



# IARU Region 1 HF band plan

Effective 01 June 2016

v2

edited by DK4VW

|             | FREQUENCY SEGMENT (kHz) | MAX BANDWIDTH (Hz) | PREFERRED MODE AND USAGE                                       |  |
|-------------|-------------------------|--------------------|--|--|
|             | 135,7 - 137,8           | 200                | CW   | CW, QRSS, narrow band digital modes  |
|             | 472 - 475               | 200                | CW   | CW, See NOTES  |
|             | 475 - 479               | ( # )              | Narrow band modes  | CW, Digimodes See NOTES  |
| 1.8 MHz     | 1810 - 1838             | 200                | CW   | 1836 kHz - CW QRP Centre of Activity   |
|             | 1838 - 1840             | 500                | Narrow band modes  |  |
|             | 1840 - 1843             | 2700               | All modes (1)  | Digimodes  |
|             | 1843 - 2000             | 2700               | All modes (1)  |  |
| 3.5 MHz     | 3500 - 3510             | 200                | CW   | Priority for intercontinental operation  |
|             | 3510 - 3560             | 200                | CW   | CW contest preferred<br>3555 kHz - CW QRS Centre of Activity   |
|             | 3560 - 3570             | 200                | CW   | 3560 kHz - CW 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 (1)  | Digimodes, automatically controlled data stations (unattended)   |
|             | 3600 - 3650             | 2700               | All modes (1)  | SSB contest preferred<br>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<br>3735 kHz - Image Centre of Activity<br>3760 kHz - R1 Emergency Centre of Activity   |
| 3775 - 3800 | 2700                    | All modes          | SSB contest preferred, Priority for intercontinental operation |  |
| 5 MHz       | 5351.5 - 5354.0         | 200                |  | CW, Narrow band modes 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  |
| 7 MHz       | 7000 - 7040             | 200                | CW   | 7030 kHz - CW, 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 (1)  | Digimodes, automatically controlled data stations (unattended)   |
|             | 7053 - 7060             | 2700               | All modes  | Digimodes  |
|             | 7060 - 7100             | 2700               | All modes  | SSB contest preferred<br>7070 kHz - Digital Voice Centre of Activity<br>7090 kHz - SSB QRP Centre of Activity  |
|             | 7100 - 7130             | 2700               | All modes  | 7110 kHz - Region 1 Emergency Centre   |
|             | 7130 - 7175             | 2700               | All modes  | SSB contest preferred<br>7165 kHz - Image Centre of Activity   |
|             | 7175 - 7200             | 2700               | All modes  | SSB contest preferred, Priority for intercontinental Activity  |
| 10 MHz      | 10100 - 10130           | 200                | CW   | 10116 kHz - CW QRP Centre of Activity  |
|             | 10130 - 10150           | 500                | Narrow band modes  | Digimodes  |
| 14 MHz      | 14000 - 14060           | 200                | CW   | CW contest preferred,<br>14055 kHz - QRS Centre of Activity  |
|             | 14060 - 14070           | 200                | CW   | 14060 kHz CW 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           |                    | International Beacon Project                                   | Beacons exclusively  |
|             | 14101 - 14112           | 2700               | All modes  | Digimodes, automatically controlled data stations (unattended)   |
|             | 14112 - 14125           | 2700               | All modes  |  |
|             | 14125 - 14300           | 2700               | All modes  | SSB contest preferred<br>14130 kHz - Digital Voice Centre of Activity<br>14195 +/- 5 kHz - Priority for DX-peditions<br>14230 kHz - Image Centre of Activity<br>14285 kHz - SSB QRP Centre of Activity |
|             | 14300 - 14350           | 2700               | All modes  | 14300 kHz - Global Emergency Centre of Activity  |



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|--------|-------------------------|--------------------|------------------------------|--|
| 18 MHz | 18068 - 18095           | 200                | CW                           | 18086 kHz - CW 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           |                    | International Beacon Project | Beacons exclusively  |
|        | 18111 - 18120           | 2700               | All modes                    | Digimode, automatically controlled data stations (unattended)  |
|        | 18120 - 18168           | 2700               | All modes                    | 18130 kHz - SSB QRP Centre of Activity<br>18150 kHz - Digital Voice Centre of Activity<br>18160 kHz - Emergency Centre of Activity |

|        |               |      |                              |   |
|--------|---------------|------|------------------------------|---|
| 21 MHz | 21000 - 21070 | 200  | CW                           | 21055 kHz - QRS Centre of Activity<br>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                    | Digimodes, automatically controlled data stations (unattended), (not SSB)   |
|        | 21120 - 21149 | 500  | Narrow band modes            |   |
|        | 21149 - 21151 |      | International Beacon Project | Beacons exclusively   |
|        | 21151 - 21450 | 2700 | All modes                    | 21180 kHz - Digital Voice Centre of Activity<br>21285 kHz - SSB QRP Centre of Activity<br>21340 kHz - Image Centre of Activity<br>21360 kHz - Global Emergency Centre of Activity |

|        |               |      |                              |  |
|--------|---------------|------|------------------------------|--|
| 24 MHz | 24890 - 24915 | 200  | CW                           | 24906 kHz - CW 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 |      | International Beacon Project | Beacons exclusively  |
|        | 24931 - 24940 | 2700 | All modes                    | Digimodes, automatically controlled data stations (unattended) |
|        | 24940 - 24990 | 2700 | All modes                    | 24960 kHz - Digital Voice Centre of Activity                   |

|               |               |           |  |  |
|---------------|---------------|-----------|--|--|
| 28 MHz        | 28000 - 28070 | 200       | CW   | 28055 kHz - QRS Centre of Activity<br>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 |           | International Beacon Project                 | Regional time shared beacons, exclusively                                |
|               | 28199 - 28201 |           | International Beacon Project                 | Worldwide time shared beacons, exclusively                               |
|               | 28201 - 28225 |           | International Beacon Project                 | Continuous duty beacons, exclusively                                     |
|               | 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                             |
|               | 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 + output) |  |
| 29620 - 29700 | 6000          | All modes | FM-Repeater output (RH1-RH8)                 |  |

## DEFINITIONS

All modes

CW, Phone and those other modes listed as Centres of Activity, plus AM (consideration should then be given to adjacent channel users)

Narrow band modes

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

Digimodes

Any digital mode within the appropriate bandwidth, e.g. RTTY, PSK, MT63 etc.

Image modes

Any analogue or digital image modes within the appropriate bandwidth, e.g. SSTV, FAX

## NOTES

The frequencies in the bandplan are understood as "transmitted frequencies" (not those of the suppressed carrier!)

- ( 1 )                      Lowest dial setting for LSB Voice mode: 1843, 3603, 7053 kHz
- ( # )                      maximum bandwidth not specified, 500 Hz suggested
- ( ## )                     Highest dial setting for USB Voice mode on the 60m band: 5663 kHz

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

**Sideband usage**              Sideband Usage: Below 10 MHz 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.

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

**OUT OF BAND:**              To prevent any out of band transmission the maximum dial setting for USB (upper sideband) Voice mode should be 3 kHz below upper band edge on bands 20m to 10m.

### **630m band - 472 - 479 kHz:**

Details shown in band plan above should be understood as "proposed usage" (VA14\_C4\_Rec\_02)

If a frequency is to be selected, particular attention must be paid to still existing Non Directional Beacons (NDB) of the radionavigaton service!

### **60m band - 5351.5 - 5366.5 kHz**

Details shown in band plan above should be understood as "proposed usage" (VIE16\_C4\_Rec\_02)

It is strongly recommended that frequencies within 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.

## **Contests**

Contest activity shall not take place on the 5, 10, 18 and 24 MHz 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\_Rec\_07)

Member societies are encouraged to publish contest operating segments clearly in the rules of their contest and that those segments are considered with due respect to the IARU band plans. (Rec SC11\_C4\_02).

The CW contest-preferred segment from 7000-7025 kHz has been withdrawn from the Region 1 band plan. Societies should (therefore) encourage contest organisers to include a rule that restricts contest activity to a limited frequency range within the CW allocation. The choice of the frequency segment is left to the discretion of the contest organisers, but should take into account expected activity levels and show consideration for non-contest operation. (SC11\_C4\_Rec\_05).

## **Unmanned transmitting stations**

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

## 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 operation.
3. Any further requirements regarding the participation of remotely controlled stations in contests or award programmes are a matter for the various contests 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  | Effective 29 March 2009     |
|               | CW segment extended from 7000-7035 kHz to 7000-7040 kHz.<br>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 7050-7053 kHz.  |                             |
|               | Introduction of all modes, digimodes segment 7053-7060 kHz.  |                             |
|               | Introduction of CW preferred contest segment 7000-7025 kHz.  |                             |
|               | Introduction of SSB preferred contest segments 7060-7100 kHz and 7130-7200 kHz   |                             |
|               | Introduction of Digital Voice Activity Centres:<br>3630 kHz, 7070 kHz, 14130 kHz, 18150 kHz, 21180 kHz, 24960 kHz, 28330 kHz.  |                             |
| 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.<br>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 kHz / 29620 kHz, RH8 = 29590 kHz / 29690 kHz  |                             |
|               | Introduction of FM Simplex Repeater 29610 kHz (parrot, input + output)   |                             |
| 2014 Varna    | Several modifications  | Effective 26 September 2014 |
|               | Change of max. bandwidth from 2700 Hz to max. 6000 Hz in segment 29000 - 29100 kHz.  |                             |
|               | Satellite segment 29300 - 29510 kHz: removal of downlink restriction   |                             |
| 2016 Vienna   | Several modifications *  | Effective 01 June 2016      |
|               | * to be ratified at 2017 General Conference  |                             |
|               | Digimode segment with max. bandwidth of 500 Hz extended from 10130 kHz to 10150 kHz  |                             |
|               | Introduction of Digimode segment 3570 kHz - 3580 kHz with max. bandwidth of 200 Hz   |                             |