:					
E23. Orbit Location:	E24. Country:					
POINTS OF COMMUNICATION (Destination Points)						
E25. Site Identifier: Southbury LES						

E26. Common Name:	E27. Country: USA
	127. Country. Cont

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
Southbury LES	Vertex 8.1	1	Vertex	КРК	8.1	59.8 dBi at 14.25

Id			· · · ·	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Vertex 8.1	8.1/8.1	8.23	44.83	0.0	700.0	0.0	88.2

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Vertex 8.1	11700 12200	R	Horizontal and Vertical	36M0F8W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Analog Video

Vertex 8.1	11700 12200	R	Horizontal and Vertical	100KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digit	al Data.					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	20M0G7W	0.0	0.0
entirety.) QPSK Digit	al Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	2M29G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digit	al Data					

Vertex 8.1	11700 12200	R	Horizontal and Vertical	32K0G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digit	al Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	36M0G7W	0.0	0.0
entirety.)	al Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	42M0G7W	0.0	0.0
E50. Modulation entirety.) QPSK Digit	× ·	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its

Vertex 8.1	11700 12200	R	Horizontal and Vertical	43K8G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digit	al Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	45K0G7W	0.0	0.0
entirety.) QPSK Digit	al Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	72M0G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digit	al Data					

Vertex 8.1	11700 12200	R	Horizontal and Vertical	76K8G7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK Digi	tal Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	9K00G7W	0.0	0.0
entirety.) QPSK Digi	tal Data					
Vertex 8.1	11700 12200	R	Horizontal and Vertical	36M0G7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
QPSK, Dig	ital Telephony	7				

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	36M0F8W	80.14	46.1
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
Analog vi	deo					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	100KG7W	60.07	46.1
QPSK Digi	tal Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	20M0G7W	83.08	46.1
E50. Modulatio entirety.)	n and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Digi	tal Data					

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	2M29G7W	73.67	46.1
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Digit	al Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	32K0G7W	55.13	46.1
entirety.) QPSK Digit	al Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	36M0G7W	77.23	46.1
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Digit	al Data					

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	42M0G7W	86.31	46.1
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Digit	al Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	43K8G7W	56.49	46.1
entirety.)	al Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	45K0G7W	56.61	46.1
E50. Modulatior entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Digit	al Data					

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	76K8G7W	58.93	46.1
E50. Modulati entirety.)	on and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK Dig	ital Data					
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	9K00G7W	49.62	46.1
entirety.)	on and Services (I		escription does not appear			
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	72M0G7W	88.55	46.1
entirety.)		f the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK, Di	gital Data					

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	36M0G7W	72.0	46.1
E50. Modulatior entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Dig	ital Telephony	7				
Vertex 8.1	11700 12200	R	Horizontal and Vertical	1M60G1F	0.0	0.0
PSK Digita	I Video with	Associated	Digital Audio			
Vertex 8.1	11700 12200	R	Horizontal and Vertical	200KG1F	0.0	0.0
E50. Modulatior entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
PSK Digita	al Video with	Associated	Digital Audio			

Vertex 8.1	11700 12200	R	Horizontal and Vertical	400KG1F	0.0	0.0
E50. Modulati entirety.)	ion and Services ((If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
PSK Digi	tal Video witl	h Associated	Digital Audio			
Vertex 8.1	11700 12200	R	Horizontal and Vertical	800KG1F	0.0	0.0
PSK Digi	tal Video wit	h Associated	Digital Audio			
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	1M60G1F	72.12	46.1
E50. Modulati entirety.)	ion and Services ((If the complete de	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
PSK Digi	tal Video wit	h Associated	Digital Audio			

Vertex 8.1	14000 14500	Т	Horizontal and Vertical	200KG1F	63.08	46.1
E50. Modulation entirety.)	and Services (If t	he complete descripti	ion does not appear	in this box, please	go to the end of th	e form to view it in its
PSK Digita	l Video with A	Associated Dig:	ital Audio			
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	400KG1F	66.1	46.1
PSK Digita	l Video with A	Associated Dig:	ital Audio			
Vertex 8.1	14000 14500	Т	Horizontal and Vertical	800KG1F	69.11	46.1
E50. Modulation entirety.) PSK Digita		he complete descripti		in this box, please	go to the end of th	e form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	n EIRP Density toward the
Vertex 8.1	Geostationary	11700 12200	3.0/112.0	103.3	6.0	230.0	27.0	0.0
	Geostationary	14000 14500	3.0/112.0	103.3	6.0	230.0	27.0	9.03
REMOTE CC	NTROL POIN	T LOCATION		•				·
	ign ase enter the calls ich this applicati	v	÷		. Phone Number			
E62. Street	Address							
E63. City			E68. County	7		E67/68. State/Country /		E64. Zip Code

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.