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Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS 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:

Orange Business Services Ku Band VSAT Network

| 1–8. Legal Name | of Applicant |
|-----------------|--------------|
|-----------------|--------------|

Name: Orange Business Services U.S. Inc **Phone Number:** 703–471–2532

DBA Fax Number: 703–471–3347

Name:

Street: 13775 McLearen Road E-Mail: ivana.kriznic@orange.com

Legal and Regulatory

City: Oak Hill State: VA

Country: USA Zipcode: 20171 –

Attention: Ms Ivana Kriznic

9–16. Name of Contact Representative

Name: Matthew Botwin Phone Number: 212.227.1867

Company: CGP Solutions, LTD Fax Number:

Street: 225 Broadway E–Mail: mb@cgpsols.com

Suite 3400

City: New York State: NY

Country: USA Zipcode: 10007-

Attention: Matt Botwin **Relationship:** Other

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. a. a. a. A. A. A. B. B. B. B. B. B. B | b. b1. Application for License of New Station 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 (N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States b10. Other (Please specify) b11. Application for Earth Station to Access a Non—U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States. b12. Application for Database Entry (N/A) b13. Amendment to a Pending Database Entry Application (N/A) b14. Modifiction of Database Entry |
|---|---|
| 17c. Is a fee submitted with this application of the submitted with | 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). rcial educational licensee |
| 17d. Fee Classification BGV – Fixed Satellite V | SAT System |

| 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 (a) Date pending application was filed: Not Applicable | ng application enter: (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 follow | wing type(s) of service(s): Select all that apply: |
| a. Fixed Satellite b. Mobile Satellite c. Radiodetermination Satellite | | |

| 22. If earth station applicant, check all that apply. Using U.S. licensed satellites Using Non–U.S. licensed satellites |
|---|
| service, see instructions regarding Sec. 214 filings. Choose one. Are these 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: |
| |
| 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 |
| c. 12/14 GHz VSAT Network |
| d. Mobile Earth Station |
| (N/A) e. Geostationary Space Station |
| (N/A) f. Non-Geostationary Space Station |
| g. Other (please specify) |
| |
| 26. TYPE OF EARTH STATION FACILITY: Choose only one. |
| Transmit/Receive Transmit-Only Receive-Only N/A |
| |
| 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

environmental impact as defined by 47 CFR 1.1307? If YES, submit the

| 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. | Radiation Hazard Ku |
|---|---------------------|
| 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. | utical en route or |
| 29. Is the applicant a foreign government or the representative of any foreign government? | O Yes O No |
| 30. Is the applicant an alien or the representative of an alien? | O Yes No O N/A |
| 31. Is the applicant a corporation organized under the laws of any foreign government? | O Yes O No O 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? | ● Yes O No O N/A |

have a significant

statement as required by Sections

Yes

No

| 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? | ● Yes ↑ No ↑ 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. | Orange Ownership |
| 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 explination of circumstances. | 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. | O 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. | | |

| 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 | O 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 coordinated or is in the process of coordinating the space station? | l, what administi | ration has |
| 43. Description. (Summarize the nature of the application and the services to be provided). (If the not appear in this box, please go to the end of the form to view it in its entirety.) | e complete desc | ription does |
| Standard Ku band VSAT network | | |

| 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. | O 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. | o c |

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.

| Individual | | | |
|---|------------------------|--|--|
| Unincorporated Association | 1 | | |
| Partnership | | | |
| Corporation | | | |
| Governmental Entity | | | |
| Other (please specify) | | | |
| 45. Name of Person Signing | | 46. Title of Person Signing Regulatory Counsel, Orange Business Services | |
| Ivana Kriznic 47. Please supply any need attac | hments. | regulatory counter, example 2 assess 2 22 1100 | |
| 47. Please supply any need attac Attachment 1: | hments. Attachment 2: | Attachment 3: | |
| 47. Please supply any need attac | | | |

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

Location of Earth Station Site

E1: Site Identifier: Clearwater E5. Call Sign:

E2: Contact Name Mark Dausher E6. Phone 727 533 3685

Number:

E3. Street: 420 Park Place E7. City: Clearwater

Boulevard

E8. County: Pinellas

E4. State FL E9. Zip Code 33760

E10. Area of Operation: Florida, USA

E11. Latitude: 27 °8 '0.0 "N

E12. Longitude: 82 °7 '0.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 0.0 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. | ⊚ Ye | s O | No 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? | ○ Ye | s o | No | ⊚ N/A |
| E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point. | ● Ye | es | 0 | No |
| E18. Is frequency coordination required? If YES, attach a frequency coordination report as | O Ye | es | • | No |
| E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as | O Yo | es | • | 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. | O Yo | es | • | No |
| POINTS OF COMMUNICATION | - | | | |
| Satellite Name: GALAXY 16 GALAXY 16 99 W.L. If you selected OTHER, please enter the following: | | | | |

| E21. Common N | E21. Common Name: | | | | E22. ITU Name: | | | | | |
|--------------------|---------------------------------------|---|----------------------------|----------------------|--|---------|--|-----|---|---|
| E23. Orbit Locat | tion: | | | | E24. Country: | | | | | |
| POINTS OF | COMMUNICAT | ION (Destination | on Points | s) | ! | | | | | |
| E25. Site Identif | ier: | | | | | | | | | |
| E26. Common Name: | | | | | E27. Cou | ntry: | | | | |
| ANTENNA | | | | | 1 | | | | | |
| Site ID | E28. Antenna | Id E29. Quar | ntity | E30. Manufac | turer | E31. M | Iodel | _ | Antenna <meters></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz) |
| Clearwater | Clearwater | 1 | | Prodelin/O Satcom | GD | Prodeli | in 1184 | 1.8 | | 46.5 dBi at 14.23 |
| | | | | | | | | | | 45.0 dBi at 11.85 |
| E28. Antenna Id | E33/34. Diameter Minor/Major (meters) | E35. Above Ground Level (meters) | E36. A Level< (meter | | E37. Buil Height A Ground Level <bi (meters)</bi | bove | E38. Total Input Powe antenna flange <br (Watts)</br | | E39. Maximum Antenna Heig Above Rooftop <br: (meters)<="" th=""><th>E40. Total EIRP for al carriers (dBW)</th></br:> | E40. Total EIRP for al carriers (dBW) |
| Clearwater | 0.0/0.0 | 2.6 | 0.0 | | 0.0 | | 12.0 | | 0.0 | 56.7 |

FREQUENCY

| E28. Antenna Id | E43/44. | E45. T/R Mode | E46. Antenna | E47. Emission | E48. Maximum | E49. Maximum |
|-----------------|-----------------|---------------|-----------------------|---------------|------------------|------------------|
| | Frequency Bands | | Polarization(H,V, | Designator | EIRP per Carrier | ERIP Density per |
| | (MHz) | | L , R) | | (dBW) | Carrier |
| | | | | | | (dBW/4kHz) |

| Clearwater | 11700 12200 | R | Horizontal and Vertical | 1M98G7W | 0.0 | 0.0 |
|---------------------------------------|--------------------|------------------------|----------------------------|-------------------------|-----------------------|---------------------|
| E50. Modulatio entirety.) | n and Services (If | the complete descripti | on does not appear ir | this box, please go t | o the end of the form | n to view it in its |
| Phase and | amplitude mod | ulated video, v | voice and data | | | |
| Clearwater | 14000 14500 | Т | Horizontal and Vertical | 1M98G7W | 53.2 | 26.3 |
| E50. Modulation entirety.) Phase and | | the complete descripti | | n this box, please go t | o the end of the form | n to view it in its |

FREQUENCY COORDINATION

| E28. Antenna Id | | Frequency Limits(MHz) | Range of Satellite Arc E/W Limit | Station Azimuth Angle | Antenna Elevation Angle Eastern Limit | Station Azimuth Angle | Antenna | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|--------------------|---------------|--------------------------|--|-----------------------------|--|-----------------------------|---------|--|
| Clearwater | Geostationary | 11700 12200 | 99.0/ 99.0 | 0.0 | 5.0 | 0.0 | 5.0 | 0.0 |

| Geostatio | nary 14000 14500 | 99.0/ 99.0 | 0.0 | 5.0 | 0.0 | 5.0 | -19.4 |
|---|---------------------|------------------------|---------|---------------------------------------|----------------------|----------|------------------------|
| REMOTE CONTROL | POINT LOCATIO | N | | · · · · · · · · · · · · · · · · · · · | • | ' | |
| E61. Call Sign E030051 NOTE: Please enter th callsign for which this ap E62. Street Address | _ | - | not the | E65. Pho 240 420 8 | ne Number 3990 | | |
| 17625 Technology Blv | vd | | | | | | |
| E63. City Hagerstown | | E67. Coun Washingto | • | | E64 State/C MD | Country | E66. Zip Code 21740 |

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

Location of Earth Station Site

E1: Site Identifier: Orange Ku VSAT E5. Call Sign:

E2: Contact Name Mark Dausher E6. Phone 727 533 3685

Number:

E3. Street: 420 Park Place E7. City: Clearwater

Boulevard

E8. County: Pinellas

E4. State FL E9. Zip Code 33760

E10. Area of Operation: CONUS Various Locations 100 Units

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '0.0 "

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 0.0 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. | ⊚ Ye | s O¹ | 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 Ye | s O ¹ | No | ● N/A |
| E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point. | ● Yo | es | 0 | No |
| | | | | |
| E18. Is frequency coordination required? If YES, attach a frequency coordination report as | O Yo | es | • | No |
| E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as | O Yo | es | • | 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. | O Yo | es | • | No |
| POINTS OF COMMUNICATION | | | | |
| Satellite Name: GALAXY 16 GALAXY 16 99 W.L. If you selected OTHER, please enter the following: | | | | |

| E21. Common Name: | E22. ITU Name: |
|--|--|
| E23. Orbit Location: | E24. Country: |
| POINTS OF COMMUNICATION (Destination Points) | <u>. </u> |

| E25. Site Identifier: Orange Ku VSAT | |
|--------------------------------------|-------------------|
| E26. Common Name: | E27. Country: USA |

ANTENNA

| Site ID | E28. Antenna Id | E29. Quantity | E30. Manufacturer | E31. Model | E32. Antenna Size <meters></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
|----------------|-----------------|---------------|-----------------------|------------|--|--|
| Orange Ku VSAT | OBS CONUS | 100 | Prodelin/GD Satcom | 1184 | 1.8 | 45.0 dBi at 11.85 |
| | | | | | | 46.5 dBi at 14.25 |

| Id | Diameter | | (meters) | Height Above Ground Level | Input Power at antenna flange (Watts) | Maximum Antenna Height | E40. Total EIRP for al carriers (dBW) |
|-----------|----------|-----|----------|-------------------------------------|--|---------------------------|--|
| OBS CONUS | 0.0/0.0 | 2.6 | 0.0 | 0.0 | 12.0 | 0.0 | 56.7 |

FREQUENCY

| E28. Antenna Id | E43/44. | E45. T/R Mode | E46. Antenna | E47. Emission | E48. Maximum | E49. Maximum |
|-----------------|-----------------|---------------|-------------------|---------------|------------------|------------------|
| | Frequency Bands | | Polarization(H,V, | Designator | EIRP per Carrier | ERIP Density per |
| | (MHz) | | L,R) | | (dBW) | Carrier |
| | | | | | | (dBW/4kHz) |
| | | | | | | |

| OBS CONUS | 11700 | R | Horizontal and | 1M98G7W | 0.0 | 0.0 |
|-----------|-------|---|----------------|---------|-----|-----|
| | 12200 | | Vertical | | | |

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.)

Phase and amplitude modulated video, voice and data

| OBS CONUS | 14000 | T | Horizontal and | 1M98G7W | 53.2 | 26.3 |
|-----------|-------|---|----------------|---------|------|------|
| | 14500 | | Vertical | | | |

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.)

Phase and amplitude modulated video, voice and data

FREQUENCY COORDINATION

| | E51. Satellite Orbit Type | Frequency Limits(MHz) | Range of Satellite Arc E/W Limit | Station Azimuth Angle | | Station Azimuth Angle | Antenna Elevation Angle Western | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|-----------|------------------------------|--------------------------|--|-----------------------------|-----|-----------------------------|--|--|
| OBS CONUS | Geostationary | 11700 12200 | 99.0/ 99.0 | 0.0 | 5.0 | 0.0 | 5.0 | 0.0 |

| | Geostationary | 14000 14500 | 99.0/ 99.0 | 0.0 | | 5.0 | 0.0 | 5.0 | -19.4 |
|--|---------------|----------------|---------------------------|-----|--|-----|-------------------------------------|------|------------------|
| REMOTE CONTROL POINT LOCATION | | | | | | | | | |
| E61. Call Sign E030051 NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed. E65. Phone Number 240 420 8990 | | | | | | | | | |
| E62. Street Address 17625 Technology Blvd | | | | | | | | | |
| E63. City Hagerstown | | | E67. County Washington | | | | E64/68. State/Country MD/ USA | 2174 | . Zip Code 40 |

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