

# IARU REGION 1 HF BAND PLAN

A recommendation for all radio amateurs how to use the bands,  
as revised at the Interim Meeting Vienna 2016, effective 01 June 2016.

FREQUENCY (kHz)	MAX. BANDWIDTH (Hz)	PREFERRED MODE AND USAGE
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## 2200m Band:

135.7 – 137.8	200	CW, QRSS and narrow band digital modes
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## 630m Band:

472 – 475 **	200	CW	See NOTES
475 – 479 **	(#)	CW, digimodes	See NOTES

( \*\* ) If a frequency is to be selected, particular attention must be paid to still existing Non Directional Beacons (NDB) of the radionavigaton service! (#) max. bandwidth not specified, 500 Hz suggested.

## 160m 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)

## 80m Band:

3500 - 3510	200	CW, priority for intercontinental operation	
3510 - 3560	200	CW, contest preferred,	3555 kHz – QRS Centre of Activity
3560 - 3570	200	CW,	3560 kHz – QRP Centre of Activity
3570 - 3580	200	Narrow band modes – digimodes	
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, SSB contest preferred, 3630 kHz – Digital Voice Centre of Activity, (*)	
3650 - 3700	2700	All modes,	3690 kHz – SSB QRP Centre of Activity
3700 - 3775	2700	All modes, SSB contest preferred	
			3735 kHz – Image Centre of Activity
			3760 kHz – Reg.1 Emergency Centre of Activity
3775 - 3800	2700	All modes, SSB contest preferred, priority for intercontinental operation	

## 60m Band:

5351.5 – 5354.0	500	CW, Narrow band modes – digimodes	See NOTES
5354.0 – 5366.0	2700	All modes, USB recommended for voice operation (##)	See NOTES
5366.0 – 5366.5	20 (!)	Weak signal narrow band modes	See NOTES

It is strongly recommended that frequencies within the WRC-15 allocation only be used if there are no other frequencies available at 5 MHz under domestic (ITU-R article 4.4) permissions.

Local nets and long rag chew QSOs should not use the WRC-15 allocation at 5 MHz but should instead make use of the 3.5 MHz, 5 MHz domestic, or 7 MHz bands where there is more spectrum available.

### 40m Band:

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) (*)	
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 – Reg.1 Emergency Centre of Activity
7130 - 7175	2700	All modes, SSB contest preferred,	7165 kHz – Image Centre of Activity
7175 - 7200	2700	All modes, SSB contest preferred, priority for intercontinental operation	

### 30m Band:

10100 - 10130	200	CW,	10116 kHz – QRP Centre of Activity
10130 - 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.

### 20m 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 Dxpeditons 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

### 17m 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

### 15m 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

### 12m 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	
24391 - 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

### 10m 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 - 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 Links	
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)	

## **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.

## **NOTES**

The frequencies in the band plan are understood as “transmitted frequencies” (not those of the suppressed carrier!)

To prevent any out of band transmission the maximum dial setting for USB Voice mode should be 3 kHz below upper band edge on bands 20m to 10m.

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

(##) Highest dial setting for USB Voice mode on the 60m band: 5363 kHz

CW QSOs are accepted across all bands, except within beacon segments. (Recommendation DV05\_C4\_Rec\_13)

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

### **Sideband Usage**

Below 10MHz lower sideband (LSB) is recommended, and above 10 MHz use upper sideband (USB). The exception to this is on the 5 MHz band where USB is recommended.

### **630m band:**

Details shown in the band plan above should be understood as “proposed usage”. (VA14\_C4\_Rec\_02)

### **60m band:**

Details shown in the band plan above should be understood as “proposed usage”. (VIE14\_C4\_Rec\_02)

### **Contests**

Where no DX traffic is involved, the contest segments should not include 3500-3510 kHz or 3775-3800 kHz.

Non-contesting radio amateurs are recommended to use the contest-free HF bands (30, 17 and 12m) during the largest international contests. (DV05\_C4\_Rec\_07)

Contests should be restricted to 160, 80, 40, 20, 15 and 10m. That is 60, 30, 17, and 12m bands shall not be used for contests. (VIE16\_C4\_Rec\_06 \*)

(\* to be ratified at General Conference 2017)

For more recommendations about contest segments see the IARU Region 1 HF Manager Handbook.

## **Unmanned transmitting stations:**

The term “automatically controlled data stations” includes Store and Forward 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.

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. (VA14\_C4\_Rec\_06).

## **Beacons**

For information about IARU Region 1 beacon policy see the IARU Region 1 HF Manager Handbook.

## **Remote controlled operation on HF**

Remote controlled operation is defined to mean operation where a licensed operator controls an amateur radio station from a remote control terminal.

Where a station is operated remotely, the following conditions shall apply:

Remote operation must be permitted, or not objected to, by the Regulatory Authority of the country where the station is located.

1. The call sign to be used should be the call sign issued by the Regulatory Authority of the country in which the station is located. This applies irrespective of the location of the operator.
2. It should be noted that the CEPT T/R 61-01 agreement only applies to people using their own call sign, with the appropriate country prefix, when the operator is actually visiting that country, not for remote operation.
3. Any further requirements regarding the participation of remotely controlled stations in contests or award programs are a matter for the various contest or award program organisers.

(SC11\_C4\_REC\_07) , (VA14\_C4\_REC\_04)

## History

2005 Davos	Introduction of band plan by bandwidth.	Effective 1 January 2006
2008 Cavtat	Several modifications.  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) moved from 7040-7043 kHz to 7050-7053kHz. Introduction of SSB preferred contest segments 7060 -7100 kHz and 7130 -7200 kHz Introduction of Digital Voice Activity Centres.	Effective 29 March 2009
2011 Sun City	Several modifications.  CW contest preferred segment 7000-7025 kHz withdrawn. Segment 29100 - 29200 kHz changed from max. bandwidth of 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)	Effective 17 August 2011
2014 Varna	Several modifications.  Segment 29000 - 29100 kHz: Change from max. bandwidth of 2700 Hz to max. 6000 Hz. Satellite segment 29300 - 29510 kHz: Removal of downlink restriction	Effective 26 September 2014
2016 Vienna	Several modifications *. (* to be ratified by General Conference 2017)  Introduction of narrow bandwidth segment with max. bandwidth of 200 Hz from 3570 kHz to 3580 kHz  Narrow bandwidth mode segment with max. bandwidth of 500 Hz extended by 10 kHz now from 10130 kHz to 10150 kHz.	Effective 01 June 2016