

S2955 SAT-PPL-20160225-00020
Telesat International Limited
TELSTAR 19 VANTAGE

IB2016000534



*with conditions

File # SAT-PPL-20160225-00020

Call Sign S2955 Grant Date 08/31/16

(or other identifier)

Term Dates see

From 08/31/16 To: conditions

Approved: Stephen J. Duell

Stephen J. Duell
Chief, Satellite Policy Branch

Approved by OMB
3060-0678

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| APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY | FCC Use Only |
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
T19V PDR for Permitted List (Feb 2016)

| | | | |
|------------------------------|-------------------------------|---------------|--------------------|
| 1-8. Legal Name of Applicant | | | |
| Name: | Telesat International Limited | Phone Number: | (613) 748-8700 |
| DBA Name: | | Fax Number: | (613) 748-8712 |
| Street: | 1601 Telesat Court | E-Mail: | JForsy@telesat.com |
| City: | Ottawa | State: | |
| Country: | Canada | Zipcode: | - |
| Attention: | Mr John Forsy | | |

ATTACHMENT TO GRANT
 Telesat International Limited
 IBFS File No. SAT-PPL-20160225-00020

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|---|---|---|
| IBFS File No(s): | SAT-PPL-20160225-00020 | <p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p> |
| Licensee/Grantee: | Telesat International Limited | |
| Call Sign: | S2955 | |
| Satellite Name: | Telstar 19 Vantage (Telstar 19V) | |
| Orbital Location: (required station-keeping tolerance) | 63° W.L. (+/- 0.05 degrees east/west) | |
| Administration: | Telstar 19V will operate under the Administrations of Brazil and the United Kingdom: Brazil for Ka-band frequencies in Brazil; Brazil for Ku-band frequencies; and the United Kingdom, on behalf of the Isle of Man, for Ka-band frequencies outside of Brazil. | |
| Nature of Service: | Fixed-Satellite Service (FSS) | |
| Scope of Grant: | <p>The Telstar 19V satellite is added to the Permitted Space Station List for the following frequency bands: 11.7-11.95 GHz (space-to-Earth); 14.0-14.25 GHz (Earth-to-space), 18.3-18.8 GHz, 19.7-20.2 GHz (space-to-Earth) and 28.35-28.6 GHz, and 29.25-30.0 GHz (Earth-to-space).</p> <p>Telstar 19V is granted U.S. Market Access in the following frequency bands: 13.8-14.0 GHz (Earth-to-space), 11.5-11.7 GHz (space-to-Earth), 18.8-19.3 GHz (space-to-Earth), 27.6-28.35 GHz (Earth-to-space), and 28.6-29.1 GHz (Earth-to-space).</p> | |
| Service Area(s): | See Schedule S, at Item S6 and accompanying .gxt files. | |
| Frequencies: | <p>11.5-11.95 GHz (space-to-Earth) 13.8-14.25 GHz (Earth-to-space) 18.3-19.3 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 27.6-29.1 GHz (Earth-to-space) 29.25-30.0 GHz (Earth-to-space)</p> <p>Telemetry, tracking, and command frequencies: 11450 MHz, and 11452 MHz (space-to-Earth) 13751 MHz and 13753 MHz (Earth-to-space)</p> | |
| <p>Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission’s rules not waived herein. This grant is also subject to the following conditions:</p> <ol style="list-style-type: none"> 1. This grant does not include the provision of any Direct-to-Home (DTH) service, Direct Broadcast Satellite Service (DBS) or Digital Audio Service (DARS) to, from, or within the United States. 2. Communications between U.S. licensed earth stations and the Telstar 19V space station must be in compliance with all existing and future space station coordination agreements reached between Brazil, the United Kingdom, and other Administrations. 3. Telesat’s operation of the Telstar 19V space station in the 11.5-11.7 GHz band is limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations. 47 CFR § 2.106, NG52. 4. Any earth station seeking to communicate with Telstar 19V using the 13.75-14.0 GHz frequencies must file a | | |

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separate application with the Commission, which will be considered on a case-by-case basis.

5. Communications between U.S.-licensed earth stations and the Telstar 19V space station in the 13.75-14.0 GHz band (Earth-to-space) are subject to footnote US337 of the United States Table of Frequency Allocations, 47 CFR § 2.106, US337, which requires any earth station in the United States and its possessions communicating with the Telstar 19V space station in the 13.75-13.8 GHz band be coordinated through the National Telecommunications and Information Administration's (NTIA) Frequency Assignment Subcommittee to minimize harmful interference to the National Aeronautics and Space Administration (NASA) Tracking and Data Relay Satellite System's (TDRSS) forward space-to-space link (TDRSS forward link-to-LEO).
6. Communications between U.S.-licensed earth stations and the Telstar 19V space station in the 13.8-14.0 GHz band (Earth-to-space) are subject to footnote US356 of the United States Table of Frequency Allocations, 47 CFR § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and a recommended minimum and maximum equivalent isotropically radiated power (EIRP). Operations of any earth station located outside of the United States and its possessions communicating with the Telstar 19V space station in the 13.75-14.0 GHz band (Earth-to-space) to provide service to the United States must be consistent with footnote 5.502 to the International Telecommunication Union (ITU) Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits. In the 13.75-14.0 GHz frequency band (Earth-to-space), receiving space stations in the fixed-satellite service must not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.
7. Operations of any earth station in the United States and its possessions communicating with the Telstar 19V space station in the 13.75-14.0 GHz band (Earth-to-space) must comply with footnote US357 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US357, which specifies that the EIRP density of emissions must not exceed 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside of the United States and its possessions communicating with the Telstar 19V space station in the 13.77-13.78 GHz band (Earth-to-space) to provide service to or from the United States must comply with footnote 5.503 to the ITU Radio Regulations, which specifies a required maximum EIRP density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.
8. Telesat's request for a waiver of Footnote NG165 to Section 2.106 of the United States Table of Frequency Allocations, 47 CFR § 2.106, to permit Telesat to operate the Telstar 19V GSO FSS space station in the 18.8-19.3 GHz (space-to-Earth) frequency band on a non-conforming basis is GRANTED. In the United States, the 18.8-19.3 GHz frequency band is designated for non-Federal, non-geostationary orbit (NGSO) FSS operations on a primary basis, with no designation for non-Federal GSO operations. The 18.8-19.3 GHz band is also allocated to Federal GSO and NGSO FSS operations on a primary basis. As a non-conforming user, Telesat must accept any interference from any non-Federal NGSO FSS system, any Federal GSO FSS or NGSO FSS system, or any grandfathered co-primary fixed service stations authorized to use the 18.8-19.3 GHz frequency band. In addition, Telesat must not cause harmful interference to any authorized non-Federal NGSO FSS system, any authorized Federal GSO FSS or NGSO FSS system, or any grandfathered co-primary fixed service stations, and must immediately cease operations upon notification of such harmful interference resulting from its
9. Telesat must coordinate its space-to-Earth operations in the 18.3-19.3 GHz and 19.7-20.2 GHz frequency bands with the U.S. Federal systems, including Federal operations to earth stations in foreign countries, in accordance with footnote US334 to the United States Table of Frequency Allocations, 47 CFR § 2.106. In addition to meeting the terms of the coordination agreement, the non-conforming Telstar 19V operations in the 18.8-19.3 GHz band must not cause harmful interference to, nor claim protection from, present and future

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Federal GSO and NGSO systems, non-Federal NGSO systems or any non-conforming services previously authorized on a non-harmful interference basis. U.S. licensed earth stations shall not communicate with the Telstar 19V space station in the 18.3-18.8 GHz and 19.7-20.2 GHz bands until Telesat has completed coordination pursuant to Footnote US334 and both the FCC and the National Telecommunications and Information Administration have approved coordination.

10. Communications between U.S.-licensed earth stations and Telstar 19V in the 27.5-28.35 GHz (Earth-to-space) frequency band are on a secondary basis with respect to LMDS until the provisions adopted in FCC 16-89 go into force. After that, communications between U.S.-licensed earth stations and Telstar 19V in this band are secondary with respect to Upper Microwave Flexible Use Service (UMFUS) operations, except for FSS operations associated with earth stations authorized pursuant to 47 CFR § 25.136.
11. Telesat's operations in the 28.6-29.1 GHz (Earth-to-space) band shall be on a secondary basis. Telesat shall not cause harmful interference to any station authorized to operate on a primary basis in the 28.6-29.1 GHz band, must accept any interference from these stations, and must terminate operations immediately upon notification of harmful interference.
12. Telesat's grant of U.S. market access will terminate in the event that the Telstar 19V space station is relocated from the 63° W.L. orbital location or ceases to operate. In either case, its grant of market access for the 13.75-14.0 GHz, 11.5-11.7 GHz, 18.8-19.3 GHz, 27.6-28.35 GHz, and 28.6-29.1 GHz bands will be revoked. If Telesat seeks to provide service to the United States using another space station or seeks to operate Telstar 19V from another location, it must file a new petition for market access.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.


This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

| | |
|---------------------|-----------------|
| Action Date: | August 31, 2016 |
|---------------------|-----------------|

| | | |
|-------------------|------------------------------|---------------------------|
| Term Dates | From: August 31, 2016 | To: see conditions |
|-------------------|------------------------------|---------------------------|

Approved:


 Stephen J. Duall
 Chief, Satellite Policy Branch

9-16. Name of Contact Representative

| | | | |
|------------|--|---------------|------------------|
| Name: | Joseph A. Godles | Phone Number: | (202) 429-4900 |
| Company: | Goldberg Godles Wiener & Wright LLP | Fax Number: | (202) 429-4912 |
| Street: | 1229 19th Street, NW | E-Mail: | jgodles@g2w2.com |
| City: | Washington | State: | DC |
| Country: | USA | Zipcode: | 20036 -2413 |
| Attention: | | Relationship: | Legal Counsel |

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a.
- (N/A) a1. Earth Station
 - a2. Space Station

- b.
- b1. Application for License of New Station
 - (N/A) b2. Application for Registration of New Domestic Receive-Only Station
 - (N/A) b3. Amendment to a Pending Application
 - (N/A) b4. Modification of License or Registration
 - (N/A) b5. Assignment of License or Registration
 - (N/A) b6. Transfer of Control of License or Registration
 - (N/A) b7. Notification of Minor Modification
 - (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
 - b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
 - b10. Replacement Satellite Application - no new frequency bands
 - b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)
 - b12. Petition for Declaratory Ruling to be Added to the Permitted List
 - (N/A) b13. 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 Noncommercial educational licensee

Other (please explain): Petition for Declaratory Ruling — no filing fee

17c. Fee Classification

18. If this filing is in reference to an existing station, enter:

(a) Call sign of station:
Not Applicable

19. If this filing is an amendment to a pending application enter:

(a) Date pending application was filed:

Not Applicable

(b) File number of pending application:

Not Applicable

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide 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 only one.

- Common Carrier Non-Common Carrier

22. If earth station applicant, check all that apply.
Not Applicable

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

- Connected to a Public Switched Network Not connected to a Public Switched Network N/A

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all 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 additional 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.

- (N/A) a. Fixed Earth Station
- (N/A) b. Temporary-Fixed Earth Station
- (N/A) c. 12/14 GHz VSAT Network
- (N/A) d. Mobile Earth Station
- e. Geostationary Space Station.
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Not Applicable

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.) Not Applicable

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

ALIEN OWNERSHIP

Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.

| | |
|--|---|
| 29. Is the applicant a foreign government or the representative of any foreign government? | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| 30. Is the applicant an alien or the representative of an alien? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A |
| 31. Is the applicant a corporation organized under the laws of any foreign government? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A |
| 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 foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote. Response to Q34 | |

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.

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 explanation of circumstances.

Yes No
Response to Q36

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 explanation of circumstances.

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

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 exhibit, an explanation of the circumstances.

Yes 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. Response to Q40

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. Yes No

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. Yes No

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? Brazil / Isle of Man

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.)

Pursuant to Section 25.137 of the Commission's rules and the DISCO II Reconsideration Order, and the Commission's extension of the policies enunciated therein to make them applicable to Ka-band space station operations, Telesat International Limited respectfully petitions the Federal Communications Commission for a declaratory ruling adding the

PDR and Tech Narr

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

GIMS

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
Christopher DiFrancesco

46. Title of Person Signing
Secretary

47. Please supply any need attachments.

1:

2:

3:

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).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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.

43. Description. (Summarize the nature of the application and the services to be provided).

Pursuant to Section 25.137 of the Commission's rules and the DISCO II Reconsideration Order, and the Commission's extension of the policies enunciated therein to make them applicable to Ka-band space station operations, Telesat International Limited respectfully petitions the Federal Communications Commission for a declaratory ruling adding the Telstar 19 VANTAGE (T19V) satellite to the Permitted Space Station List.