

|                             |                  |                              |                          |                     |                       |                     |                     |                     |                  |
|-----------------------------|------------------|------------------------------|--------------------------|---------------------|-----------------------|---------------------|---------------------|---------------------|------------------|
| E_TSUM Requested by: RICKYP |                  | Date: 30.06.2016 12:55:07 PM |                          | DB: SPACECAP_V7.MDB |                       | Plan Id.:           |                     | Notice type: NONGEO |                  |
| A                           | A1a Sat. Network | CICERO                       | A1f1 Notifying adm.      | USA                 | A1f3 Inter. sat. org. |                     | BR1 Date of receipt | 29.06.2016          | BR20 BR IFIC no. |
| BR6a/BR6b Id. no.           |                  | 2                            | BR3a Provision reference |                     | 9.1/IA                | BR2 Adm. serial no. |                     |                     |                  |

### Résumé / Summary / Resumen

Article 9, sous-section IA / Article 9, sub-section IA / Artículo 9, sub-sección IA  
 第9条第1A分节 / Статья 9, подраздел IA / المادة 9، القسم الفرعي IA

| B1a<br>Beam<br>designation | B2<br>Emi-Rcp | BR8<br>Action<br>code | BR7a<br>Group id. | BR9<br>Action<br>code | BR47<br>Frequency band (MHz) | C4a<br>Class of station |
|----------------------------|---------------|-----------------------|-------------------|-----------------------|------------------------------|-------------------------|
| UPLINK                     | R             |                       | 3                 |                       | 399.9 - 400.5                | EA                      |
| UHFDOWN                    | E             |                       | 5                 |                       | 399.9 - 400.5                | EW                      |

E\_TSUM Requested by: RICKYP Date: 30.06.2016 12:55:07 PM DB: SPACECAP\_V7.MDB Plan Id.: Notice type: NONGEO

A A1a Sat. Network CICERO A1f1 Notifying adm. USA A1f3 Inter. sat. org. BR1 Date of receipt 29.06.2016 BR20 BR IFIC no.

BR6a/BR6b Id. no. 2 BR3a Provision reference 9.1/IA BR2 Adm. serial no. UPLINK R

A1f2 Submitted on behalf

A4b1 No. of orbital planes 1 A4b2 Ref. body T

A4b3a No. of space stations simult. trans. on Northern Hemisphere 1 A4b3b No. of space stations simult. trans. on Southern Hemisphere 1

| Orbital plane id. no. | A4b4a Inclination angle | A4b4b No. of satellites in this plane | A4b4c Period | A4b4d Apogee | A4b4e Perigee | A4b4f Min. altitude |
|-----------------------|-------------------------|---------------------------------------|--------------|--------------|---------------|---------------------|
| 1                     | 97.4                    | 1                                     | 0-01:35      | 600e0        | 600e0         | 600e0               |

B1a/BR17 Beam designation UPLINK B1b Steerable B2 Emi-Rcp R B3a1 Max. co-polar gain 0

B2bis.a Transmit only when visible from notified service area B2bis.b Min. Elev. Angle

| B3c1 Co-polar antenna pattern |         |         |  |  |                     |
|-------------------------------|---------|---------|--|--|---------------------|
| Co-polar ref. pattern         | Coef. A | Coef. B |  |  | Co-polar rad. diag. |
|                               |         |         |  |  | 1                   |

List of orbital planes  
1

B4a3a1 Angle alpha B4a3a2 Angle beta

BR92 Attach. for missing angle alpha/beta

BR7a/BR7b Group id. 3 BR1 Date of receipt 29.06.2016 C2c RR No. 4.4 Y

BR14 Special Section

C4a Class of station EA C3a Assigned freq. band C5a Noise temperature 303

C4b Nature of service CR C6a Polarization type CL C6b Polarization angle

C11a2 Service area XAA C11a3 Service area diagram

A2b Period of valid. 2 A3a Op. agency 999 A3b Adm. resp. A BR16 Value of type C8b

BR60 Regulatory deadline(s) 11.44/11.44.1

| C1 Frequency Range |                 |       |     |
|--------------------|-----------------|-------|-----|
| C1a Lower limit    | C1b Upper limit |       |     |
| 399.9              | MHz             | 400.5 | MHz |

| C7a Design. of emission | C8a1/C8b1 Max. peak pwr | C8a2/C8b2 Max. pwr dens. | C8c1 Min. peak pwr | C8c2 Attch. | C8c3 Min. pwr dens. | C8c4 Attch. | C8e1 C/N ratio | C8e2 Attch. | C8f2 E.i.r.p. on the beam axis |
|-------------------------|-------------------------|--------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|--------------------------------|
| 1 16K5G1D--             | 3                       | -43.1                    | 0.5                |             | -46.1               |             | 57.1           |             |                                |

C7b Carrier frequency of the emissions (16K5G1D--)  
399.92 MHz

| C10b1 Assoc. earth station id. | C10b2 Type | C10c1 Geographical coord. |          | C10c2 Ctry | C10d1/C10d2 Cts. / Nat. |       | C10d3 Max. iso. gain | C10d4 Bmwdth |  |  |  |  |
|--------------------------------|------------|---------------------------|----------|------------|-------------------------|-------|----------------------|--------------|--|--|--|--|
| TYVAK IRVINE FAC               | S          | 117W44 04                 | 33N39 04 | USA        | 1                       | TA CR | 16.2                 | 27           |  |  |  |  |

| C10d5a Co-polar antenna pattern |                       |         |         |         |         |      |                     |
|---------------------------------|-----------------------|---------|---------|---------|---------|------|---------------------|
| C10b1 Assoc. earth station id.  | Co-polar ref. pattern | Coef. A | Coef. B | Coef. C | Coef. D | Phi1 | Co-polar rad. diag. |
| TYVAK IRVINE FAC                |                       |         |         |         |         |      | 4                   |

13C Remarks

E\_TSUM Requested by: RICKYP Date: 30.06.2016 12:55:07 PM DB: SPACECAP\_V7.MDB Plan Id.: Notice type: NONGEO  
 A A1a Sat. Network CICERO A1f1 Notifying adm. USA A1f3 Inter. sat. org. BR1 Date of receipt 29.06.2016 BR20 BR IFIC no.  
 BR6a/BR6b Id. no. 2 BR3a Provision reference 9.1/IA BR2 Adm. serial no. UHFDOWN E

B1a/BR17 Beam designation UHFDOWN B1b Steerable B2 Emi-Rcp E B3a1 Max. co-polar gain 0

B2bis.a Transmit only when visible from notified service area B2bis.b Min. Elev. Angle

| B3c1 Co-polar antenna pattern |         |         |  |  |                     |
|-------------------------------|---------|---------|--|--|---------------------|
| Co-polar ref. pattern         | Coef. A | Coef. B |  |  | Co-polar rad. diag. |
|                               |         |         |  |  | 1                   |

List of orbital planes  
1

B4a3a1 Angle alpha B4a3a2 Angle beta  
 BR92 Attach. for missing angle alpha/beta

BR7a/BR7b Group id. 5 BR1 Date of receipt 29.06.2016 C2c RR No. 4.4 Y

BR14 Special Section  
 C4a Class of station EW C3a Assigned freq. band  
 C4b Nature of service CR C6a Polarization type CR C6b Polarization angle  
 C8d1 Max. tot. peak pwr. C8d2 Contiguous bandwidth  
 C11a2 Service area XAA C11a3 Service area diagram  
 A2b Period of valid. 2 A3a Op. agency 999 A3b Adm. resp. A BR16 Value of type C8b  
 BR60 Regulatory deadline(s) 11.44/11.44.1

| C1 Frequency Range |                 |       |     |
|--------------------|-----------------|-------|-----|
| C1a Lower limit    | C1b Upper limit |       |     |
| 399.9              | MHz             | 400.5 | MHz |

| C7a Design. of emission | C8a1/C8b1 Max. peak pwr | C8a2/C8b2 Max. pwr dens. | C8c1 Min. peak pwr | C8c2 Atch. | C8c3 Min. pwr dens. | C8c4 Atch. | C8e1 C/N ratio | C8e2 Atch. | C8f1 E.i.r.p. on the beam axis |
|-------------------------|-------------------------|--------------------------|--------------------|------------|---------------------|------------|----------------|------------|--------------------------------|
| 1 16K5G1D--             | 3                       | -43.1                    | 0.5                |            | -49.1               |            | 57.1           |            |                                |

| C7b Carrier frequency of the emissions (16K5G1D--) |     |  |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|--|
| 399.92   | MHz |  |  |  |  |  |  |  |  |

| C10b1 Assoc. earth station id. | C10b2 Type | C10c1 Geographical coord. |          | C10c2 Ctry | C10d1/C10d2 Cls. / Nat. |       | C10d3 Max. iso. gain | C10d4 Bmwdth | C10d6 Noise temp. |
|--------------------------------|------------|---------------------------|----------|------------|-------------------------|-------|----------------------|--------------|-------------------|
| TYVAK IRVINE FAC               | S          | 117W44 04                 | 33N39 03 | USA        | 1                       | TC CR | 16.2                 | 27.9         | 175               |

| C10d5a Co-polar antenna pattern |                       |         |         |         |         |      |                     |
|---------------------------------|-----------------------|---------|---------|---------|---------|------|---------------------|
| C10b1 Assoc. earth station id.  | Co-polar ref. pattern | Coef. A | Coef. B | Coef. C | Coef. D | Phi1 | Co-polar rad. diag. |
| TYVAK IRVINE FAC                |                       |         |         |         |         |      | 4                   |

13C Remarks

| C9 Modulation characteristics                      | C7a Designation of emission 16K5G1D-- |
|--|---------------------------------------|
| C9a1 Type of modulation                            | PSK                                   |
| C9a2a Lowest frequency                             |                                       |
| C9a2b Highest frequency                            |                                       |
| C9a2c Frequency deviation                          |                                       |
| C9a3a Freq. deviation of the pre-emphasized signal |                                       |
| C9a3b Pre-emphasis characteristics                 |                                       |
| C9a3c Type of multiplexing                         |                                       |
| C9a4a Bit rate                                     |                                       |
| C9a4b Number of phases                             |                                       |
| C9a5a Modulating signal attached (see attch. no.)  |                                       |
| C9a5b Amplitude modulation                         |                                       |
| C9a6a Peak-to-peak freq. dev.                      |                                       |
| C9a6b Sweep frequency                              |                                       |
| C9a6c Energy dispersal waveform                    |                                       |
| C9a7 Type of energy dispersal                      |                                       |
| C9a8 Other types of modulation (see attch. no.)    |                                       |
| C9a9 TV standard                                   |                                       |
| BR7a Group id.                                     | 3                                     |

| C9 Modulation characteristics                      | C7a Designation of emission 16K5G1D-- |
|--|---------------------------------------|
| C9a1 Type of modulation                            | PSK                                   |
| C9a2a Lowest frequency                             | 399.9                                 |
| C9a2b Highest frequency                            | 400.1                                 |
| C9a2c Frequency deviation                          |                                       |
| C9a3a Freq. deviation of the pre-emphasized signal |                                       |
| C9a3b Pre-emphasis characteristics                 |                                       |
| C9a3c Type of multiplexing                         |                                       |
| C9a4a Bit rate                                     |                                       |
| C9a4b Number of phases                             |                                       |
| C9a5a Modulating signal attached (see attch. no.)  |                                       |
| C9a5b Amplitude modulation                         |                                       |
| C9a6a Peak-to-peak freq. dev.                      |                                       |
| C9a6b Sweep frequency                              |                                       |
| C9a6c Energy dispersal waveform                    |                                       |
| C9a7 Type of energy dispersal                      |                                       |
| C9a8 Other types of modulation (see attch. no.)    |                                       |
| C9a9 TV standard                                   |                                       |
| BR7a Group id.                                     | 5                                     |

BR22 Administration remarks

BR23 Radiocommunication Bureau comments