



IARU Region 1: Europe, Africa, Middle East and Northern Asia

IARU Region 2: The Americas

IARU Region 3: Asia-Pacific



IARU REGION 1 HF BAND PLAN

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
<b>2200m</b> 135.7 – 137.8	200	CW, QRSS and narrow band digital modes
<b>630m</b> 472 – 479		WRC-2012 decided to allocate to the amateur service on a secondary basis.
<b>160m</b> 1810 - 1838	200	CW, 1836 kHz - QRP Centre of Activity
1838 - 1840	500	Narrow band modes
1840 - 1843	2700	All modes – digimodes
1843 - 2000	2700	All modes
<b>80m</b> 3500 - 3510	200	CW, priority for intercontinental operation
3510 - 3560	200	CW, contest preferred, 3555 kHz - QRS Centre of Activity
3560 - 3580	200	CW, 3560 kHz - QRP Centre of Activity
3580 - 3590	500	Narrow band modes - digimodes

3590 - 3600	500	Narrow band modes - digimodes, automatically controlled data stations (unattended)
3600 - 3620	2700	All modes - digimodes, automatically controlled data station (unattended)
3600 – 3650	2700	All modes, 3630 kHz - Digital Voice Centre of Activity, SSB contest preferred
3650 - 3700	2700	All modes, 3690 kHz - SSB QRP Centre of Activity
3700 - 3800	2700	All modes, SSB contest preferred, 3735 kHz - Image Centre of Activity 3760 kHz - Region 1 Emergency Centre of Activity
3775 - 3800	2700	All modes, priority for intercontinental operation
<b>60m</b> 5250 - 5450		WRC-12 concluded on Resolution 649 (WRC- 12) Possible allocation to the amateur service on a secondary basis at around 5 300 kHz
<b>40m</b> 7000 - 7040	200	CW, 7030 kHz - QRP Centre of Activity
7040 - 7047	500	Narrow band modes - digimodes
7047 - 7050	500	Narrow band modes – digimodes, automatically controlled data stations (unattended)
7050 - 7053	2700	All modes - digimodes, automatically controlled data stations (unattended)
7053 - 7060	2700	All modes - digimodes
7060 - 7100	2700	All modes, SSB contest preferred 7070 kHz - Digital Voice Centre of Activity 7090 kHz - SSB QRP Centre of Activity
7100 - 7130	2700	All modes, 7110 kHz – Region 1 Emergency Centre of Activity
7130 - 7200	2700	All modes, SSB contest preferred, 7165 kHz - Image Centre of Activity
7175 - 7200	2700	All modes, priority for intercontinental operation
<b>30m</b> 10100 - 10140	200	CW, 10116 kHz - QRP Centre of Activity
10140 - 10150	500	Narrow band modes – digimodes
<b>20m</b> 14000 - 14060	200	CW, contest preferred, 14055 kHz - QRS Centre of Activity
14060 - 14070	200	CW, 14060 kHz - QRP Centre of Activity
14070 - 14089	500	Narrow band modes - digimodes
14089 - 14099	500	Narrow band modes - digimodes, automatically controlled data stations
14099 - 14101		IBP, exclusively for beacons
14101 - 14112	2700	All modes - digimodes, automatically controlled data stations (unattended)
14112 - 14125	2700	All modes
14125 - 14300	2700	All modes, SSB contest preferred, 14130 kHz - Digital Voice Centre of Activity 14195 kHz ± 5 kHz - Priority for Dxpeditions 14230 kHz - Image Centre of Activity 14285 kHz - SSB QRP Centre of Activity
14300 - 14350	2700	All modes, 14300 kHz - Global Emergency centre of activity
<b>17m</b> 18068 - 18095	200	CW, 18086 kHz - QRP Centre of Activity
18095 - 18105	500	Narrow band modes - digimodes
18105 - 18109	500	Narrow band modes - digimodes, automatically controlled data stations
18109 - 18111		IBP, exclusively for beacons
18111 – 18120	2700	All modes - digimodes, automatically controlled data stations

18120 - 18168	2700	All modes, 18130 kHz - SSB QRP Centre of Activity 18150 kHz - Digital Voice Centre of Activity 18160 kHz - Global Emergency Centre of Activity
<b>15m</b> 21000 - 21070	200	CW, 21055 kHz - QRS Centre of Activity 21060 kHz - QRP Centre of Activity
21070 - 21090	500	Narrow band modes - digimodes
21090 - 21110	500	Narrow band modes - digimodes, automatically controlled data stations
21110 - 21120	2700	All modes (excluding SSB) - digimodes, automatically controlled data stations
21120 - 21149	500	Narrow band modes
21149 - 21151		IBP, exclusively for beacons
21151 - 21450	2700	All modes, 21180 kHz - Digital Voice Centre of Activity 21285 kHz - SSB QRP Centre of Activity 21340 kHz - Image Centre of Activity 21360 kHz - Global Emergency Centre of Activity
<b>12m</b> 24890 - 24915	200	CW, 24906 kHz - QRP centre of activity
24915 - 24925	500	Narrow band modes - digimodes
24925 - 24929	500	Narrow band modes - digimodes, automatically controlled data stations (unattended)
24929 - 24931		IBP, exclusively for beacons
24931 - 24940	2700	All modes - digimodes, automatically controlled data stations (unattended)
24940 - 24990	2700	All modes, 24960 kHz - Digital Voice Centre of Activity
<b>10m</b> 28000 - 28070	200	CW, 28055 kHz - QRS Centre of Activity 28060 kHz - QRP Centre of Activity
28070 - 28120	500	Narrow band modes - digimodes
28120 - 28150	500	Narrow band modes - digimodes, automatically controlled data stations (unattended)
28150 - 28190	500	Narrow band modes
28190 - 28199		IBP, regional time shared beacons
28199 - 28201		IBP, worldwide time shared beacons
28201 - 28225		IBP, continuous duty beacons
28225 - 28300	2700	All modes - beacons
28300 - 28320	2700	All modes - digimodes, automatically controlled data stations (unattended)
28320 - 29000	2700	All modes, 28330 kHz - Digital Voice Centre of Activity 28360 kHz - SSB QRP Centre of Activity 28680 kHz - Image Centre of Activity
29000 - 29100	6000	All modes
29100 - 29200	6000	All modes - FM simplex - 10 kHz channels
29200 - 29300	6000	All modes - digimodes, automatically controlled data stations (unattended)
29300 - 29510	6000	Satellite- uplink & downlink
29510 - 29520		Guard channel
29520 - 29590	6000	All modes - FM repeater input (RH1 - RH8)
29600	6000	All modes - FM calling channel
29610	6000	All modes - FM simplex repeater (parrot - input and output)
29620 - 29700	6000	All modes - FM repeater outputs (RH1 - RH8)

## IARU REGION 1 VHF-UHF BAND PLAN

Frequency 6m	(Max) BW	Mode	Usage
50.000 - 50.100	500 Hz	Telegraphy exclusive (Except BeaconProject)	50.000 - 010 Region 1 50.010 - 020 Region 2 50.020 - 030 Region 3 50.050 CW future international center of activity 50.090 Intercontinental center of activity
50.100 - 50.200	2 700 Hz	Telegraphy & SSB	50.100 - 130 Intercontinental section 50.110 Intercontinental center of activity 50.130 - 200 International section 50.150 International center of activity
50.200 - 50.300	2 700 Hz	Telegraphy & SSB	General usage 50.285 for crossband
50.300 - 50.400	2 700 Hz	MGM Narrowband Telegraphy	50.305 PSK Center of activity 50.310 - 320 EME center of activity 50.320 - 380 MS center of activity
50.400 - 50.500	1 000 Hz	MGM Telegraphy	BEACONS EXCLUSIVE 50.401 MHz +/- 500Hz WSPR Beacons
50.500 - 52.000	12 kHz	All mode	50.510 SSTV 50.520 - 540 Fimplex FM Internet Voice Gatewas 50.550 Image working frequency 50.600 RTTY (FSK) 50.620 - 750 Digital communications 50.630 Digital Voice (DV) calling 51.210 - 390 FM/DV Repeater Inputs 51.410 - 590 FM/DV Simplex 51.510 FM calling frequency 51.810 - 51.990 FM repeaters output channels
Frequency 4m	(Max) BW	Mode	Usage
70.000 - 70.090	1 000 Hz	Telegraphy MGM	Coordinated Beacons
70.090 - 70.100	1 000 Hz	Beacons	Temporary and personal beacons 70.091 Personal WSPR beacons
70.100 - 70.250	2 700 Hz	Telegraphy SSB MGM	70.185 Crossband center of activity 70.200 Telegraphy/SSB calling 70.250 MS calling
70.250 - 70.294	12 kHz	AM / FM	70.260 AM/FM calling 70.270 MGM centre of activity
70.294 - 70.500	12 kHz	FM Channels 12.5 kHz spacing	70.3125 digital communications 70.3250 digital communications 70.4500 FM calling 70.4625 70.4750 70.4875 digital communications
Frequency 2m	(Max) BW	Mode	Usage
144.000 144.025	2 700 Hz	All Mode	Satelite (downlink only)
144.025 144.110	500 Hz	Telegraphy (EME)	144.050 Telagraphy calling 144.100 Random MS
144.110 144.150	500 Hz	Telegraphy & MGM	144.110-144-160 EME MGM 144.138 PSK31 center of activity
144.150 144.180	2 700 Hz	Telegraphy, MGM & SSB	144.160-144.180 alternative MGM allocation 144.170 alternative MGM calling frequency
144.180 144.360	2 700 Hz	Telegraphy & SSB	144.195-144.205 Random MS SSB 144.300 SSB centre of activity
144.360 144.399	2 700 Hz	Telegraphy, MGM & SSB	144.370 FSK441 Random calling

144.399 144.491	500Hz	Telegraphy & MGM	Beacons only 144.4920 +/- 500Hz WSPR Beacons
144.500 144.794	20 kHz	All Mode	144.500 Image mode centre (SSTV, Fax,...) 144.600 Data Centre of activity (MGM, RTTY,..) 144.750 ATV Talk back
144.794 144.9625	12 kHz	MGM Digital communication	144.800 APRS 144.8125 DV internet voice gateway 144.8250 DV internet voice gateway 144.8375 DV internet voice gateway 144.8500 DV internet voice gateway 144.8625 DV internet voice gateway
144.975 145.194	12kHz	FM / Digital Voice	Repeater input exclusive
145.194 145.206	12 kHz	FM / Digital Voice	Space communication
145.206 145.5625	12 kHz	FM / Digital Voice	145.2375 FM Internet Voice Gateway 145.2875 FM Internet Voice Gateway 145.3375 FM Internet Voice Gateway 145.375 digital voice calling 145.500 FM calling
145.575 145.7935	12 kHz	FM / Digital Voice	Repeater Output exclusive
145.794 145.806	12 kHz	FM / Digital Voice	Space communication
145.806 146.000	12kHz	All Mode	Satellite exclusive
<b>Frequency 70cm</b>	<b>(Max) BW</b>	<b>Mode</b>	<b>Usage</b>
430.000 432.975	20KHz	All modes	430.025 - 430.375 FM repeater output (1.6 MHz shift) 430.400 - 43.575 digital communications 430.600 . 430.925 digital communications repeater 430.925 - 431.025 multimode channels 431.05 - 432975 Repeater input channels 1.6MHz shift
432.000 432.100	500Hz	Telegraphy & MGM	432.000 - 432.500 EME 432.050 Telegraphy Centre of activity 432.088 PSK31 Centre of activity
432.100 432.400	2700Hz	Telegraphy, MGM & SSB	432.200 SSB centre of activity 432.350 Microwave talkback centre of activity 432.370 FSK441 centre of activity
432.400 432.490	500 Hz	Telegraphy & MGM	Beacons exclusive
432.500 432.975	12 KHz	All Modes	432.500 New APRS frequency REPEATER INPUT REGION 1 STANDARD, 25 kHz spacing, 2 MHz shift(Channel freq 432.600 - 432.975MHz)
433.000 433.375	12 KHz	FM Digital Voice repeater	REPEATER INPUT REGION 1 STANDARD, 25 kHz spacing, 1.6 MHz shift
433.400 433.575	12 KHz	FM Digital Voice	433.400 SSTV (FM/AFSK) 433.450 Digital Voice calling 433.500 FM calling
433.600 434.000	20 KHz	All modes	433.625 - 433.775 Digital communications channels 434.000 Centre frequency of digital experiments
434.000 434.594	12 KHz	All modes ATV	434.450 Digital communications channels
434.594 434.981	12 KHz	All Modes	
435.000 438.000	20 KHz	Sattelite Service & ATV	ATV Repeater outputs are not permitted in the 435 MHz Band

438.000 440.000	20 KHz	All Modes	438.025 - 438.175 Digital communication channels 438.200 - 438.525 Digital communication repeater 438.550 - 438.625 Multi mode 438.650-439.425 Repeater output cha 7.6 MHz shift 439.800 - 439.975 Digital communication link cha
<b>Frequency 23cm</b>	<b>(Max) BW</b>	<b>Mode</b>	<b>Usage</b>
1240.000 1240.500	2700 Hz	All modes	Reserved for the future
1240.500 1240.750	500Hz	Telegraphy & MGM	Beacons (reserved for the future)
1240.750 1241.000	20 KHz	FM Digital Voice	Reserved for the future
1241.000 1243.250	20 KHz	all mode	1242.025 - 1242.250 repeater output (RS1 - RS10) 1242.275 - 1242.700 repeater output (RS11 - RS28) 1242.725-1243.250 Digital comm (RS29 - RS50)
1243.250 1260.000		ATV Digital ATV	1258.150 - 1259.350 Repeater output
1260.00 1270.00		Sattelite Service	
1270.00 1272.00	20 KHz	All Mode	1270.025 - 1270.700 Repeater input (RS1 - RS28) 1270.725 - 1271.250 Digital Comm (RS29 - RS50)
1272.00 1290.994		ATV Digital ATV	
1290.994 1291.481	20 KHz	FM Digital Voice Repeater input	RM1(1291.000) - RM19(1291.475) 25 Khz spacing
1291.494 1296.000		all modes	1293.150 - 1294.350 repeater input R20 - R68
1296.000 1296.150	500 Hz	Telegraphy MGM	1296.000 - 1296.025 Moonbounce 1296.138 PSK31 Centre of activity
1296.150 1296.800	2700 Hz	Telegraphy SSB MGM	1296.200 Narrow band centre of activity 1296.400 - 1296.600 linear transponder input 1296.500 fax 1296.600 Narrowband data centre of activity MGM 1296.600 - 1296.700 lineartransponder output 1296.750 - 1296.800 local beacons
1296.800 1296.994	500 Hz	Telegraphy MGM	Beacons exclusive
1296.994 1297.481	20 KHz	FM digital voice repeater OUTPUT	RM0(1297.000) - RM19(1297.475) 25 KHz spacing
1297.494 1297.981	20 KHz	FM Digital voice	1297.500 SM20 1297.500 centre of FM acitivity 1297.725 digital voice calling frequency 1297.900 - 1297.975 Simplex FM internet gateways 1297.975 SM39
1298.000 1299.000	20 KHz	All modes	General mixed analogue or digital use 25 KHz spacing channels 1298.025 RS1 1298.975 RS39
1299.000 1299.750	150 KHz	All modes	Arranged as 5 x 150kHz channels for high speed Digital Data (DD) usage: Centres: 1299.075, 1299.225, 1299.375, 1299.525, 1299.675 MHz (+/- 75kHz)
1299.750 1300.000	20 KHz	All modes	8x25kHz channels (available for FM/DV use) Centres: 1299.775-1299.975

Frequency 13cm	(Max) BW	Mode	Usage
2300.000 2320.000	20 KHz	All modes	2304 - 2306 Narrow band segment in countries where the 2320-2322 segment is not available 2308 - 2310 Narrow band segment in HB
2320.000 2320.150	500 Hz	Telegraphy	2320.000-2320.025 EME 2320.138 PSK31 centre of activity
2320.150 2320.800	2700 Hz	Telegraphy SSB	2320.200 SSB centre of activity 2320.750-2320.800 Local Beacons (10W ERP max)
2320.800 2321.000		Telegraphy MGM	Beacons exclusive
2321.000 2322.000	20 KHz	FM Digital Voice	Voice simplex and repeaters
2322.000 2400.000		All modes	2322.000-2355.000 ATV 2355.000-2365.000 Digital communications 2365.000-2370.000 Repeaters 2370.000-2392.000 ATV 2392.000-2400.000 Digital communications
2400.000 2450.000		Amateur satellite service	2427.00 - 2443.00 ATV if no satellite uses this segment

IARU REGION 1 SHF-EHF BAND PLAN

Frequency 9cm	(Max) BW	Mode	Usage
3400.000 3400.800	500 Hz	Telegraphy MGM	3400.100 EME Centre of activity 3400.750 - 3400.800 Local beacons
3400.800 3400.995	500 Hz	Telegraphy MGM	Beacons only
3401.000 3402.000	2 700 Hz	All modes	
3402.000 3410.000		All modes	Satellite downlinks
3410.000 3475.000		All Modes	
Frequency 6cm	(Max) BW	Mode	Usage
5650.000 5668.000	2 700 Hz	All modes	Amateur Satellite service (uplink)
5668.000 5670.000	2 700 Hz	All modes	5668.200 Narrow band center of activity (a) AMATEUR SATELLITE SERVICE ( up-link)
5670.000 5700.000		MGM	
5700.000 5720.000		ATV	
5720.000 5760.000		All modes	
5760.000 5760.800	2 700 Hz	All modes	5760.200 Narrow band center of activity 5760.750-5760.800 Local Beacon
5760.800 5760.990		Telegraphy MGM	Beacons only
5761.000 5762.000	2 700 Hz	All modes	
5762.000 5790.000		All modes	
5790.000 5850.000		All modes	Amateur Satellite service (down link)

Frequency 3cm	(Max) BW	Mode	Usage
10000.000 10150.000		MGM	
10150.000 10250.000		All modes	
10250.000 10350.000		MGM	
10350.000 10368.000		All modes	
10368.000 10368.800	2 700 Hz	All modes	10.3682 Narrow band center of activity 10368.750-10368.800 Local Beacon
10368.800 10368.990			Beacons only
10369.000 10370.000	2 700 Hz	All modes	
10370.000 10450.000		All modes	
10450.000 10500.000		All modes	10.450-10.452 Narrow band modes in countries where 10.368-10.370 is not available AMATEUR SATELLITE SERVICE
Frequency 1.5cm	(Max) BW	Mode	Usage
24000.000 24048.000		All modes	24.025 Wideband centre of activity
24048.000 24048.800	2 700 Hz	All modes	24.0482 Narrow band centre of activity AMATEUR SATELLITE SERVICE NARROW BAND MODES 24048.750-24048.800MHz Local Beacon
24048.800 24048.995		All modes	Beacons
24049.000 24050.000	2 700 Hz	All modes	AMATEUR SATELLITE SERVICE NARROW BAND MODES
24050.000 24250.000		All modes	
Frequency (Mhz)	(Max) BW	Mode	Usage
47000.000 47088.000		All modes	
47088.000 47090.000	2700 Hz	All modes	47.088200 Narrow band center of activity AMATEUR SATELLITE SERVICE
47090.000 47200.000		All modes	
Frequency (Ghz)	(Max) BW	Mode	Usage
75.500 76.000	2700 Hz	All modes	AMATEUR SATELLITE SERVICE (Preferred) 75976.200 MHz : Preferred Narrow band centre of activity
76.000 77.500		All modes	76032.200 MHz :Narrow Band Centre of activity in some countries (not preferred)
77.500 77.501	2700 Hz	All modes	77500.200 MHz: Preferred NB centre of activity in countries outside the CEPT area AMATEUR SATELLITE SERVICE
77.501 78.000		All modes	Preferred segment
78.000 81.500		All Modes	Not preferred segment

Others E-High Frequency Bands

119.98 - 120.02 GHz, 122.5 - 123.0 GHz, 134 - 141 GHz, 142-149 GHz, 241 - 250 GHz, 275+ GHz