

ECC/DEC/(05)09 ANNEX C

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1. Technical Specification(s) of ESV type(s) used in the network

ESV Antenna (NSS-10 aka AMC-12)

Antenna type: Intellian 240M

Antenna size: 240cm

Transmit frequency bands: 5925 to 6425 MHz

Transmit peak gain: 41.9 dBi @ 6.14 GHz

Max e.i.r.p. per carrier: 58.1 dBW

Min. operating elevation: 12.5 degrees

Pointing accuracy: 0.2 degrees peak

Waveform definition

Number(s) of carriers per ESV: 1

Maximum occupied bandwidth(s) per carrier: 6.0 MHz

Modulation: Variable QPSK 4/5 to 8PSK 3/4

Multiple access scheme: TDMA

ESV Antenna (NSS-806)

Antenna type: Intellian 240M

Antenna size: 240cm

Transmit frequency bands: 5925 to 6425 MHz

Transmit peak gain: 41.9 dBi @ 6.14 GHz

Max e.i.r.p. per carrier: 60.4 dBW

Min. operating elevation: 15.5 degrees

Pointing accuracy: 0.2 degrees peak

Waveform definition

Number(s) of carriers per ESV: 1
Maximum occupied bandwidth(s) per carrier: 6.0 MHz
Modulation: Variable QPSK 4/5 to 8PSK 3/4
Multiple access scheme: TDMA

ESV Antenna (SES-5)

Antenna type: Intellian 240M
Antenna size: 240cm
Transmit frequency bands: 5925 to 6425 MHz
Transmit peak gain: 41.9 dBi @ 6.14 GHz
Max e.i.r.p. per carrier: 60.7 dBW
Min. operating elevation: 16.2 degrees
Pointing accuracy: 0.2 degrees peak

Waveform definition

Number(s) of carriers per ESV: 1
Maximum occupied bandwidth(s) per carrier: 7.88 MHz
Modulation: Variable QPSK 4/5 to 8PSK 2/3
Multiple access scheme: TDMA

2. Operating details of each satellite

The satellites listed further below will operate in the following bands in the territories and within coordination distance of CEPT Member Countries:

C-Band Uplink

5925 to 6425 MHz

C-Band Downlink

3700 to 4200 MHz

NSS-10 (aka AMC-12)

ITU Filing satellite name: USASAT-25A, USASAT-25A-1
Satellite operator name: SES
GEO longitude: 37.5° WL
Satellite service area: EA beam, see Figure A.1

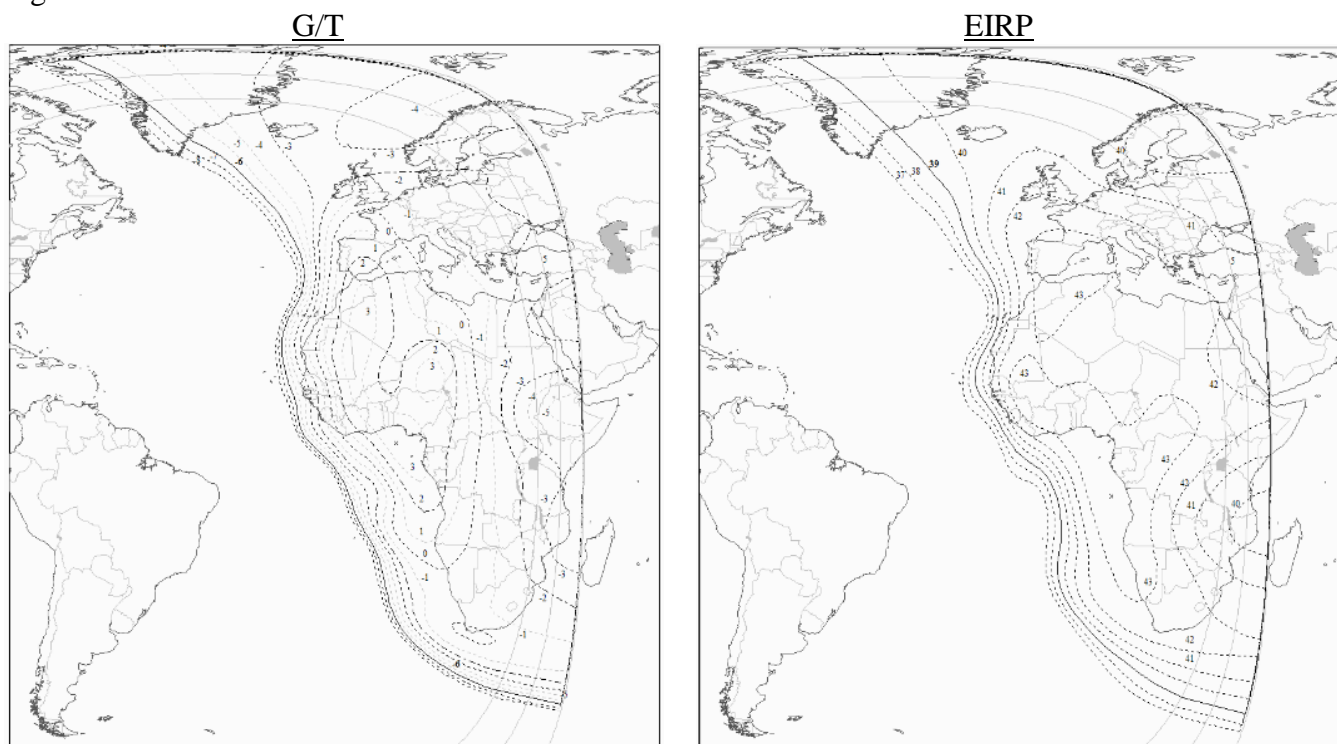
Forward Channel details (Satellite to ESV)

Transponder downlink centre frequency (MHz)	Transponder downlink bandwidth (MHz)
3720.0000	36.0000
3740.0000	36.0000
3760.0000	36.0000
3780.0000	36.0000
3800.0000	36.0000
3820.0000	36.0000
3840.0000	36.0000
3860.0000	36.0000
3880.0000	36.0000
3900.0000	36.0000
3920.0000	36.0000
3940.0000	36.0000
3960.0000	36.0000
3980.0000	36.0000
4000.0000	36.0000
4020.0000	36.0000
4040.0000	36.0000
4060.0000	36.0000
4080.0000	36.0000
4100.0000	36.0000
4120.0000	36.0000
4140.0000	36.0000
4160.0000	36.0000
4180.0000	36.0000

Return Channel details (ESV to satellite)

Transponder uplink centre frequency (MHz)	Transponder uplink bandwidth (MHz)
5945.0000	36.0000
5965.0000	36.0000
5985.0000	36.0000
6005.0000	36.0000
6025.0000	36.0000
6045.0000	36.0000
6065.0000	36.0000
6085.0000	36.0000
6105.0000	36.0000
6125.0000	36.0000
6145.0000	36.0000
6165.0000	36.0000
6185.0000	36.0000
6205.0000	36.0000
6225.0000	36.0000
6245.0000	36.0000
6265.0000	36.0000
6285.0000	36.0000
6305.0000	36.0000
6325.0000	36.0000
6345.0000	36.0000
6365.0000	36.0000
6385.0000	36.0000
6405.0000	36.0000

Figure A.1:



NSS-806

ITU Filing satellite name: BSAT-1W, BSAT-1W-2
Satellite operator name: SES
GEO longitude: 47.5° WL
Satellite service area: Hemi beam, see Figure A.2 and A.3

Forward Channel details (Satellite to ESV)

Transponder downlink centre frequency (MHz)	Transponder downlink bandwidth (MHz)
3743.0000	72.0000
3803.0000	36.0000
3843.0000	36.0000
3883.0000	36.0000
3923.0000	36.0000
3976.0000	34.0000
4015.0000	36.0000
4055.0000	36.0000
4095.0000	36.0000
4135.0000	36.0000
4177.5000	41.0000

Return Channel details (ESV to satellite)

Transponder uplink centre frequency (MHz)	Transponder uplink bandwidth (MHz)
5968.0000	72.0000
6028.0000	36.0000
6068.0000	36.0000
6108.0000	36.0000
6148.0000	36.0000
6201.0000	34.0000
6240.0000	36.0000
6280.0000	36.0000
6320.0000	36.0000
6360.0000	36.0000
6402.5000	41.0000

Figure A.2 (Hemi beam, Americas detail):

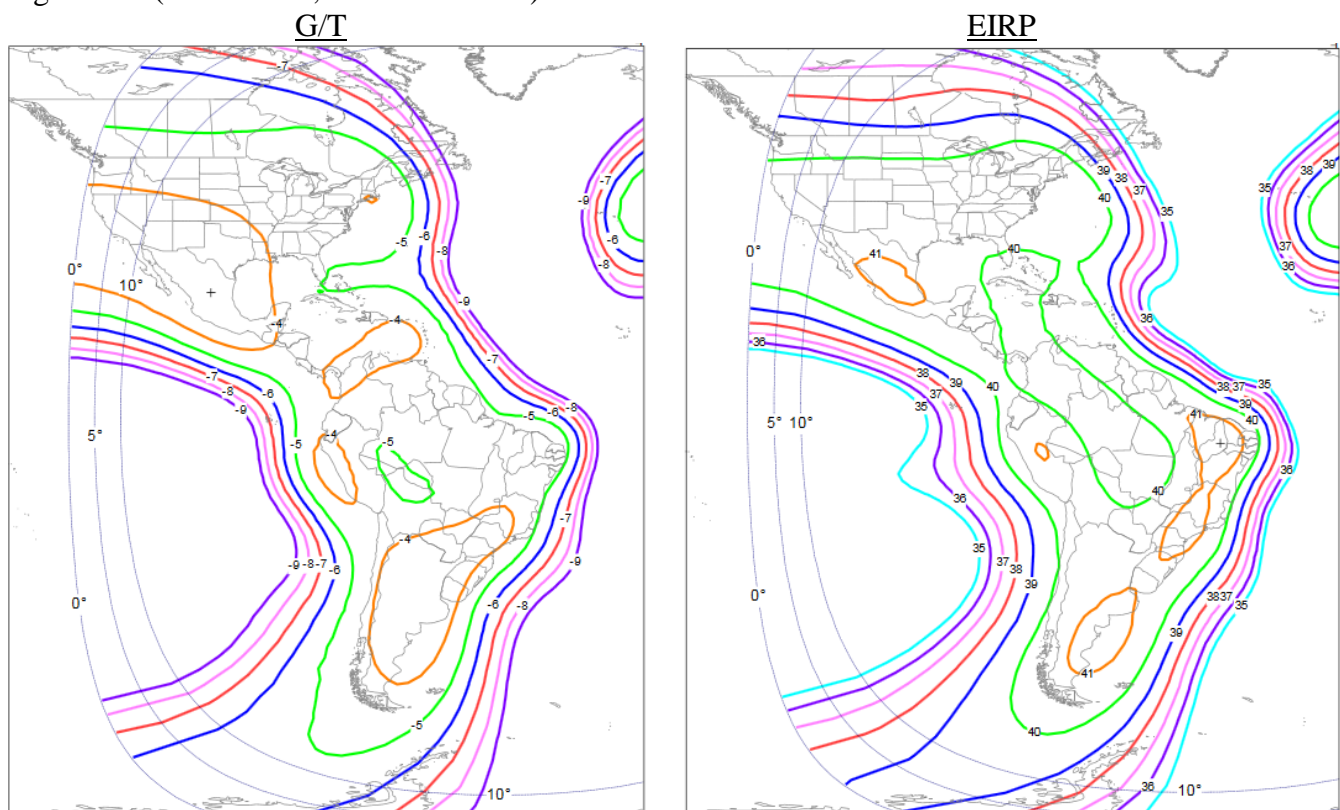
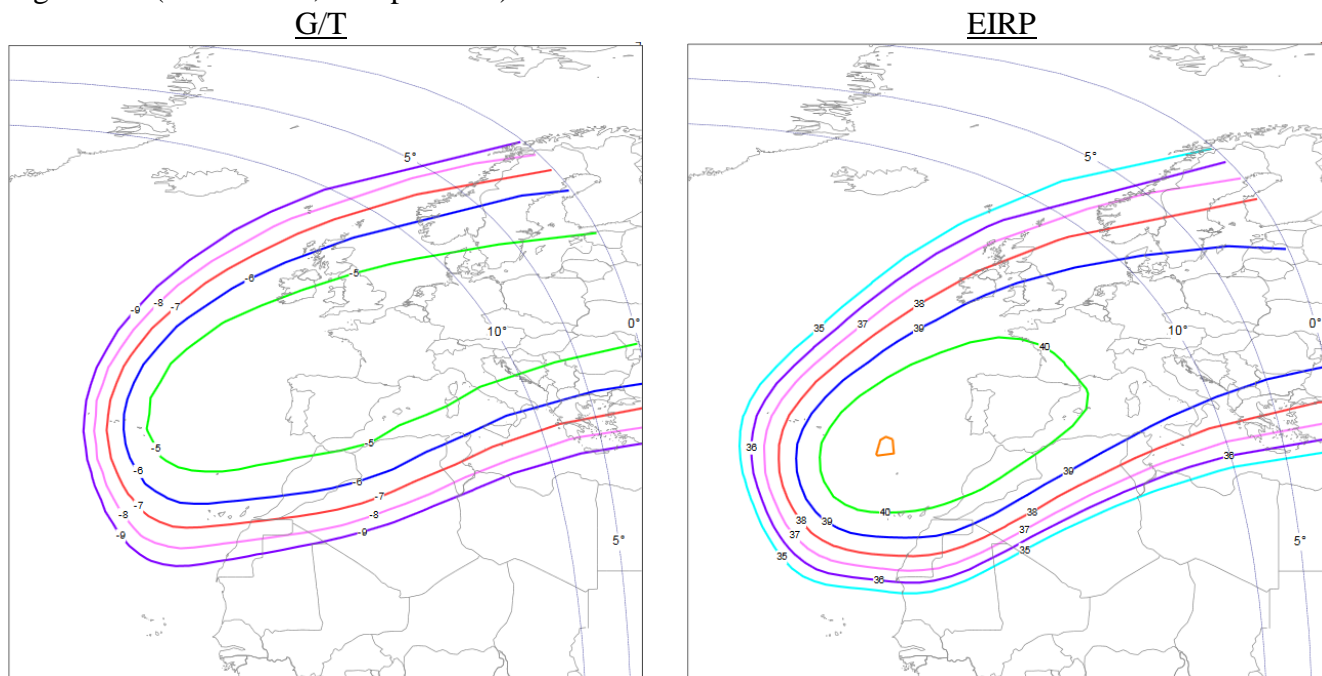


Figure A.3 (Hemi beam, Europe detail):



SES-5

ITU Filing satellite name: SIRIUS-5E-2
Satellite operator name: SES
GEO longitude: 5° EL
Satellite service area: Global beam, see Figure A.4

Forward Channel details (Satellite to ESV)

Transponder downlink centre frequency (MHz)	Transponder downlink bandwidth (MHz)
4100.0000	36.0000
4140.0000	36.0000
4180.0000	36.0000

Return Channel details (ESV to satellite)

Transponder uplink centre frequency (MHz)	Transponder uplink bandwidth (MHz)
6325.0000	36.0000
6365.0000	36.0000
6405.0000	36.0000

Figure A.4:

