List of International Monitoring Stations (List VIII) 11th Edition (March 2009)

(Amendment No. 6)

PART I B ALPHABETICAL INDEX OF STATIONS

RUS Russian Federation

P 32 COL 1-6 ADD by alphabetical order

			Téléfax <i>Telefax</i> Telefax	Partie II <i>Part II</i> Parte II		Partie III <i>Part III</i> Parte III
Nom de la station <i>Name of the station</i> Nombre de la estación	Adresse postale <i>Postal address</i> Dirección postal	Téléphone <i>Telephone</i> Teléfono	et <i>and</i> y Courrier électronique <i>Electronic-mail</i> Correo electrónico	Section Sección	Page Página	Page Página
1	2	3	4	5		6
Khabarovsk (SCIE, IMS, SCTE)	17, Irtyshskiy proezd 68000 Khabarovsk Russian Federation	+7 421 2744000	+7 421 2541212 info@dforadio.ru			166 f 175 e 184 s

PART III

PARTICULARS OF MONITORING STATIONS CARRYING OUT MEASUREMENTS RELATED TO STATIONS OF SPACE RADIOCOMMUNICATION SERVICES

P 175 ADD by alphabetical order

RUS Russian Federation

- 1. Name of the station Belgorod (SCIE, IMS, SCTE)
- 2. Geographical coordinates 36°36′16″ E 50°39′12″ N
- Hours of service 1300-2200 h from Monday to Thursday 1300-2045 h on Friday
- 4. Information on antennas in use 12 m Cassegrain antenna
- Range of azimuth and elevation angles 107° – 253°, 0.5° – 80°.
- Maximum attainable accuracy in determining orbital positions of space stations 0.1°
- Information on system polarization
 For the 3400 4200 MHz, 10.7 12.75 GHz and 17.7 21.7 GHz frequency bands: circular polarization (RHC and LHC) and linear polarization (horizontal and vertical)
- 8. System noise temperature
 - (a) C band: 3400 MHz 4200 MHz: 66 K (b) Ku band: 10.7 GHz – 12.75 GHz: 170 K
 - (c) Ka band: 17.7 GHz 21.7 GHz: 342 K
- 9. Ranges of frequencies with the maximum attainable accuracy of frequency measurement for each frequency range
 - (a) C band: 3400 MHz 4200 MHz: 2×10^{-8}
 - (b) Ku band: 10.7 GHz 12.75 GHz: 2×10^{-8}
 - (c) Ka band: 17.7 GHz 21.7 GHz: 2×10^{-8}
- 10. Ranges of frequencies in which field strength or power flux-density measurements can be performed
 - (a) C band: 3400 MHz 4200 MHz
 - (b) Ku band: 10.7 GHz 12.75 GHz
 - (c) Ka band: 17.7 GHz 21.7 GHz
- 11. Minimum value of measurable field strength or power flux-density with indication of attainable accuracy of measurement

(a) C band:3400MHz - 4200MHz: $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$ (b) Ku band:10.7GHz - 12.75GHz: $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$ (c) Ka band:17.7GHz - 21.7GHz: $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$ Bandwidth 4 kHz.

12. Information available for bandwidth measurements

Automatic bandwidth measurement is carried out in accordance with the ITU-R Recommendations and the Handbook on Spectrum Monitoring.

13. Information available for spectrum occupancy measurements

The monitoring of spectrum occupancy is possible in the C band (3400 - 4200 MHz), Ku band (10.7 - 12.75 GHz) and Ka Band (17.7 - 21.7 GHz). The results are saved in database and may be tabulated or presented in spectrograms or in frequency-time diagrams.

14. Information available for orbit occupancy measurements

The results of the monitoring of the orbit occupancy are saved in database and may be tabulated or presented in spectrograms.

P 175 ADD by alphabetical order

RUS Russian Federation

- 1. Name of the station Khabarovsk (SCIE, IMS, SCTE)
- 2. Geographical coordinates 135°16'39" E 48°28'43" N
- Hours of service H24
- Information on antennas in use
 7 m Cassegrain antenna in the 3400 4200 MHz and 10.7 12.75 GHz frequency bands
- 5. Range of azimuth and elevation angles $90^{\circ} - 270^{\circ}, 0.5^{\circ} - 80^{\circ}.$
- 6. Maximum attainable accuracy in determining orbital positions of space stations 0.02°
- Information on system polarization
 For the 3400 4200 MHz and 10.7 12.75 GHz frequency bands: circular polarization (RHC and LHC) and linear polarization (horizontal and vertical)
- 8. System noise temperature
 - (a) C band: 3400 MHz 4200 MHz: 70 K (b) Ku band: 10.7 GHz - 12.75 GHz: 120 K
- 9. Ranges of frequencies with the maximum attainable accuracy of frequency measurement for each frequency range
 - (a) C band: 3400 MHz 4200 MHz: 0.5×10^{-7}
 - (b) Ku band: 10.7 GHz 12.75 GHz: 0.5×10^{-7}
- 10. Ranges of frequencies in which field strength or power flux-density measurements can be performed
 - (a) C band: 3400 MHz 4200 MHz
 - (b) Ku band: 10.7 GHz 12.75 GHz
- 11. Minimum value of measurable field strength or power flux-density with indication of attainable accuracy of measurement

(a) C band: 3400 MHz - 4200 MHz: $-210 \text{ dBW/m}^2 \pm 1 \text{ dB}$ (b) Ku band: 10.7 GHz - 12.75 GHz: $-210 \text{ dBW/m}^2 \pm 1 \text{ dB}$ Bandwidth 4 kHz, S/N ratio 3 dB. 12. Information available for bandwidth measurements

Automatic bandwidth measurement is carried out in accordance with the ITU-R Recommendations and the Handbook on Spectrum Monitoring.

- Information available for spectrum occupancy measurements
 The monitoring of spectrum occupancy is possible in the C band (3400 4200 MHz) and Ku band (10.7 12.75 GHz).
- 14. Information available for orbit occupancy measurements

Search and detection of the emissions of the space station stayed in GSO in the sector from 65° E to 156° W; determination of the subsatellite point of the detected space station.

P 175 ADD by alphabetical order

RUS Russian Federation

- 1. Name of the station Smolensk (SCIE, IMS, SCTE)
- 2. Geographical coordinates 32°05′35″ E 54°50′40″ N
- Hours of service
 1300-2200 h from Monday to Thursday
 1300-2045 h on Friday
- Information on antennas in use 12 m Cassegrain antenna
- 5. Range of azimuth and elevation angles $107^{\circ} 253^{\circ}, 0.5^{\circ} 80^{\circ}.$
- 6. Maximum attainable accuracy in determining orbital positions of space stations 0.1°
- 7. Information on system polarization

For the 3400 – 4200 MHz, 10.7 – 12.75 GHz and 17.7 – 21.7 GHz frequency bands: circular polarization (RHC and LHC) and linear polarization (horizontal and vertical)

- 8. System noise temperature
 - (a) C band: 3400 MHz 4200 MHz: 66 K
 - (b) Ku band: 10.7 GHz 12.75 GHz: 170 K
 - (c) Ka band: 17.7 GHz 21.7 GHz: 342 K
- 9. Ranges of frequencies with the maximum attainable accuracy of frequency measurement for each frequency range
 - (a) C band: 3400 MHz 4200 MHz: 2×10^{-8}
 - (b) Ku band: 10.7 GHz 12.75 GHz: 2×10^{-8}
 - (c) Ka band: 17.7 GHz 21.7 GHz: 2×10^{-8}
- 10. Ranges of frequencies in which field strength or power flux-density measurements can be performed
 - (a) C band: 3400 MHz 4200 MHz
 - (b) Ku band: 10.7 GHz 12.75 GHz
 - (c) Ka band: 17.7 GHz 21.7 GHz

- 11. Minimum value of measurable field strength or power flux-density with indication of attainable accuracy of measurement
 - (a)
 C band:
 3400
 MHz
 4200
 MHz:
 $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$

 (b)
 Ku band:
 10.7
 GHz
 12.75
 GHz:
 $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$

 (c)
 Ka band:
 17.7
 GHz
 21.7
 GHz:
 $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$

 Bandwidth 4 kHz.
 Hz.
 21.7
 GHz:
 $-140 \text{ dBW/m}^2 \pm 3 \text{ dB}$
- 12. Information available for bandwidth measurements

Automatic bandwidth measurement is carried out in accordance with the ITU-R Recommendations and the Handbook on Spectrum Monitoring.

13. Information available for spectrum occupancy measurements

The monitoring of spectrum occupancy is possible in the C band (3400 - 4200 MHz), Ku band (10.7 - 12.75 GHz) and Ka Band (17.7 - 21.7 GHz). The results are saved in database and may be tabulated or presented in spectrograms or in frequency-time diagrams.

14. Information available for orbit occupancy measurements

The results of the monitoring of the orbit occupancy are saved in database and may be tabulated or presented in spectrograms.