

RSGB Band Plan 2013

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on frequencies above 430MHz.

EFFECTIVE FROM 1ST JANUARY 2013 UNLESS OTHERWISE SHOWN

136kHz	NECESSARY BANDWIDTH	UK USAGE
135.7-137.8kHz	200Hz	CW, QRSS and Narrowband Digital Modes

Licence Notes: Amateur Service - Secondary User. 1 watt (0dBW) EIRP.
R.R. 5.67B. The use of the band 135.7-137.8kHz in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Lebanon, Syrian Arab Republic Sudan, South Sudan and Tunisia is limited to fixed and maritime mobile services. The amateur service shall not be used in the above-mentioned countries in the band 135.7-137.8kHz, and this should be taken into account by the countries authorising such use. (WRC-12).

472kHz (600m)	NECESSARY BANDWIDTH	UK USAGE
472-479kHz	500Hz	CW, QRSS and Narrowband Digital Modes

Note 1: It should be emphasised that this band is available on a non-interference basis to existing services. UK amateurs should be aware that some overseas stations may be restricted in terms of transmit frequency in order to avoid interference to nearby radio navigation service Non-Directional Beacons.

Licence Notes: Amateur Service Secondary User. Full Licensees only, with NoV. Note that conditions on power are specified by the NoV terms.

R.R. 5.80B. The use of the frequency band 472-479kHz in Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia and Yemen is limited to the maritime mobile and aeronautical radionavigation services. The amateur service shall not be used in the above-mentioned countries in this frequency band, and this should be taken into account by the countries authorising such use. (WRC 12).

1.8MHz (160m)	NECESSARY BANDWIDTH	UK USAGE
1,810-1,838kHz	200Hz	Telegraphy
1,838-1,840	500Hz	Narrowband Modes
1,840-1,843	2.7kHz	All Modes
1,843-2,000	2.7kHz	Telephony (Note 1), Telegraphy
		1,836kHz – QRP (low power) Centre of Activity
		1,960kHz – DF Contest Beacons (14dBW)

Note 1: Lowest LSB carrier frequency (dial setting) should be 1,843kHz. AX25 packet should not be used on the 1.8MHz band.

Licence Notes: 1,810-1,850kHz – Primary User; 1,810-1,830kHz on a non-interference basis to stations outside of the UK. 1,850-2,000kHz – Secondary User.

Notes to the Band Plan: As on page 42.

3.5MHz (80m)	NECESSARY BANDWIDTH	UK USAGE
3,500-3,510kHz	200Hz	Telegraphy – Priority for Inter-Continental Operation
3,510-3,560	200Hz	Telegraphy – Contest Preferred. 3,555kHz – QRS (slow telegraphy) Centre of Activity
3,560-3,580	200Hz	Telegraphy 3,560kHz – QRP (low power) Centre of Activity
3,580-3,590	500Hz	Narrowband Modes
3,590-3,600	500Hz	Narrowband Modes – Automatically Controlled Data Stations (unattended)
3,600-3,620	2.7kHz	All Modes – Automatically Controlled Data Stations (unattended), (Note 1)
3,600-3,650	2.7kHz	All Modes – Phone Contest Preferred, (Note 1).
3,650-3,700	2.7kHz	3,630kHz – Digital Voice Centre of Activity
3,700-3,800	2.7kHz	All Modes – Telephony, Telegraphy
		3,663kHz May Be Used For UK Emergency Comms Traffic
		3,690kHz SSB QRP (low power) Centre of Activity
		All Modes – Phone Contest Preferred
		3,735kHz – Image Mode Centre of Activity
		3,760kHz – IARU Region 1 Emergency Centre of Activity
3,775-3,800	2.7kHz	Priority for Inter-Continental Telephony (SSB) Operation

Note 1: Lowest LSB carrier frequency (dial setting) should be 3,603kHz.

Licence Notes: Primary User: Shared with other user services.

Notes to the Band Plan: As on page 42.

5MHz (60m)	AVAILABLE WIDTH	UK USAGE
5,258-5,264	5.5kHz	All Modes (necessary bandwidth to be within channel limits)
5,276-5,284	8kHz	
5,288-5,292	3.5kHz	
5,298-5,307	9kHz	
5,313-5,323	10kHz	
5,333-5,338	5kHz	
5,354-5,358	4 kHz	

5,362-5,374.5	12.5kHz
5,378-5,382	4kHz
5,395-5,401.5	6.5kHz
5,403.5-5,406.5	3kHz

Note 1: Upper Sideband is recommended for SSB activity.

Note 2: Activity should avoid interference to the experimental beacons on 5290kHz.

Note 3: Amplitude Modulation is permitted on frequencies with 6kHz or more available width.

Licence Notes: Full Licensees only, with NoV. Note that conditions on transmission bandwidth, power and antennas are specified by the NoV terms.

Notes to the Band Plan: As on page 42.

7MHz (40m)	NECESSARY BANDWIDTH	UK USAGE
7,000-7,040kHz	200Hz	Telegraphy – 7,030kHz QRP (low power) Centre of Activity
7,040-7,047	500Hz	Narrowband Modes (Note 2)
7,047-7,050	500Hz	Narrowband Modes, Automatically Controlled Data Stations (unattended)
7,050-7,053	2.7kHz	All Modes, Automatically Controlled Data Stations (unattended), (Note 1)
7,053-7,060	2.7kHz	All Modes, Digimodes
7,060-7,100	2.7kHz	All Modes, SSB Contest Preferred Segment Digital Voice
7,100-7,130	2.7kHz	7,070kHz; SSB QRP Centre of Activity 7,090kHz
7,130-7,200	2.7kHz	All Modes, 7,110kHz – Region 1 Emergency Centre of Activity
7,175-7,200	2.7kHz	All Modes, SSB Contest Preferred Segment; 7,165kHz – Image Centre of Activity
		All Modes, Priority For Inter-Continental Operation

Note 1: Lowest LSB carrier frequency (dial setting) should be 7,053kHz.

Note 2: PSK31 activity starts from 7,040kHz. Since 2009, the narrowband modes segment starts at 7,040kHz.

Licence Notes: 7,000-7,100kHz Amateur and Amateur Satellite Service – Primary User.

7,100-7,200kHz Amateur Service – Primary User.

Notes to the Band Plan: As on page 42.

10MHz (30m)	NECESSARY BANDWIDTH	UK USAGE
10,100-10,140kHz	200Hz	Telegraphy (CW)
10,140-10,150	500Hz	10,116kHz – QRP (low power) Centre of Activity
		Narrowband Modes
		Automatically Controlled Data Stations (unattended)
		should avoid the use of the 10MHz band

Licence Notes: Amateur Service – Secondary User.

Notes to the Band Plan: As on page 42.

The 10MHz 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 10MHz 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 10,120-10,140kHz may only be used for SSB transmissions in the area of Africa south of the equator during local daylight hours.

14MHz (20m)	NECESSARY BANDWIDTH	UK USAGE
14,000-14,060kHz	200Hz	Telegraphy – Contest Preferred
14,060-14,070	200Hz	14,055kHz – QRS (slow telegraphy) Centre of Activity
14,070-14,089	500Hz	Telegraphy
14,089-14,099	500Hz	14,060kHz – QRP (low power) Centre of Activity
		Narrowband Modes
		Narrowband Modes – Automatically Controlled Data Stations (unattended)
14,101-14,112	2.7kHz	All Modes – Automatically Controlled Data Stations (unattended)
14,112-14,125	2.7kHz	All Modes (excluding digimodes)
14,125-14,300	2.7kHz	All Modes – SSB Contest Preferred Segment
		14,130kHz – Digital Voice Centre of Activity
		14,195 ± 5kHz – Priority for DXpeditions
		14,230kHz – Image Centre of Activity
		14,285kHz – QRP Centre of Activity
14,300-14,350	2.7kHz	All Modes
		14,300kHz – Global Emergency Centre of Activity

Licence Notes: Amateur Service – Primary User. 14,000-14,250kHz Amateur Satellite Service – Primary User.

Notes to the Band Plan: As on page 42.

18MHz (17m)	NECESSARY BANDWIDTH	UK USAGE
18,068-18,095kHz	200Hz	Telegraphy – 18,086kHz QRP (low power) Centre of Activity
18,095-18,105	500Hz	Narrowband Modes
18,105-18,109	500Hz	Narrowband Modes – Automatically Controlled Data



18,109-18,111		Stations (unattended)
18,111-18,120	2.7kHz	IBP – Reserved Exclusively for Beacons
18,120-18,168	2.7kHz	All Modes – Automatically Controlled Data Stations (unattended)
		All Modes, 18,130kHz – SSB QRP Centre of Activity
		18,150kHz – Digital Voice Centre of Activity
		18,160kHz – 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.

Notes to the Band Plan: As on page 42.

21MHz (15m)	NECESSARY BANDWIDTH	UK USAGE
21,000-21,070kHz	200Hz	Telegraphy
		21,055kHz – QRS (slow telegraphy) Centre of Activity
21,070-21,090	500Hz	21,060kHz – QRP (low power) Centre of Activity
21,090-21,110	500Hz	Narrowband Modes
21,110-21,120	2.7kHz	Narrowband Modes – Automatically Controlled Data Stations (unattended)
21,120-21,149	500Hz	All Modes (excluding SSB) – Automatically Controlled Data Stations (unattended)
21,149-21,151		Narrowband Modes
21,151-21,450	2.7kHz	IBP – Reserved Exclusively For Beacons
		All Modes
		21,180kHz – Digital Voice Centre of Activity
		21,285kHz – QRP Centre of Activity
		21,340kHz – Image Centre of Activity
		21,360kHz – Global Emergency Centre of Activity

Licence Notes: Amateur and Amateur Satellite Service – Primary User.

Notes to the Band Plan: As on page 42.

24MHz (12m)	NECESSARY BANDWIDTH	UK USAGE
24,890-24,915kHz	200Hz	Telegraphy
24,915-24,925	500Hz	24,906kHz – QRP (low power) Centre of Activity
24,925-24,929	500Hz	Narrowband Modes
		Narrowband Modes – Automatically Controlled Data Stations (unattended)
24,929-24,931		IBP – Reserved Exclusively For Beacons
24,931-24,940	2.7kHz	All Modes – Automatically Controlled Data Stations (unattended)
24,940-24,990	2.7kHz	All Modes, 24,950kHz – SSB QRP Centre of Activity
		24,960kHz – Digital Voice Centre of Activity

Licence Notes: Amateur and Amateur Satellite Service – Primary User. The band is not to be used for contests or bulletins.

Notes to the Band Plan: As on page 42.

28MHz (10m)	NECESSARY BANDWIDTH	UK USAGE
28,000-28,070kHz	200Hz	Telegraphy
		28,055kHz – QRS (slow telegraphy) Centre of Activity
28,070-28,120	500Hz	28,060kHz – QRP (low power) Centre of Activity
28,120-28,150	500Hz	Narrowband Modes
		Narrowband Modes – Automatically Controlled Data Stations (unattended)
28,150-28,190	500Hz	Narrowband 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	2.7kHz	All Modes – Beacons
28,300-28,320	2.7kHz	All Modes – Automatically Controlled Data Stations (unattended)
28,320-29,100	2.7kHz	28,330kHz – Digital Voice Centre of Activity
		28,360kHz – QRP Centre of Activity
		28,680kHz – Image Centre of Activity
29,100-29,200	6kHz	All Modes – FM Simplex – 10kHz Channels
29,200-29,300	6kHz	All Modes – Automatically Controlled Data Stations (unattended)
		29,210kHz – UK Internet Voice Gateway (unattended)
		29,290kHz – UK Internet Voice Gateway (unattended)
		Satellite Downlinks
29,300-29,510	6kHz	
29,510-29,520		Guard Channel
29,520-29,590	6kHz	All Modes – FM Repeater Inputs (RH1-RH8)
		29,530kHz – UK Internet Voice Gateway (unattended) (RH2)
29,600	6kHz	All Modes – FM Calling Channel
29,610	6kHz	All Modes – FM Simplex Repeater (parrot) – input and output
29,620-29,700	6kHz	All Modes – FM Repeater Outputs (RH1-RH8)
		29,630kHz – UK Internet Voice Gateway (unattended) (RH2)

Licence Notes: Amateur and Amateur Satellite Service – Primary User. 26dBW permitted. Beacons may be established for DF competitions except within 50km of NGR SK985640 (Waddington).

Notes to the Band Plan: As on page 42.

50MHz (6m)	NECESSARY BANDWIDTH	UK USAGE
50,000-50,100	500Hz	Telegraphy Only (except for Beacon Project) (Note 2)
		50,000-50,030MHz reserved for future Synchronised Beacon Project (Note 2)
		Region 1: 50,000-50,010; Region 2: 50,010-50,020; Region 3: 50,020-50,030
		50,050MHz – Future International Centre of Activity
		50,090MHz – Inter-Continental DX Centre of Activity (Note 1)

50,100-50,200	2.7kHz	SSB/Telegraphy – International Preferred
		50,100-50,130MHz – Inter-Continental DX Telegraphy & SSB (Note 1)
		50,110MHz – Inter-Continental DX Centre of Activity
		50,130-50,200MHz – General International Telegraphy & SSB
50,200-50,300	2.7kHz	50,150MHz – International Centre of Activity
		SSB/Telegraphy – General Usage
50,300-50,400	2.7kHz	50,285MHz – Crossband Centre of Activity
		MGM/Narrowband/Telegraphy
		50,305MHz – PSK Centre of Activity
		50,310-50,320MHz – EME
		50,320-50,380MHz – MS
50,400-50,500		Propagation Beacons only
50,500-52,000	12.5kHz	50,401MHz – WSPR beacons ±500Hz
		All Modes
		50,510MHz – SSTV (AFSK)
		50,520MHz – Internet Voice Gateway (10kHz channels), (IARU common channel)
		50,530MHz – Internet Voice Gateway (10kHz channels), (IARU common channel)
		50,540MHz – Internet Voice Gateway (10kHz channels), (IARU common channel)
		50,550MHz – Image/Fax working frequency
		50,600MHz – RTTY (FSK)
		50,620-50,750MHz – Digital communications
		50,630MHz – Digital Voice (DV) calling
		50,710-50,890MHz – FM/DV Repeater Outputs (10kHz channel spacing)
		51,210-51,390MHz – FM/DV Repeater Inputs (10kHz channel spacing) (Note 4)
		51,410-51,590MHz – FM/DV Simplex (Note 3) (Note 4)
		51,510MHz – FM Calling Frequency
		51,530MHz – GB2RS News Broadcast and Slow Morse
		51,650 & 51,750MHz – See Note 5 (25kHz aligned)
		51,770 & 51,790MHz – See Note 5
		51,810-51,900MHz – FM/DV Repeater Outputs (IARU aligned channels)
		51,910-51,940MHz – Internet Voice Gateways (10kHz channels)
		51,950-51,990MHz – FM/DV Repeater Outputs (IARU aligned channels)

Note 1: Only to be used between stations in different continents (not for intra-European QSOs).

Note 2: 50.0-50.1MHz is currently shared with Propagation Beacons. These are due to be migrated by Aug 2014 to 50.4-50.5MHz, to create more space for Telegraphy and a new Synchronised Beacon Project.

Note 3: 20kHz channel spacing. Channel centre frequencies start at 51.430MHz.

Note 4: Embedded data traffic is allowed with digital voice (DV).

Note 5: May be used for Emergency Communications and Community Events.

Licence Notes: Amateur Service 50.0-51.0MHz – Primary User. Amateur Service 51.0-52.0MHz – Secondary User. Available on the basis of non-interference to other services (inside or outside the UK).

Notes to the Band Plan: As on page 42.

70MHz (4m)	NECESSARY BANDWIDTH	UK USAGE (NOTE 1)
70,000-70,090MHz	1kHz	Propagation Beacons Only
70,090-70,100	1kHz	Personal Beacons
70,100-70,250	2.7kHz	70,090MHz – WSPR Beacons ±500Hz
		Narrowband Modes
		70,185MHz – Cross-band Activity Centre
		70,200MHz – CW/SSB Calling
		70,250MHz – MS Calling
70,250-70,294	12kHz	All Modes
		70,260MHz – AM/FM Calling
		70,270MHz MGM Centre of Activity
70,294-70,500	12kHz	All Modes Channelised Operations Using 12.5kHz Spacing
		70,3000MHz – RTTY/FAX Calling/working
		70,3125MHz – Digital Modes
		70,3250MHz – DX Cluster
		70,3375MHz – Digital Modes
		70,3500MHz – Internet Voice Gateway (Note 2)
		70,3625MHz – Internet Voice Gateway
		70,3750MHz – See Note 2
		70,3875MHz – Internet Voice Gateway
		70,4000MHz – See Note 2
		70,4125MHz – Internet Voice Gateway
		70,4250MHz – FM Simplex – used by GB2RS news broadcast
		70,4375MHz – Digital Modes (special projects)
		70,4500MHz – FM Calling
		70,4625MHz – Digital Modes
		70,4750MHz
		70,4875MHz – Digital Modes

Note 1: Usage by operators in other countries may be influenced by restrictions in their national allocations.

Note 2: May be used for Emergency Communications and Community Events.

Licence Notes: Amateur Service 70.0-70.5MHz – Secondary User. 22dBW permitted. Available on the basis of non-interference to other services (inside or outside the UK).

Notes to the Band Plan: As on page 42.

144MHz (2m)	NECESSARY BANDWIDTH	UK USAGE
144,000-144,110MHz	500Hz	Telegraphy (including EME CW)
		144,050MHz – Telegraphy Calling
144,110-144,150	500Hz	144,100MHz – Random MS Telegraphy Calling (Note 1)
		Telegraphy and MGM
		144,138MHz – PSK31 Centre of Activity
144,150-144,180	2700Hz	EME MGM Activity (Note 7)
		Telegraphy, MGM and SSB

144.180-144.360	2700Hz	Telegraphy and SSB 144.175MHz – Microwave Talk-back 144.195-144.205MHz – Random MS SSB 144.200MHz – Random MS SSB Calling Frequency 144.250MHz – GB2RS News Broadcast and Slow Morse 144.260MHz – USB. (Note 10) 144.300MHz – SSB Calling
144.360-144.399	2700Hz	Telegraphy, MGM, SSB 144.370MHz – MGM Calling Frequency
144.400-144.490		Propagation Beacons only
144.490-144.500		144.490MHz – ± 500 Hz WSPR beacons and beacon guard band
144.500-144.794	20kHz	All Modes 144.500MHz – SSTV Calling 144.525MHz – ATV SSB Talk-back 144.600MHz – RTTY Centre of Activity (FSK) 144.6125MHz – UK Digital Voice (DV) Calling (Note 9) 144.625-144.675MHz – See Note 10 144.700MHz – FAX Calling 144.750MHz – ATV Talk-back 144.775-144.794MHz – See Note 10
144.794-144.990	12kHz	MGM Digital Communications 144.800-144.9875MHz – Digital Modes (including unattended) 144.8000MHz – Unconnected Nets – APRS, UIView etc 144.8250MHz – DV Internet Voice Gateway 144.8375MHz – DV Internet Voice Gateway 144.8500MHz – DV Internet Voice Gateway 144.8625MHz – DV Internet Voice Gateway 144.8750MHz – DV Internet Voice Gateway 144.8875MHz – AX25 – Priority for DX Cluster Access 144.9000MHz – AX25 DX Cluster Access 144.9125MHz – TCP/IP User Access 144.9250MHz – TCP/IP User Access 144.9375MHz – AX25 BBS User Access 144.9500MHz – AX25 BBS User Access 144.9625MHz – FM Internet Voice Gateway 144.9750MHz – High Speed 25kHz Channel (Note 11) 144.990-145.1935
145.1935	12kHz	FM/DV RV48-RV63 – Repeater Input Exclusive (Note 2) (Note 5)
145.200	12kHz	FM/DV Space Communications (eg ISS) – Earth-to-Space 145.2000MHz – (Note 4) & (Note 10)
145.200-145.5935	12kHz	FM/DV V16-V48 – FM/DV Simplex (Note 3) (Note 5) (Note 6) 145.2125MHz – FM Internet Voice Gateway (Note 13) 145.2250MHz – See Note 10 145.2375MHz – FM Internet Voice Gateway (IARU common channel) 145.2500MHz – Used for Slow Morse Transmissions 145.2875MHz – FM Internet Voice Gateway (IARU common channel) 145.3000MHz – RTTY Local 145.3375MHz – FM Internet Voice Gateway (IARU common channel) 145.5000MHz – FM Calling (Note 12) 145.5250MHz – Used for GB2RS News Broadcast. 145.5500MHz – Used for Rally/exhibition Talk-in 145.5750MHz – (Note 11)
145.5935-145.7935	12kHz	FM/DV RV48-RV63 – Repeater Output (Note 2)
145.800	12kHz	FM/DV Space Communications (eg ISS) – Space-Earth
145.806-146.000	12kHz	All Modes – Satellite Exclusive

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 = 145.000MHz, output = 145.600MHz.

Note 3: 12.5kHz simplex channels numbered V16-V46. V16 = 145.200MHz.

Note 4: Emergency Communications Groups utilising this frequency should take steps to avoid interference to ISS operations in non-emergency situations.

Note 5: Embedded data traffic is allowed with digital voice (DV).

Note 6: Simplex use only – no DV gateways.

Note 7: EME activity using MGM is commonly practiced between 144.110-144.160MHz.

Note 8: The use of Amplitude Modulation (AM) is acceptable within the All Modes segment. AM usage may often be found on 144.550MHz although this frequency is not officially recognised within the 2m band plan. AM users are asked to consider adjacent channel activity when selecting operating frequencies.

Note 9: In other countries IARU Region 1 recommends 145.375MHz.

Note 10: May be used for Emergency Communications and Community Events.

Note 11: May be used for repeaters in other IARU Region 1 countries.

Note 12: DV users are asked not to use this channel, and use 144.6125MHz for calling.

Note 13: Gateways NoVs no longer available to new applicants (to reduce interference to 145.200 ISS uplinks).

Licence Notes: Amateur Service and Amateur Satellite Service – Primary User. Beacons may be established for DF competitions except within 50km of TA 012869 (Scarborough).
Notes to the Band Plan: As on page 42.

430MHz (70cm)	NECESSARY BANDWIDTH	UK USAGE
IARU Recommendation		
430.0000-431.9810MHz	20kHz	430.0125-430.0750MHz – Internet Voice Gateways (Notes 7, 8) (12.5kHz channels)
All Modes		
430.4000-430.5750		UK DV 9MHz Split Repeaters – inputs
Digital Links		
430.6000-430.9250		430.8000MHz – 7.6MHz Talk-through – Mobile TX (Note 10) 430.8250-430.9750MHz – RU66-RU78 7.6MHz Split Repeaters – outputs See Licence Exclusion Note; 431-432MHz 430.9900-431.9000MHz – Digital Communications 431.0750-431.1750MHz – Internet Voice Gateway (6dBW max)(12.5kHz channels) 432.0000-432.0250MHz – Moonbounce (EME) 432.0500MHz – Telegraphy Centre of Activity 432.0880MHz – PSK31 Centre of Activity
digital repeaters		
432.0000-432.1000	500Hz	
Telegraphy		
MGM		

432.1000-432.4000	2700Hz	432.2000MHz – SSB Centre of Activity 432.3500MHz – Microwave Talk-back Calling Frequency (Europe) 432.3700MHz – FSK441 Calling Frequency
MGM		
432.4000-432.5000	500Hz	Propagation Beacons only (Note 9)
Beacons Exclusive		
432.5000-432.9940	25kHz	432.5000MHz – Narrowband SSTV Activity Centre 432.5000-432.6000MHz – IARU Region 1 Linear Transponder Inputs 432.6000MHz – RTTY (ASK/PSK) Activity Centre 432.6000-432.8000MHz – IARU Region 1 Linear Transponder Outputs 432.6250-432.6750MHz – Digital Communications (25kHz channels) 432.7000MHz – FAX Activity Centre 432.7750MHz – 1.6MHz Talk-through – Base TX (Note 10) 432.8000-432.9900MHz – UK Beacons (Note 9)
All Modes	(Note 11)	
Non-channelised		
432.9940-433.3810	25kHz	433.0000-433.3750MHz (RBO-RB15) – RU240-RU270 FM/DV Repeater Outputs (25kHz channels) in UK Only 433.3940-433.5810
FM repeater outputs in UK only (Note 1)	(Note 11)	
433.3940-433.5810	25kHz	433.4000MHz U272 – IARU Region 1 SSTV (FM/AFSK) 433.4250MHz U274 433.450MHz U276 (Note 5) 433.4750MHz U278 433.5000MHz U280 – FM Calling Channel 433.5250MHz U282 433.5500MHz U284 – Used for Rally/Exhibition Talk-in 433.5750MHz U286 433.6000MHz U288 – RTTY, AFSK 433.6250-6750MHz – Digital Communications (25kHz channels) 433.7000MHz (Note 3) (Note 10) 433.7250-433.7750MHz (Note 10) 433.8000-434.2500MHz – Digital Communications 433.9500-434.0500MHz – 25kHz Internet Voice Gateway Channels 434.3750MHz 1.6MHz Talk-through – Mobile TX (Note 10) 434.4750-434.5250MHz – Internet Voice Gateway (25kHz channels) 434.6000-434.9750MHz (RBO-RB15) RU240-RU270 FM repeater inputs in UK only & ATV (Note 4) 435.0000-438.0000
FM/DV (Notes 12, 13) Simplex Channels	(Note 11)	
433.6000-434.0000	25kHz	FM/DV Repeater Inputs (25kHz channels) in UK Only (Note 12) Satellites and Fast Scan TV (Note 4) 437.0000 – Experimental DATV Centre of Activity (Note 14) 438.0250-438.1750MHz – IARU Region 1 Digital Communications 438.2000-439.4250MHz (Note 1) 438.4000MHz – 7.6MHz Talk-through – Base TX (Note 10) 438.4250-438.5750MHz RU66-RU78 – 7.6MHz Split Repeaters – inputs 438.6125MHz – UK DV calling (Note 12) (Note 13) 439.6000-440.0000MHz – Digital Communications UK DV 9MHz Split Repeaters – Outputs
All Modes	(Note 11)	
439.9875	POCSAG	
Centre		

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

Note 5: In other countries IARU Region 1 recommends 433.450MHz for DV calling.

Note 7: Users must accept interference from repeater output channels in France and the Netherlands at 430.025-430.575MHz. 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 ± 2.4 kHz, maximum effective radiated power 10W (10dBW).

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

Note 10: May be used for Emergency Communications and Community Events.

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

Note 12: Embedded data traffic is allowed with digital voice (DV).

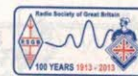
Note 13: Simplex use only – no DV gateways.

Note 14: QPSK 2 Mega-symbols/second maximum recommended.

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.

Notes to the Band Plan: As on page 42.

1.3GHz (23cm)	NECESSARY BANDWIDTH	UK USAGE
1240.000-1240.500	2700Hz	Alternative Narrowband Segment – see Note 7 – 1240.00-1240.750MHz
1240.500-1240.750		Alternative Propagation Beacon Segment
1240.750-1241.000	20kHz	FM/DV Repeater Inputs
1241.000-1241.750	150kHz	DD High Speed Digital Data – 5 x 150kHz



All Modes		channels
1241.750-1242.000	20kHz	1241.075, 1241.225, 1241.375, 1241.525, 1241.675MHz (± 75 kHz)
All Modes		25kHz Channels available for FM/DV use
1242.000-1249.000		1241.775-1241.975MHz
ATV		TV Repeaters (Note 9)
1249.000-1249.250	20kHz	New DATV Repeater Inputs
		Original ATV Repeater Inputs: 1248, 1249
		FM/DV Repeater Outputs, 25kHz Channels (Note 9)
1250.00		1249.025-1249.225MHz
1260.000-1270.000		In order to prevent interference to Primary Users, caution must be exercised prior to using 1250-1290MHz in the UK
Satellites		Amateur Satellite Service – Earth to Space Uplinks Only
1290.000		
1290.994-1291.481	20kHz	FM/DV Repeater Inputs (Note 5)
		1291.000-1291.375MHz (RMO-RM15)
		25kHz spacing
1291.494-1296.000	All Modes	Preferred Narrowband segment
1296.000-1296.150	500Hz	1296.000-1296.025MHz – Moonbounce
Telegraphy, MGM		1296.138MHz – PSK31 Centre of Activity
1296.150-1296.800	2700Hz	1296.200MHz – Narrowband Centre of Activity
Telegraphy, SSB & MGM		1296.400-1296.600MHz – Linear Transponder Input
(Note 1)		1296.500MHz – Image Mode Centre of Activity (SSTV, FAX etc)
		1296.600MHz – Narrowband Data Centre of Activity (MGM, RTTY etc)
		1296.600-1296.700MHz – Linear Transponder Output
1296.800-1296.994		1296.750-1296.800MHz – Local Beacons, 10W ERP max
		1296.800-1296.990MHz – Propagation Beacons only
		Beacons exclusive
1296.994-1297.481	20kHz	FM/DV Repeater Outputs (Note 5)
1297.494-1297.981	20kHz	1297.000-1297.375MHz (RMO-RM15)
FM/DV simplex (Notes 2, 5, 6)		FM/DV Simplex ((Notes 2, 5 & 6)) 25kHz spacing
		1297.500-1297.750MHz (SM20-SM30)
		1297.725MHz – Digital Voice (DV) Calling (IARU recommended)
		1297.900-1297.975MHz – FM Internet Voice Gateways (IARU common channels, 25kHz)
1298.000-1299.000	20kHz	All Modes
All Modes		General mixed analogue or digital use in channels
1299.000-1299.750	150kHz	1298.025-1298.975MHz (RS1-RS39)
All Modes		DD High Speed Digital Data – 5 x 150kHz channels
1299.750-1300.000	20kHz	1299.075, 1299.225, 1299.375, 1299.525, 1299.675MHz (± 75 kHz)
All Modes		25kHz Channels Available for FM/DV use
1300.000-1325.000		1299.775-1299.975MHz
ATV		TV Repeaters (UK only) (Note 9)
		New DATV Repeater Outputs
		Original ATV Repeater Outputs: 1308.0, 1310.0, 1311.5, 1312.0, 1316.0, 1318.5MHz

Note 1: Local traffic using narrowband modes should operate between 1296.500-1296.800MHz during contests and band openings.

Note 2: Stations in countries that do not have access to 1298-1300MHz may also use the FM simplex segment for digital communications.

Note 3: IARU Region 1 recommended maximum bandwidth is 20kHz. See also Note 7.

Note 4: deleted.

Note 5: Embedded data traffic is allowed with digital voice (DV).

Note 6: Simplex use only – no DV gateways.

Note 7: 1240.000-1240.750 has been designated by IARU as an alternative centre for narrowband activity and beacons. Operations in this range should be on a flexible basis to enable coordinated activation of this alternate usage.

Note 8: The band 1240-1300MHz is subject to major replanning. Contact the Microwave Manager for further information.

Note 9: Repeaters and Migration to DATV, inc option for new DATV simplex are subject to further development and coordination.

Note 10: QPSK 4 Mega-symbols/second maximum recommended.

Licence Notes: Amateur Service – Secondary User. Amateur Satellite Service: 1,260-1,270MHz – Secondary User Earth to Space only. In the sub-band 1,298-1,300MHz unattended operation is not allowed within 50km of SS206127 (Bude), SE202577 (Harrogate), or in Northern Ireland.

Notes to the Band Plan: As on page 42.

2.3GHz (13cm)	NECESSARY BANDWIDTH	UK USAGE
IARU Recommendation		
2,310.000-2,320.000MHz		2,310.000-2,310.500MHz – Repeater links
Sub-regional	200kHz	2,310.100MHz – Data
(National band plans)	200kHz	2,310.300MHz – Data
		2,310.000-2,310.500MHz – Remote control
		2,311.000-2,315.000MHz – High speed data
2,320.000-2,320.150	500Hz	Preferred Narrowband Segment
2,320.150-2,320.800	2.7kHz	2,320.000-2,320.025MHz – Moonbounce
		2,320.200MHz – SSB Centre of Activity
2,320.800-2,321.000		2,320.750-2,320.800MHz – Local Beacons, 10W ERP max
		2,320.800-2,320.990MHz – Propagation Beacons Only
		Beacons exclusive
2321.000-2322.000	Note 1	
Simplex and repeaters		
2,322.000-2,400.000		2,322.000-2,355.000MHz – ATV and ATV Repeaters

All Modes (Note 4)		2,355.100-2,364.000MHz – Repeater Links
200kHz		2,355.100MHz – Data
200kHz		2,355.300MHz – Data
		2,356.000-2,360.000MHz – High speed data
1,000kHz		2,364.000MHz – Data
		2,365.000-2,370.000MHz – Repeaters
		2,370.000-2,390.000MHz – ATV and ATV repeaters
2,400.000-2,450.000		2,390.000-2,392.000MHz – Moonbounce
Satellites		2,435.000MHz – ATV Repeater Outputs
		2,440.000MHz – ATV Repeater Outputs

Note 1: Stations in countries which do not have access to the all modes section 2,322-2,390MHz, use the simplex and repeater segment 2,320-2,322MHz for data transmission.

Note 2: Stations in countries that do not have access to the narrowband segment 2,320-2,322MHz, use the alternative narrowband segment 2,304-2,306MHz and 2,308-2,310MHz.

Note 3: The segment 2,433-2,443MHz may be used for ATV if no satellite is using the segment.

Note 4: Parts of this range are subject to regulatory change. Contact the Microwave Manager for further information.

LICENCE NOTES: Amateur Service – Secondary User. Users must accept interference from ISM users.

Amateur Satellite Service: 2,400-2,450MHz – Secondary User. Users must accept interference from ISM users. In the sub-bands 2,310.000-2,310.4125; 2,355-2,365 and 2,392-2,450MHz unattended operation is not allowed within 50km of SS206127 (Bude) or SE202577 (Harrogate).

ISM = Industrial, scientific and medical.

Notes to the Band Plan: As on page 42.

3.4GHz (9cm)	UK USAGE
IARU Recommendation	
3,400.000-3,402.000MHz	3,400.100MHz – Centre of activity (Note 1)
Narrowband	
CW/E/SSB	3,400.750-3,400.800MHz – Local Beacons, 10W ERP max
3,400.800-3,400.995	3,400.800-3,400.995MHz – Propagation Beacons Only
Propagation Beacons	
3,401.000-3,402.000MHz	3,401.000-3,402.000MHz – Remote control
3,402.000-3,410.000	
All Modes (Notes 2, 3)	
3,410.000-3,475.000	
All Modes (Note 4)	3,456.000MHz (Note 1)

Note 1: EME has migrated from 3456MHz to 3400MHz promote harmonised usage and activity.

Note 2: Stations in many European countries have access to 3400-3410MHz as permitted by ECA Table Footnote EU17.

Note 3: Amateur Satellite downlinks planned.

Note 4: This range is subject to regulatory change. Contact the Microwave Manager for further information.

Licence Notes: Amateur Service – Secondary User. Unattended operation is permitted for remote control, digital modes and beacons, except in the sub-bands 3,420-3,430MHz and 3,450-3,455MHz within 50km of SS0916223 (Cheltenham), SS206127 (Bude) and SE202577 (Harrogate).

ISM = Industrial, scientific and medical.

Notes to the Band Plan: As on page 42.

5.7GHz (6cm)	UK USAGE
IARU Recommendation	
5,650.000-5,668.000MHz	
Satellite Uplinks	Amateur Satellite Service – Earth to Space Only
5,650.000-5,670.000	5,668.200MHz – Alternative Centre of Activity
Narrowband	5,668.8MHz – Beacons
CW/E/SSB	
5,670.000-5,680.000	
All Modes	
5,755.000-5,760.000	
All Modes	
5,760.000-5,762.000	
Narrowband	5,760.100MHz – Current Centre of Activity
CW/E/SSB	5,760.750-5,760.800MHz – Local Beacons, 10W ERP max
5,760.800-5,760.995	5,760.800-5,760.995MHz – Propagation Beacons only
Propagation Beacons	
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

LICENCE NOTES: Amateur Service: 5,650-5,680MHz – Secondary User. 5,755-5,765 and 5,820-5,850MHz – Secondary User. Users must accept interference from ISM users. Amateur Satellite Service: 5,650-5,670MHz and 5,830-5,850MHz – 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 5,670-5,680MHz within 50km of SS206127 (Bude) and SE202577 (Harrogate). ISM = Industrial, scientific and medical.

Notes to the Band Plan: As on page 42.

10GHz (3cm)	UK USAGE
IARU Recommendation	
10,000.000-10,125.000MHz	10,002.5-10,027.5MHz – Wideband Transponders – 015 OUT
Digital Modes	10,027.5-10,052.5MHz – Wideband Transponders – 040 OUT
	10,052.5-10,077.5MHz – Wideband Transponders – 065 OUT
	10,080-10,090MHz – Data Links
	10,090-10,110MHz – Wideband Beacons and Operating (Note 1)
	10,110-10,120MHz – Voice Repeaters OUT
10,225.000-10,250.000	10,227.5-10,252.5MHz – Wideband Transponders – 425 OUT
All Modes	10,252.5-10,227.5MHz – Wideband Simplex
10,250.000-10,350.000	10,277.5-10,302.5MHz – Wideband Transponders – 015 IN
Digital Modes	10,302.5-10,327.5MHz – Wideband Transponders – 040 IN
10,350.000-10,368.000	10,327.5-10,352.5MHz – Wideband Transponders – 065 IN
All Modes	10,352.5-10,368MHz – Wideband Modes
10,368.000-10,370.000	10,368-10,370MHz – Narrowband Modes (Note 3)
Narrowband Telegraphy	10,368.1MHz – Centre of Activity
EME/SSB	
10,368.800-10,368.995	10,368.750-10,368.800MHz – Local Beacons, 10W ERP max
	10,368.800-10,368.995MHz – Propagation Beacons Only

Propagation Beacons

10,370.000-10,450.000	10,370-10,390MHz – Wideband Modes (Note 2)
All modes	10,390-10,410MHz – Wideband Beacons and Operating (Note 1)
	10,412.5-10,437.5MHz – Wideband Transponders – 425 IN
10,450.000-10,475.000	10,440-10,450MHz – Voice Repeaters Rx
	10,400-10,475MHz – Unattended Operation
10,475.000-10,500.000	10,450-10,452MHz – Alternative Narrowband CW/EME/SSB (Note 3)
All modes and satellites	Amateur Satellite Service ONLY

Note 1: 10,400MHz is the preferred frequency for wideband beacons but 10,100MHz is still used.
Note 2: Wideband FM is preferred between 10,350-10,400MHz to encourage compatibility between narrowband systems, however there is still activity between 10,050-10,125MHz.

Note 3: The current narrowband sub-band is at 10,368MHz; however, 10,450MHz is being considered as a possible future alternative.

Note 4: Simplex TV operations should take place on wideband transponder inputs that are not being used by local transponders.

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.

Note 6: 10,475-10,500MHz is allocated ONLY to the Amateur Satellite Service and NOT to the Amateur Service.

Licence Notes: Amateur Service – Secondary User. Amateur Satellite Service: 10,450-10,500MHz – Secondary User. Unattended operation is permitted for remote control, digital modes and beacons except in the sub-bands 10,000-10,125MHz within 50km of SO916223 (Cheltenham), SS206127 (Bude), SK985640 (Waddington) and SE202577 (Harrogate).

Notes to the Band Plan: As on page 42.

24GHz (12mm) UK USAGE

24,000.000-24,050.000MHz	24,025MHz – Preferred Operating Frequency for Wideband Equipment
Satellites	24,048.2MHz – Narrowband Centre of Activity
	24,048.750-24,048.800MHz – Local Beacons, 10W ERP max
24,048.800-24,048.995	24,048.800-24,048.995MHz – Propagation Beacons Only
Propagation Beacons	
24,050.000-24,250.000	
All modes	

Licence Notes: Amateur Service: 24,000-24,050MHz – Primary User. Users must accept interference from ISM users. 24,050-24,150MHz – Secondary User. May only be used with the written permission of Ofcom. Users must accept interference from ISM users. 24,150-24,250MHz – Secondary User. Users must accept interference from ISM users. Amateur Satellite Service: 24,000-24,050MHz – 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 24,000-24,050MHz within 50km of SK985640 (Waddington) and SE202577 (Harrogate).

ISM = Industrial, scientific and medical.

Notes to the Band Plan: As on page 42.

47GHz (6mm) UK USAGE

47,000.000-47,200.000MHz	47,088.2MHz – Centre of Narrowband Activity
47,088.000-47,090.000	47,088.8-47,089.0MHz – Propagation Beacons Only
Narrowband Segment	

NOTES TO THE BAND PLAN

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

All Modes: CW, SSB and those modes listed as Centres of Activity, plus AM. Consideration should be given to adjacent channel users.

Image Modes: Any analogue or digital image modes within the appropriate bandwidth, for example SSTV and FAX.

Narrowband Modes: All modes using up to 500Hz bandwidth, including CW, RTTY, PSK, etc.

Digimodes: Any digital mode used within the appropriate bandwidth, for example RTTY, PSK, MT63, etc.

Sideband usage: Below 10MHz use lower sideband (LSB), above 10MHz use upper sideband (USB). Note the lowest dial settings for LSB Voice modes are 1843, 3603 and 7043kHz on 160, 80 and 40m. Note that on (5MHz) USB is used.

Amplitude Modulation (AM): Amplitude Modulation (AM) is acceptable in the All Modes segments provided users consider adjacent channel activity when selecting operating frequencies (Davos 2005).

Digital Voice (DV): Users of Digital Voice (DV) should check that the channel is not in use by other modes (CT08_C5_Rec20).

FM Repeater & Gateway Access: CTCSS Access is recommended. Toneburst access is being withdrawn in line with IARU-R1 recommendations.

Beacons: Propagation Beacon Sub-bands are highlighted – please avoid transmitting in them! CW QSOs are accepted across all bands, except within beacon segments (Recommendation DV05_C4_Rec_13).

Contest activity shall not take place on the 10, 18 and 24MHz (30, 17 and 12m) bands. Non-contesting radio amateurs are recommended to use the contest-free HF bands (30, 17 and 12m) during the largest international contests (DV05_C4_Rev_07). The term 'automatically controlled data stations' include Store and Forward stations.

Transmitting Frequencies: The announced frequencies in the band plan are understood as 'transmitted frequencies' (not those of the suppressed carrier).

Unmanned transmitting stations: IARU member societies are requested to limit this activity on the HF bands. It is recommended that any unmanned transmitting stations on HF shall only be activated under operator control except for beacons agreed with the IARU Region 1 Beacon Coordinator, or specially licensed experimental stations.

472-479kHz: Access to this band requires an appropriate NoV, which is available to Full licensees only.

Licence Notes: Amateur Service and Amateur Satellite Service – Primary User. Unattended operation is permitted for remote control, digital modes and beacons, except within 50km of SK985640 (Waddington) and SE202577 (Harrogate).

Notes to the Band Plan: As on page 42.

76GHz (4mm) UK USAGE

75,500-76,000MHz	
All Modes (preferred)	75,976.200MHz – IARU Region 1 Preferred Centre of Activity
76,000.000-77,500.000	
All Modes	
77,500-78,000	77,500.200MHz – Alternative IARU Recommended Narrowband Segment
All Modes (preferred)	
78,000-81,000	
All Modes	

Licence Notes:

75,500-75,875MHz Amateur Service and Amateur Satellite Service – Secondary User.

75,875-76,000MHz Amateur Service and Amateur Satellite Service – Primary User.

76,000-77,500MHz Amateur Service and Amateur Satellite Service – Secondary User.

77,500-78,000MHz Amateur Service and Amateur Satellite Service – Primary User.

78,000-81,000MHz Amateur Service and Amateur Satellite Service – Secondary User.

Unattended operation is permitted for remote control, digital modes and beacons, except within 50km of SK985640 (Waddington) and SE202577 (Harrogate).

Notes to the Band Plan: As on page 42.

134GHz (2mm) UK USAGE

134,000-134,928MHz	
All Modes	
134,928-134,930	IARU Region 1 Preferred Centre of Activity
Narrowband Modes	
	134,928.800-134,928.990 – Propagation Beacons Only
134,930-136,000	
All Modes	

Licence Notes: 134,000-136,000MHz Amateur Service and Amateur Satellite Service – Primary User. Unattended operation is permitted for remote control, digital modes and beacons, except within 50km of SK985640 (Waddington) and SE202577 (Harrogate).

THE FOLLOWING BANDS ARE ALSO ALLOCATED TO THE AMATEUR SERVICE AND THE AMATEUR SATELLITE SERVICE

122,250-123,000MHz – Amateur Service only, Secondary User
 136,000-141,000MHz – Secondary User
 241,000-248,000MHz – Secondary User
 248,000-250,000MHz – Primary User

Notes to the Band Plan: As on page 42.

1.8MHz: Radio amateurs in countries that have a SSB allocation ONLY below 1840kHz, may continue to use it, but the National Societies in those countries are requested to take all necessary steps with their licence administrations to adjust phone allocations in accordance with the Region 1 Band Plan (UBA - Davos 2005).

3.5MHz: Inter-Continental operations should be given priority in the segments 3500-3510kHz and 3775-3800kHz. Where no DX traffic is involved, the contest segments should not include 3500-3510kHz or 3775-3800kHz. Member societies will be permitted to set other (lower) limits for national contests (within these limits).

3510-3600kHz may be used for unmanned ARDF beacons (CW, A1A) (Recommendation DV05_C4_Rec_12). Member societies should approach their national telecommunication authorities and ask them not to allocate frequencies other than amateur stations in the band segment that IARU has assigned to Inter-Continental long distance traffic.

5MHz: Access to this experimental band requires an appropriate NoV, which is available to Full licensees only.

7MHz: The band segment 7040-7060kHz may be used for automatic controlled data stations (unattended) traffic in the areas of Africa south from the equator during local daylight hours. Where no DX traffic is involved, the contest segment should not include 7,175-7,200kHz.

10MHz: SSB may be used during emergencies involving the immediate safety of life and property and only by stations actually involved in the handling of emergency traffic.

The band segment 10120kHz to 10140kHz may be used for SSB transmissions in the area of Africa south of the equator during local daylight hours.

News bulletins on any mode should not be transmitted on the 10MHz band.

28MHz: Member societies should advise operators not to transmit on frequencies between 29.3 and 29.51MHz to avoid interference to amateur satellite downlinks.

Experimentation with NBFM Packet Radio on 29MHz band: Preferred operating frequencies on each 10kHz from 29.210 to 29.290MHz inclusive should be used. A deviation of ± 2.5 kHz being used with 2.5kHz as maximum modulation frequency.

1.3GHz
 The band is subject to re-planning. It is also shared with air traffic radar.

2.3GHz
 Parts of the band are subject to regulatory change (2350-2390MHz).

3.4GHz
 Parts of the band are subject to regulatory change (3410-3475MHz).