

RSGB Bandplan (effective from 1st December 2006)

The following bandplan is largely based on that agreed at the 2005 IARU Region 1 Conference with some local differences on frequencies above 430 MHz. Changes from the previous version are shown in red.

136 kHz	<i>No rigid bandplan is proposed for the 136kHz band, but amateurs are asked to work within the following conventions, giving long distance communications and experimentation priority.</i>
135.7 - 136.0 kHz 136.0 - 137.4 137.4 - 137.6 137.6 - 137.8	Station Tests and transatlantic reception window 135.900-135.980 kHz preferred transatlantic window for Europe to North America transmissions of very slow telegraphy (QRSS) Telegraphy 135.980 - 136.050 kHz preferred transatlantic window for Europe/North America contacts. Non-Telegraphy digital modes Very slow telegraphy centred on 137.7 kHz 137.700-137.800 kHz preferred transatlantic window for North America to Europe

1.8 MHz (160m)	Necessary Bandwidth	UK Usage
1,810-1,838 kHz 1,838-1,840 1,840-1,843 1,843-2,000	200 Hz 500 Hz 2.7 kHz 2.7 kHz	Telegraphy Narrow band modes All modes Telephony (Note 1), Telegraphy 1,836 kHz QRP (low power) Centre of Activity, 1,960 kHz DF Contest beacons
<p>Note 1: Lowest LSB carrier frequency (dial setting) should be 1,843 kHz. AX25 packet should not be used on the 1.8 MHz band. LICENCE NOTES: 1,810-1,850 kHz Primary User: 1810-1830 kHz on a non-interference basis to stations outside of the UK. 1,850-2,000 kHz Secondary User.</p>		

3.5 MHz (80m)	Necessary Bandwidth	UK Usage
3,500-3,510 kHz 3,510-3,560 3,560-3,580 3,580-3,590 3,590-3,600 3,600-3,620 3,600-3,650 3,650-3,700 3,700-3,800 3,775-3,800	200 Hz 200 Hz 200 Hz 500 Hz 500 Hz 2.7 kHz 2.7 kHz 2.7 kHz 2.7 kHz	Telegraphy - Priority for inter-continental operation Telegraph - contest preferred. 3,555 kHz - QRS (slow telegraphy) Centre of Activity Telegraphy 3,560 kHz - QRP (low power) Centre of Activity Narrow band modes Narrow band modes - automatically controlled data stations (unattended) All modes - automatically controlled data stations (unattended), (Note 1) All modes - Phone contest preferred, (Note 1). All modes - Telephony, Telegraphy 3,663 kHz may be used for UK emergency comms traffic. 3,690 kHz SSB QRP (low power) Centre of Activity. All modes - Phone contest preferred 3,735 kHz Image mode Centre of Activity 3,760 kHz IARU Region 1 Emergency Centre of Activity Priority for inter-continental telephony (SSB) operation
<p>Note 1. Lowest LSB carrier frequency (dial setting) should be 3,603 kHz. LICENCE NOTES: Primary User: Shared with other user services.</p>		

7 MHz (40m)	Necessary Bandwidth	UK Usage
7,000-7,035 kHz 7,035-7,038 7,038-7,040 7,040-7,043 7,043-7,200	200 Hz 500 Hz 500 Hz 2.7 kHz 2.7 kHz	Telegraphy. 7,030 kHz - QRP (low power) Centre of Activity Narrow band modes Narrow band modes - automatically controlled data stations (unattended) All modes - automatically controlled data stations (unattended), 7,043 kHz Image mode Centre of Activity, (Note 1) All modes (excluding digimode) 7,045 kHz may be used for UK emergency traffic. 7,060 kHz IARU Region 1 centre of activity for emergency traffic 7,090 kHz may be used as an alternative for UK emergency traffic
<p>Note 1. Lowest LSB carrier frequency (dial setting) should be 7,043 kHz. This band will be replanned before March 2009. LICENCE NOTES: 7,000-7,100 kHz Amateur and Amateur Satellite Service - Primary User. 7,100-7,200 kHz Amateur Service – Secondary User: Available on the basis of non interference to other services (inside or outside of the UK).</p>		

10 MHz (30m)	Necessary Bandwidth	UK Usage
10,100-10,140 kHz 10,140-10,150	200 Hz 500 Hz	Telegraphy (CW) 10,116 kHz - QRP (low power) Centre of Activity Narrow band modes Automatically controlled data stations (unattended) should avoid the use of the 10 MHz band
<p>The 10 MHz band is allocated to the Amateur Service only on a Secondary basis. The IARU has agreed that only CW and other narrow bandwidth modes are to be used on this band. Likewise the band is not to be used for contests and bulletins. SSB may be used on the 10 MHz band during emergencies involving the immediate safety of life and property, and only by stations actually involved with the handling of emergency traffic. The band segment 10,120-10,140 kHz may only be used for SSB transmissions in the area of Africa south of the equator during local daylight hours. LICENCE NOTES: Amateur Service - Secondary User.</p>		

14MHz (20m)	Necessary Bandwidth	UK Usage
14,000-14,060 kHz	200 Hz	Telegraph - contest preferred 14,055 kHz QRS (slow telegraphy) Centre of Activity
14,060-14,070	200 Hz	Telegraphy 14,060 kHz QRP (low power) Centre of Activity
14,070-14,089	500 Hz	Narrow band modes
14,089-14,099	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
14,099-14,101		IBP - reserved exclusively for beacons
14,101-14,112	2.7 kHz	All modes - automatically controlled data stations (unattended)
14,112-14,125	2.7 kHz	All modes (excluding digimodes)
14,125-14,300	2.7 kHz	All modes - SSB contest preferred segment 14,195+ 5 kHz Priority for Dxpeditons 14,230 kHz Image Centre of Activity. 14,285 kHz QRP Centre of Activity
14,300-14,350	2.7 kHz	All modes 14,300 kHz Global Emergency Centre of Activity
LICENCE NOTES: Amateur Service - Primary User . 14,000-14,250 kHz Amateur Satellite Service - Primary User .		

18 MHz (17m)	Necessary Bandwidth	UK Usage
18,068-18,095 kHz	200 Hz	Telegraphy 18,096 kHz QRP (low power) Centre of Activity.
18,095-18,105	500 Hz	Narrow band modes
18,105-18,109	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
18,109-18,111		IBP - reserved exclusively for beacons
18,111-18,120	2.7 kHz	All modes - automatically controlled data stations (unattended)
18,120-18,168	2.7 kHz	All modes - 18,160 kHz Global Emergency Centre of Activity
LICENCE NOTES: Amateur and Amateur Satellite Service - Primary User . The band is not to be used for contests or bulletins.		

21 MHz (15m)	Necessary Bandwidth	UK Usage
21,000-21,070 kHz	200 Hz	Telegraphy 21,055 kHz QRS (slow telegraphy) Centre of Activity. 21,060 kHz QRP (low power) Centre of Activity
21,070-21,090	500 Hz	Narrow band modes
21,090-21,110	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
21,110-21,120	2.7 kHz	All modes (excluding SSB) - automatically controlled data stations (unattended)
21,120-21,149	500 Hz	Narrow band modes
21,149-21,151		IBP - reserved exclusively for beacons
21,151-21,450	2.7 kHz	All modes. 21,285 kHz QRP Centre of Activity. 21,340 kHz Image Centre of Activity. 21,360 kHz - Global Emergency Centre of Activity
LICENCE NOTES: Amateur and Amateur Satellite Service - Primary User .		

24 MHz (12m)	Necessary Bandwidth	UK Usage
24,890-24,915 kHz	200 Hz	Telegraphy 24,906 kHz QRP (low power) centre of activity
24,915-24,925	500 Hz	Narrow band modes
24,925-24,929	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
24,929-24,931		IBP - reserved exclusively for beacons
24,931-24,940	2700	All modes - automatically controlled data stations (unattended)
24,940-24,990	2700	All modes
LICENCE NOTES: Amateur and Amateur Satellite Service - Primary User . This band is not to be used for contests or bulletins		

28 MHz (10m)	Necessary Bandwidth	UK Usage
28,000-28,070 kHz	200 Hz	Telegraphy 28,055 kHz QRS (slow telegraphy) Centre of Activity. 28,060 kHz QRP (low power) Centre of Activity.
28,070-28,120	500 Hz	Narrow band modes
28,120-28,150	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
28,150-28,190	500 Hz	Narrow band modes
28,190-28,199		IBP - regional time shared beacons
28,199-28,201		IBP - world wide time shared beacons
28,201-28,225		IBP - continuous-duty beacons
28,225-28,300	2.7 kHz	All modes - beacons
28,300-28,320	2.7 kHz	All modes - automatically controlled data stations (unattended)
28,320-29,200	2.7 kHz	28,360 kHz QRP (low power) Centre of Activity. 28,680 kHz Image Centre of Activity.
29,200-29,300	6 kHz	All modes - automatically controlled data stations (unattended) 29,210 kHz UK Internet voice gateway - unattended 29,290 kHz UK Internet voice gateway - unattended
29,300-29,510	6 kHz	Satellite down-links
29,510-29,520		Guard channel
29,520-29,550	6 kHz	All modes - FM simplex - 10 kHz channels 29,530 kHz UK Internet voice gateway - Unattended
29,560-29,590	6 kHz	All modes - FM repeater inputs (RH1-RH4)
29,600	6 kHz	All modes - FM calling channel
29,610-29,650	6 kHz	All modes - FM simplex - 10 kHz channels 29,630 kHz UK Internet voice gateway - Unattended
29,660-29,700	6 kHz	All modes - FM repeater outputs (RH1-RH4)
LICENCE NOTES: Amateur and Amateur Satellite Service - Primary User : Beacons may be established for D.F. competitions except within 50km of NGR SK985640 (Waddington)		

50 MHz (6m)	Necessary Bandwidth	UK Usage
50.000-50.100 MHz		Telegraphy
		50.000-50.080 MHz Propagation Beacons only
	500 Hz	50.090 MHz Telegraphy - Centre of Activity
50.100-50.500	2.7 kHz	All Narrow Band Modes.
		50.100-50.130 MHz Intercontinental telegraphy & SSB (Note 1)
		50.110 MHz DX calling (Note 2).
		50.150 MHz SSB Centre of Activity
		50.185 MHz Crossband Centre of Activity
		50.200 MHz MS Centre of Activity
		50.210-50.250 MHz JT6M
		50.230 MHz JT6M calling frequency
		50.250 MHz PSK31 Centre of Activity
50.500-52.000	12.5 kHz	All Modes.
		50.510 MHz SSTV (AFSK)
		50.520 MHz Internet voice gateway (10 kHz channels)
		50.530 MHz Internet voice gateway (10 kHz channels)
		50.540 MHz Internet voice gateway (10 kHz channels)
		50.550 MHz Fax working frequency
		50.600 MHz RTTY (FSK)
		50.620-50.750 MHz Digital communications
		50.710-50.910 MHz FM repeater outputs (10 kHz channel spacing)
		51.210 MHz. Can be used by RAYNET
		51.210-51.410 MHz FM repeater inputs (10 KHz channel spacing)
		51.430-51.590 MHz FM (Note 3)
		51.530 MHz GB2RS new broadcast and slow morse
		51.910-51.950 MHz Internet voice gateways (10 kHz channels)
		51.950-51.990 MHz. Can be used by RAYNET
<p>Note 1. Only to be used between station in different continents.</p> <p>Note 2. No QSOs on this frequency. Always QSY when working intercontinental DX.</p> <p>Note 3. 20 kHz channel spacing. Channel centre frequencies start at 51.430 MHz.</p> <p>LICENCE NOTES: Amateur Service 50.0-51.0 MHz: Primary User: Amateur Service 51.0-52.0 MHz: Secondary User: Available on the basis on non-interference to other services (inside or outside the UK).</p>		

70 MHz (4m)	Necessary Bandwidth	UK Usage
70.000-70.050 MHz		Propagation Beacons only
	500 Hz	70.030 MHz Personal beacons.
70.050-70.250	2.7 kHz	Narrow Band modes
		70.085 MHz PSK31 centre of activity
		70.150 MHz MS calling
		70.185 MHz Cross-band activity centre
		70.200 MHz SSB/CW calling
70.250-70.294	12 kHz	All Modes
		70.260 MHz AM/FM calling
70.294-70.500	12 kHz	All modes channelised operations using 12.5 kHz spacing.
		70.3000 MHz RTTY/fax calling/working
		70.3125 MHz Digital modes
		70.3250 MHz DX Cluster
		70.3375 MHz Digital modes
		70.3500 MHz Internet Gateway - can be used by RAYNET
		70.3625 MHz Internet voice gateway
		70.3750 MHz Can be used by RAYNET
		70.3875 MHz Internet voice gateway
		70.4000 MHz Can be used by RAYNET
		70.4125 MHz Internet voice gateway
		70.4250 MHz FM simplex - used by GB2RS news broadcast
		70.4375 MHz Digital modes (special projects)
		70.4500 MHz FM calling
		70.4625 MHz Digital modes
		70.4750 MHz
		70.4875 MHz Digital modes
<p>LICENCE NOTES: Amateur Service 70.0-70.5 MHz: Secondary User: Available on the basis of non-interference to other services (inside or outside the UK).</p>		

144MHz (2m)	Necessary Bandwidth	UK Usage
144.000-144.110 MHz	500Hz	144.000-144.035 MHz Moonbounce (EME) exclusive 144.050 MHz Telegraphy calling 144.100 MHz Random MS telegraphy calling (Note 1)
144.110-144.150	500Hz	144.138 MHz PSK31 centre of activity 144.120-144.150 MHz Moonbounce (EME) MGM (JT65)
144.150-144.180	2700Hz	144.150-144.160 MHz FAI and Moonbounce (EME) activity SSB
144.180-144.360	2700Hz	Telegraphy and SSB 144.175 MHz Microwave talk-back 144.195-144.205 MHz Random MS SSB 144.200 MHz Random MS SSB calling frequency 144.250 MHz GB2RS news broadcast and slow Morse 144.260 MHz Can be used by RAYNET (SSB) 144.300 MHz SSB calling
144.360-144.399	2700Hz	Telegraphy, MGM, SSB 144.370 MHz MGM calling frequency
144.400-144.490		Propagation Beacons only
144.490-144.500		(Guard band)
144.500-144.794	20 kHz	All Modes 144.500 MHz SSTV calling 144.525 ATV SSB Talk-back 144.600 MHz RTTY calling 144.600 MHz RTTY working (FSK) 144.625-144.675 MHz Can be used by RAYNET 144.700 MHz FAX calling 144.750 MHz ATV Talk-back 144.775-144.794 MHz Can be used by RAYNET
144.794-144.990	12 kHz	MGM Packet radio 144.800-144.9875 MHz Digital modes (including unattended) 144.8000 MHz Unconnected nets - APRS, UiView etc 144.8250 MHz Internet voice gateway 144.8375 MHz Internet voice gateway 144.8500 MHz AX25 BBS user access 144.8625 MHz Available for nodes and BBSs on application 144.8750 MHz TCP/IP user access 144.8875 MHz AX25 - priority for DX Cluster access 144.9000 MHz AX25 DX Cluster access 144.9250 MHz TCP/IP user access 144.9500 MHz AX25 BBS user access 144.9750 MHz High speed 25 kHz channel
144.990-145.1935	12 kHz	FM RV48 - RV63 Repeater input exclusive (Note 2)
145.200	12 kHz	FM Space communications (e.g. I.S.S.) - Earth-to-Space 145.2000 MHz (Note 4). Can be used by RAYNET
145.200-145.5935	12 kHz	FM V16-V48 FM simplex (Note 3) 145.2125 MHz Internet voice gateway 145.2250 MHz Can be used by RAYNET 145.2375 MHz Internet voice gateway 145.2500 MHz Used for slow Morse transmissions 145.2875 MHz Internet voice gateway 145.3000 MHz RTTY local 145.3375 MHz Internet voice gateway 145.5000 MHz Mobile calling 145.5250 MHz Used for GB2RS news broadcast. 145.5500 MHz Used for rally/exhibition talk-in
145.5935-145.7935	12 kHz	FM RV48 - RV63 Repeater output (Note 2)
145.800	12 kHz	FM Space communications (e.g. I.S.S.) - Space-Earth
144.806-146.000	12 kHz	All Modes - Satellite exclusive
<p>Note 1. Meteor scatter operation can take place up to 26kHz higher than the reference frequency. Note 2. 12.5kHz channels numbered RV48-RV63. RV48 input = 145.000 MHz, output=145.600 MHz. Note 3. 12.5kHz simplex channels numbered V16-V46. V16=145.200 MHz. Note 4. Emergency Communications Groups utilising this frequency should take steps to avoid interference to ISS operations in non-emergency situations.</p> <p>LICENCE NOTES: Amateur Service & Amateur Satellite Service: Primary User. Beacons may be established for DF competitions except within 50 km of TA 012869 (Scarborough)</p>		

430MHz (70cm) IARU Recommendation	Necessary Bandwidth	UK Usage
430.0000-431.9810 MHz All modes	20 kHz	430.0125-430.0750 MHz Internet voice gateways (Notes 7, 8)(12.5 kHz channels) 430.1625-430.1875 MHz Experimental MPT1327 Base TX Ch 1-3 (12.5 kHz channels)
430.4000-430.5750 digital links		430.8000 MHz RAYNET 7.6 MHz talkthrough - mobile TX
430.6000-430.9250 digital repeaters		430.8250-430.9750 MHz RU66-RU78 7.6 MHz split repeaters – outputs See licence exclusion note; 431-432 MHz
432.0000-432.1000 Telegraphy MGM	500 Hz	430.9900-431.9000 MHz Digital Communications 431.0750-431.1750 MHz Internet voice gateways (6 dBW max)(12.5 kHz channel) 432.0000-432.0250 MHz Moonbounce (EME)
432.1000-432.4000 SSB, Telegraphy MGM	2700 Hz	432.0500 MHz Telegraphy centre of activity 432.0880 MHz PSK31 centre of activity 432.2000 MHz SSB centre of activity
432.4000-432.5000 Beacons Exclusive	500 Hz	432.3500 MHz Microwave talkback calling frequency (Europe) 432.3700 MHz FSK441 calling frequency
432.5000-432.9940 All modes Non-channelised	25 kHz (Note 11)	432.5000 MHz Narrow band SSTV activity centre 432.5000-432.6000 MHz IARU Region 1 linear transponder inputs 432.6000 MHz RTTY (AFSK/PSK) activity centre 432.6000-432.8000 MHz IARU Region 1 linear transponder outputs 432.6250-432.6750 MHz Digital communications (25 kHz channels) 432.7000 MHz Fax activity centre 432.7750 MHz RAYNET 1.6 MHz Talkthrough - base TX 432.8000-432.9900 MHz Beacons (Note 9)
432.9940-433.3810 FM repeater outputs in UK only (Note 1)	25 kHz (Note 11)	433.0000-433.3750 MHz (RB0-RB15) RU240-RU270 FM repeater outputs (25 kHz channels) in UK only
433.3940-433.5810 FM Simplex Channels	25 kHz (Note 11)	433.4000 MHz U272; IARU Region 1 SSTV (FM/AFSK) 433.4250 MHz U274 433.4500 MHz U276 433.4750 MHz U278 433.5000 MHz U280 FM Calling channel 433.5250 MHz U282 433.5500 MHz U284 Used for Rally/Exhibition talk-in 433.5750 MHz U286
433.6000-434.0000 All modes 433.800 MHz for APRS where 144.800 MHz cannot be used.	25 kHz (Note 11)	433.6000 MHz U288 RTTY AFSK 433.6250-6750 MHz Digital communications (25 kHz channels) 433.7000 MHz (Note 3). Can be used by RAYNET 433.7250-433.7750 MHz. Can be used by RAYNET 433.8000-434.2500 MHz Digital communications
434.000-434.5940	25 kHz (Note 11)	433.9500-434.0500 MHz 25 kHz Internet voice gateway channels 434.0625-434.0875 MHz Experimental MPT1327 Mobile TX Ch 1-3 (12.5 kHz channels) 434.3750 MHz RAYNET 1.6 MHz Talkthrough - mobile TX 434.4750-434.5250 MHz Internet voice gateway (25 kHz channels)
434.5940-434.9810 FM repeater inputs in UK only and ATV (Note 4)	25 kHz (Note 11)	434.6000-434.9750 MHz (RB0-RB15) RU240-RU270 FM repeater inputs (25 kHz channels) in UK only.
435.0000-438.0000 438.0000-440.0000 All modes	20 kHz 25 kHz (Note 11)	Satellites and fast scan TV (Note 4) 438.0250-438.1750 MHz IARU Region 1 Digital communications 438.2000-439.4250 MHz (Note 1) 438.4000 MHz RAYNET 7.6 MHz talkthrough - base TX 438.4250-438.5750 MHz RU66-RU78 7.6MHz split repeaters – inputs 439.6000-440.0000 MHz Digital communications
439.9875 POCSAG centre		

Note 1: In Switzerland, Germany and Austria, repeater inputs are 431.050-431.825 MHz with 25 kHz spacing and outputs 438.650-439.425 MHz. In Belgium, France and the Netherlands repeater outputs are 430.025-430.375 MHz with 12.5 kHz spacing and inputs at 431.625-431.975 MHz. In other European countries repeater inputs are 433.000-433.375 MHz with 25 kHz spacing and outputs at 434.600-434.975 MHz, i.e. the reverse of the UK allocation.

Note 3: IARU Region 1 FAX/AFSK.

Note 4: ATV carrier frequencies shall be chosen to avoid interference to other users, in particular the satellite service and repeater inputs.

Notes 5 and 6: Deleted.

Note 7: Users must accept interference from repeater output channels in France and the Netherlands at 430.025-430.575 MHz. Users with sites that allow propagation to other countries (notably France and the Netherlands) must survey the proposed frequency before use to ensure that they will not cause interference to users in those countries.

Note 8: Internet voice gateway channels: maximum deviation +2.4kHz, maximum effective radiated power 10W (10 dBW)

Note 9: The beacon band in the UK is scheduled to change to 432.400-432.500 MHz when agreed by the Primary User.

Note 10: No longer used.

Note 11: IARU Region 1 recommended maximum bandwidths are 12.5 or 20 kHz

LICENCE NOTES: Amateur service: **Secondary User.** Amateur satellite service: 435-438MHz: **Secondary User**
Exclusion: 431-432MHz not available within 100km radius of Charing Cross, London.

1.3 GHz (23cm) IARU Recommendation	Necessary Bandwidth	UK Usage
1240.000-1243.250 MHz All modes 1242.025-1242.250 1242.275-1242.700 Repeater outputs 1242.725-1243.250 Packet Radio	150 kHz (Note 3)	1240.150 MHz Packet Radio 1240.300 MHz Packet Radio 1240.450 MHz Packet Radio 1240.600 MHz Packet Radio 1240.750 MHz Packet Radio
1243.250-1260.000 ATV 1258.150-1259.350 Repeater outputs		1248.000 MHz ATV repeater input 1249.000 MHz ATV repeater input
1,260.000-1,270.000 Satellites		Amateur satellite service - Earth to Space only
1,270.000-1,272.000 All modes 1270.025-1270.700 Repeater Inputs 1270.725-1271.250 Packet Radio	20 kHz	
1272.000-1290.994 ATV/DATV		1280.000 MHz ATV Repeater input
1290.994-1291.481	25 kHz (Note 4)	1291.000 MHz RM0 25 kHz spacing to 1291.375 MHz RM15 repeater inputs
1291.494-1296.000 All modes 1293.150-1294.350 Repeater Inputs		
1296.000-1296.150 Telegraphy, MGM	500 Hz	1296.000-1296.025 MHz Moonbounce
1296.150-1296.800 Telegraphy, SSB and MGM (Note 1)	2700 Hz	1296.138 MHz PSK31 Centre of activity 1296.200 MHz Narrow band centre of activity 1296.370 MHz FSK441 MS calling 1296.400-1296.600 MHz Linear transponder input 1296.500 MHz SSTV 1296.600 MHz RTTY 1296.700 MHz FAX 1296.600-1296.800 MHz Linear transponder output
1296.800-1296.994 Beacons exclusive		1296.800-1296.990 Propagation Beacons only
1296.994-1297.481	25 kHz (Note 4)	1297.000 MHz RM0 to 1297.375 MHz RM15 repeater outputs
1297.494-1297.981	25 kHz (Note 4)	1297.500 MHz SM20 (UK) 25 kHz spacing to 1297.750 MHz SM30
FM simplex (Note 2)		1297.900 MHz Internet voice gateway (25 kHz channel) 1297.925 MHz Internet voice gateway (25 kHz channel) 1297.950 MHz Internet voice gateway (25 kHz channel)
1298.000-1300.000 All modes 1298.025-1298.500 Repeater outputs 1298.500-1300.000 Digital comms	20 kHz	Unattended remote control and beacons, and digital communications
1298.725-1299.000 Duplex packet radio	25 kHz	1299.000 MHz Packet radio
	150 kHz	1299.425 MHz Packet radio
	150 kHz	1299.575 MHz Packet radio
	150 kHz	1299.725 MHz Packet radio
1300.000-1325.000		TV repeater outputs (UK only) 1308.000 MHz ATV repeater output 1310.000 MHz ATV repeater output 1311.500 MHz ATV repeater output 1312.000 MHz ATV repeater output 1316.000 MHz ATV repeater output 1318.500 MHz ATV repeater output
Note 1: Local traffic using narrow band modes should operate between 1,296.500-1,296.800 MHz during contests and band openings.		
Note 2: Stations in countries that do not have access to 1,298-1,300 MHz may also use the FM simplex segment for digital communications.		
Note 3: IARU Region 1 recommended maximum bandwidth is 20 kHz.		
Note 4: IARU recommended maximum bandwidth is 12 kHz		
LICENCE NOTES: Amateur Service: Secondary User. Amateur Satellite service: 1,260-1,270 MHz: Secondary user Earth to Space only. In the sub-band 1,298-1,300 MHz unattended operation is not allowed within 50km of SS206127 (Bude), SE202577 (Harrogate), or in Northern Ireland.		

2.3 GHz (13cm)	Necessary Bandwidth	UK Usage
IARU Recommendation		
2,310.000-2,320.000 MHz Sub-regional (National band plans)	200 kHz 200 kHz	2,310.000-2,310.500 MHz Repeater links 2,310.100 MHz Packet radio 2,310.300 MHz Packet radio 2,310.000-2,310.500 MHz *Remote control 2,311.000-2,315.000 MHz High speed data 2,320.000-2,320.025 MHz Moonbounce
2,320.000-2,320.150 CW exclusive		
2,320.150-2,320.800 CW and SSB		2,320.200 MHz SSB centre of activity
2,320.800-2,321.000 Beacons exclusive		2,320.800-2,320.990 MHz Propagation Beacons only
2,321.000-2,322.000 Simplex and repeaters (Note 1)		
2,322.000-2,400.000	200 kHz 200 kHz 1,000 kHz	2,322.000-2,355.000 MHz ATV and ATV repeaters 2,355.100-2,364.000 MHz Repeater links 2,355.100 MHz Packet radio 2,355.300 MHz Packet radio 2,356.000-2,360.000 MHz *High speed data 2,364.000 MHz *Packet radio 2,365.000-2,370.000 MHz Repeater 2,370.000-2,390.000 MHz ATV and ATV repeaters 2,390.000-2,392.000 MHz Moonbounce 2,435.000 MHz ATV repeater outputs 2,440.000 MHz ATV repeater outputs
2,400.000-2,450.000 Satellites		
<p>Note 1: Stations in countries which do not have access to the all modes section 2,322-2,390 MHz, use the simplex and repeater segment 2,320-2,322 MHz for data transmission.</p> <p>Note 2: Stations in countries that do not have access to the narrow band segment 2,321-2,322 MHz, use the alternative narrow band segment 2,304-2,306 MHz and 2,308-2,310 MHz.</p> <p>Note 3: The segment 2,433-2,443 MHz may be used for ATV if no satellite is using the segment.</p> <p>LICENCE NOTES: Amateur service: Secondary User: Users must accept interference from ISM users. Amateur satellite service: 2,400-2,450 MHz : Secondary user: Users must accept interference from ISM users. *In the sub-bands 2,310.000-2,310.4125; 2,355-2,365 and 2,392-2,450 MHz unattended operation is not allowed within 50km of SS206127 (Bude) or SE 202577 (Harrogate). ISM = Industrial, scientific and medical.</p>		

3.4 GHz (9cm)	UK Usage
IARU Recommendation	
3,400.000-3,402.000 MHz Narrow band CW/EME/SSB	3,400.100 MHz Centre of activity 3,400.800-3,401.000 MHz Propagation Beacons only 3,401.000-3,402.000 MHz Remote control
3,402.000-3,456.000 All modes	
3,456.000-3,458.000 Narrow band CW/EME/SSB	3,456.000 MHz EME to USA
3,458.000-3,475.000 All modes	
<p>LICENCE NOTES: Amateur Service: Secondary User. Unattended operation is permitted for remote control, digital modes and beacons, except in the sub-bands 3,420-3,430 MHz and 3,450-3,455 MHz within 50 km of SO916223 (Cheltenham), SS206127 (Bude) and SE 202577 (Harrogate). ISM = Industrial, scientific and medical</p>	

5.7 GHz (6cm)	UK Usage
IARU Recommendation	
5,650.000-5,668.000 MHz Satellite uplinks	Amateur satellite service - Earth to Space only
5,650.000-5,670.000 Narrow band CW/EME/SSB	5,668.200 MHz Alternative centre of activity
5,670.000-5,680.000 All modes	
5,755.000-5,760.000 All modes	
5,760.000-5,762.000 Narrow band CW/EME/SSB	5,760.100 MHz Current centre of activity 5,760.800-5,761.000 MHz Propagation Beacons only
5,762.000-5,765.000 All modes	
5,820.000-5,830.000 All modes	
5,830.000-5,850.000 Satellite downlinks	Amateur satellite service - Space to Earth only
<p>LICENCE NOTES: Amateur service: 5,650-5,680 MHz, Secondary User. 5,755-5,765 and 5,820-5,850 MHz, Secondary user: Users must accept interference from ISM users. Amateur satellite service: 5,650-5,670 MHz and 5,830-5,850 MHz, Secondary User: Users must accept interference from ISM users. Unattended operation is permitted for remote control, digital modes and beacons, except in the sub-bands 5,670-5,680 MHz within 50 km of SS206127 (Bude) and SE202577 (Harrogate). ISM = Industrial, scientific and medical</p>	

10 GHz (3cm)	UK Usage	
IARU Recommendation		
10,000.000-10,125.000 MHz	10,002.5-10,027.5 MHz	Wideband transponders - 015 OUT
Digital modes	10,027.5-10,052.5 MHz	Wideband transponders - 040 OUT
	10,052.5-10,077.5 MHz	Wideband transponders - 065 OUT
	10,080-10,090 MHz	Packet links
	10,090-10,110 MHz	Wideband beacons and operating (Note 1)
	10,110-10,120 MHz	Voice repeaters OUT
10,225.000-10,250.000	10,227.5-10,252.5 MHz	Wideband transponders - 425 OUT
All modes	10,252.5-10,227.5 MHz	Wideband simplex
10,250.000-10,350.000	10,277.5-10,302.5 MHz	Wideband transponders - 015 IN
Digital modes	10,302.5-10,327.5 MHz	Wideband transponders - 040 IN
	10,327.5-10,352.5 MHz	Wideband transponders - 065 IN
10,350.000-10,368.000	10,352.5-10,368 MHz	Wideband modes
All modes	10,368-10,370 MHz	Narrowband modes (Note 3)
	10,368.1 MHz	Centre of activity
10,368.000-10,370.000	10,368.8-10,369 MHz	Propagation Beacons only
Narrowband telegraphy		
EME/SSB		
Beacons		
10,370.000-10,450.000	10,370-10,390MHz	Wideband modes (Note 2)
All modes	10,390-10,410 MHz	Wideband beacons and operating (Note 1)
	10,412.5-10,437.5 MHz	Wideband transponders - 425 IN
	10,440-10,450 MHz	Voice repeaters RX
10,450.000-10,475.000	10,400-10,475 MHz	Unattended operation
All modes and satellites.	10,450-10,452 MHz	Alternative narrowband CW/EME/SSB (Note 3)
	Amateur satellite service ONLY	
<p>Note 1. 10,400 MHz is the preferred frequency for wideband beacons but 10,100 MHz is still used.</p> <p>Note 2. Wideband FM is preferred between 10,350-10,400 MHz to encourage compatibility between narrowband systems, however there is still activity between 10,050-10,125 MHz.</p> <p>Note 3. The current NB sub-band is at 10,368 MHz; however, a sub-band at 10,450 MHz is being considered as a possible future alternative.</p> <p>Note 4. Simplex TV operations should take place on wideband transponder inputs which are not being used by local transponders.</p> <p>Note 5. Wideband transponder pairs are designated by input/output frequencies. The pairings shown are recommended but occasionally variants may be needed to suit local circumstances.</p> <p>Note 6. 10,475-10,500 MHz is allocated ONLY to the amateur satellite service and NOT to the amateur service.</p> <p>LICENCE NOTES: Amateur service: Secondary User: Amateur Satellite service: Amateur Satellite service: 10,450-10,500 MHz, Secondary User: Unattended operation is permitted for remote remote control, digital modes and beacons, except in the sub-bands 10,000-10,125 MHz within 50 km of SO916223 (Cheltenham), SS206127 (Bude), SK985640 (Waddington) and SE 202577 (Harrogate).</p>		
24 GHz (12mm)	UK Usage	
IARU Recommendation		
24,000.000-24,050.000 MHz	24,025 MHz	Preferred operating frequency wideband equipment
Satellites	24,048.2 MHz	Narrow band center of activity
	24,048.8-24,049 MHz	Propagation Beacons Only
24,050.000-24,250.000		
All modes		
<p>LICENCE NOTES: Amateur service: 24,000-24,050 MHz: Primary user: Users must accept interference from ISM users. 24,050-24,150 MHz: Secondary user: May only be used with the written permission of Ofcom. Users must accept interference from ISM users. 24,150-24,250 MHz : Secondary user: Users must accept interference from ISM users.</p> <p>Amateur satellite service : 24,000-24,050 MHz: Primary user: Users must accept interference from ISM users. Unattended operation is permitted for remote control, digital modes and beacons, except in the sub-bands 24,000-24,050 MHz within 50 km of SK985640 (Waddington) and SE 202577 (Harrogate). ISM = Industrial, scientific and medical</p>		
47 GHz (6mm)	UK Usage	
IARU Recommendation		
47,000.000-47,200.000 MHz	47,088.2 MHz	Centre of narrowband activity
47,088.000-47,090.000 narrow band segment	47,088.8-47,089 MHz	Propagation Beacons only
<p>LICENCE NOTES: Amateur service and amateur satellite service, Primary user. Unattended operation is permitted for remote control, digital modes and beacons, except within 50 km of SK985640 (Waddington) and SE 202577 (Harrogate).</p>		

76 GHz (4mm)	UK Usage
IARU Recommendation	
75,500-76,000 MHz All modes (preferred)	75,976.200 MHz IARU Region 1 preferred centre of activity
76,000.000-77,500.000 All modes	
77,500-78,000 All modes (preferred)	77,500.2 MHz IARU recommended NB segment (Note 2)
78,000-81,000 All modes	
Note 1. Deleted Note 2. After 1 January 2007	
LICENCE NOTES: 75,500-76,000 MHz Amateur service and Amateur Satellite service, Primary user. 76,000-77,500 MHz Amateur service and Amateur Satellite service, Secondary user. 77,500-78,000 MHz Amateur service and Amateur Satellite service, Primary user. 78,000-81,000 MHz Amateur service and Amateur Satellite service, Secondary user. Unattended operation is permitted for remote control, digital modes and beacons, except within 50 km of SK985640 (Waddington) and SE202577 (Harrogate).	

The following bands are also allocated to the Amateur service and the Amateur Satellite service -	
122,250-123,000 MHz	Amateur service only, Secondary user
134,000-136,000 MHz	Primary user
136,000-141,000MHz	Secondary user
142,000-144,000 MHz	Primary user (until 31st December 2006.)
241,000-248,000 MHz	Secondary user
248,000-250,000 MHz	Primary user

Notes to the Bandplan

ITU-R Recommendation SM.328 (extract)

Necessary bandwidth: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

Foundation and Intermediate Licence holders are advised to check their licences for the permitted power limits and conditions applicable to their class of licence.