IARU REGION 1 HF BAND PLAN

A recommendation for all radio amateurs how to use the bands, as revised at the General Conference Varna 2014

FREQUENCY BAND (kHz)	MAX BANDWIDTH (Hz)	....PREFERRED MODE AND USAGE
135.7 – 137.8	200	CW, QRSS and narrow band digital modes

RR 5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07) (Cavtat 2008)

RR 5.67B The use of the band 135.7-137.8 kHz in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Libyan Arab Jamahiriya, Lebanon, Syrian Arab Republic, Sudan and Tunisia is limited to the fixed and maritime mobile services. The amateur service shall not be used in the above-mentioned countries in the band 135.7-137.8 kHz, and this should be taken into account by the countries authorising such use. (WRC-07)(Cavtat 2008)

1.8 MHz Band:

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, (*)

Radio Amateurs in countries that have a **SSB allocation ONLY** below 1840 kHz, 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 the phone allocations in accordance with the Region 1 Bandplan. (Davos 2005)

3.5 MHz Band:

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

Intercontinental operations should be given priority in the segments 3500-3510 kHz and 3775-3800 kHz.

Where no DX traffic is involved, the contest segments should not include 3500-3510 kHz or 3775-3800 kHz.
Member societies will be permitted to set other (lower) limits for national contests (within these limits).
3510-3600 kHz may be used for unmanned ARDF beacons (CW) (Davos 2005)

Member societies should approach their national telecommunication authorities and ask them not to allocate frequencies to other than amateur stations in the band segment that IARU has assigned to intercontinental long distance traffic.

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

10 MHz:

10100 - 10140	200	CW, 10116 kHz - QRP Centre of Activity
10140 - 10150	500	Narrow band modes – digimodes

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 10120 kHz to 10140 kHz 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 10 MHz band.

14 MHz Band:

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 (unattended)
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

18 MHz Band:

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 (unattended)
18109 - 18111		IBP, exclusively for beacons
18111 - 18120	2700	All modes - digimodes, automatically controlled data stations (unattended)
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

21 MHz Band:

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 (unattended)
21110 - 21120	2700	All modes (excluding SSB) - digimodes, automatically controlled data stations (unattended
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

24 MHz Band:

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, 24950 kHz – SSB QRP Centre of Activity 24960 kHz - Digital Voice Centre of Activity

28 MHz Band:

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 - 29100	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)

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

Preferred NBFM operating frequencies on each 10 kHz from 29.110 to 29.290 MHz inclusive should be used. A deviation of ±2.5 kHz being used with 2.5 kHz as maximum modulation frequency.

DEFINITIONS

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.

Narrow band modes All modes using up to 500 Hz bandwidth, including CW, RTTY, PSK etc.

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

(*) Lowest dial setting for LSB Voice mode: 1843, 3603 and 7053 kHz

NOTES

Amplitude modulation (AM) may be used in the telephony sub-bands providing consideration is given to adjacent channel users. (NRRL Davos 05).

CW QSOs are accepted across all bands, except within beacon segments. (Recommendation DV05_C4_Rec_13)
The frequencies in the band plan are understood as "transmitted frequencies" (not those of the suppressed carrier!)

Sideband Usage Below 10MHz use lower sideband (LSB), above 10 MHz use upper sideband (USB)

Proposed usage of 630m band - (WRC-12, Rec VA14_C4_Rec_02)

472 – 475 kHz CW only – maximum bandwidth 200 Hz
475 – 479 kHz CW + digimodes
If a frequency is to be selected, particular attention must be paid to still existing Non Directional Beacons (NDB) of the radionavigaton service!

RR 5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service.(WRC-12)

RR 5.80A The use of the frequency band 472-479 kHz 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 authorizing such use. (WRC-12

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.

The term "automatically controlled data stations" includes Store and Forward stations.

***Recommendation VA14_C4_REC_06*:**
Member Societies are reminded of the recommendation in the IARU Region 1 HF Band Plan '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'.

Unmanned transmitting stations, and operation involving unmanned transmitting stations, must adhere to the frequency and bandwidth limits of the band plan.
The operator connecting to an automatically controlled unmanned transmitting station is responsible for not causing interference. This is particularly important in the 30 meter band where the amateur service only has secondary status.

Amateur radio operators may transmit messages via unmanned transmitting stations during coordinated emergency, and disaster preparedness exercises, limited to the duration of such exercises, using a bandwidth not exceeding 2 700 Hz. Such communication should be announced regularly on the frequency, and radio amateurs not participating in the communication should cooperate by not transmitting on the frequency.

History

2005 Davos **Introduction of band plan by bandwidth.** **Effective 1 January 2006**

2008 Cavtat **Several modifications.** **Effective 29 March 2009**

CW segment extended from 7000 - 7035 kHz to 7000 -7040 kHz.

Narrow band modes, digimodes segment moved and extended from 7035 -7038 kHz to 7040 -7047 kHz.

Narrow band modes, digimodes, segment for automatically controlled stations (unattended) moved and extended from 7038 - 7040 kHz to 7047-7050 kHz.

All modes, digimodes, segment for automatically controlled stations (unattended)

Introduction of SSB preferred contest segments 7060 -7100 kHz and 7130 -7200 kHz

Introduction of Digital Voice Activity Centres.

2011 Sun City **Several modifications.** **Effective 17 August 2011**

CW contest preferred segment 7000-7025 kHz withdrawn.

Segment 29100 - 29200 kHz changed from max. bandwidth 2700 Hz to max. 6000 Hz.
Introduction of new segment 29100 - 29200 kHz for FM simplex operation (10 kHz channels).
Removal of FM simplex channels 29520 - 29550 kHz and 29610 - 29650 kHz.
Number of FM Repeater channels increased to eight, former FM simplex channels became new repeater input, respectively repeater output channels.

FM repeater channels renumbered, RH1 = 29520 / 29620 kHz, RH8 = 29590 / 29690 kHz

Introduction of FM Simplex Repeater 29610 kHz (parrot, input + output)

2014 Varna **Several modifications.** **Effective 26 September 2014**

Segment 29000 - 29100 kHz: Change from max. bandwidth 2700 Hz to max. 6000 Hz.
Satellite segment 29300 - 29510 kHz: Removal of downlink restriction