



## **IARU Region 3 Interim Band Plan**

Agreed by IARU Region 3 Directors' Meeting

September 3<sup>rd</sup>, 2019

For consideration by

IARU Region 3 Member Societies

IARU Regions 1 and 2

### **1. Introduction**

At the 16<sup>th</sup> IARU Region 3 Conference the following Recommendation was adopted.

- Recommendation AI 11.5/XVI That the IARU Region 3 Band Plan is amended as set out in Annex 1 to this report. The Directors are requested to consider how the format of the Region 3 Band Plan can be changed in future to be similar to that of Regions 1 and 2.

To respond to this Recommendation the Region 3 Band Plan using a new format was drafted for the Region 3 Societies consideration.

### **2. Proposed Region 3 Interim Band Plan Using a New Format**

The formats of the Regions 1 and 2 Band Plans are similar and the band plans are comprised of the four columns which are Frequencies, Maximum Bandwidth/BW, Mode and Usage or Applications and observations.

The Region 3 Band Plan by using a format similar to the formats of Regions 1 or 2 is shown in Attachment.

In changing the format of the current Region 3 Band Plan the following are taken into account.

- (i) Some footnotes of the current band plans are deleted because the contents of the footnotes are included in the Tables of the new format.
- (ii) In the current band plan the portion of the band 7.2-7.3 MHz is indicated as secondary, but the portion is not allocated to the amateur service in Region 3 in the



Radio Regulations. Therefore, the portion and the relevant footnote need to be deleted.

- (iii) In the current band plan the portion of the band 440-450 MHz is indicated as secondary, but in Region 3 the portion is allocated to the amateur service only in Australia and Philippines in footnote 5.270 of the Radio Regulations. Therefore, the portion needs to be deleted.
- (iv) The allocation in the band 1240-1300 MHz is secondary, but no indication of secondary is made in the current band plan. To avoid misunderstanding the indication of primary or secondary is made in all band Tables of the new format.
- (v) The revised plan has been split into two parts, Part 1 covers LF to UHF and Part 2 covers SHF to EHF.



## **Interim BAND PLANS**

### ***IARU REGION 3***

#### **Introductory Notes**

The IARU Region 3 Band Plans are revised at the triennial IARU Region 3 Conferences.

This version was adopted at the IARU Region 3 Directors' meeting held in Tokyo, September 3, 2019.

#### **Basic Principles**

The Basic Principles underlying the IARU Region 3 Band Plans are:

- (1) In all cases of conflict between a band plan and the national regulations of a country, the latter shall prevail. However, it is not recommended to use frequencies outside of the band plan for the Amateur Satellite Service and it should be noted that the IARU cannot coordinate the amateur satellite usage of frequencies outside of the band plan.
- (2) Nothing in these band plans shall be construed as prohibiting different national arrangements, provided that harmful interference is not caused to stations in countries operating in accordance with the regional band plan.
- (3) Notwithstanding item (2) above, Member Societies of IARU Region 3 are strongly urged to use these regional band plans as a basis for their national band plans.
- (4) Societies should consult with the amateur satellite community for proposed satellite operating frequencies before deciding local band plans above 1300 MHz.

#### **Definitions**

The "Definition"/ "Abbreviations" used are:

- All modes: Any mode fitting in the specified bandwidth of the frequency segment. (Consideration should be given to adjacent channel users).
- AM: DSB AM phone is allowed with maximum of 6 kHz BW. The AM signal can be placed when the segment is permitted for "all modes" with sufficient bandwidth.
- Bandwidth: The maximum bandwidth determines the maximum spectral width (-6 dB points) of all emissions allowed in a segment. Sets the power output and modulation levels to the minimum required for not exceeding the maximum expected Bandwidth.
- Broadband Applications: Broadband applications may be used for any combination of highspeed data (e.g. 802.11 protocols), Amateur Television and other wide-bandwidth activities. Division into channels and/or separation of users within



these segments may be set regionally based on needs and usage.

- CoA:** “Centre of Activity” frequency (IARU recommended)
- Digimodes:** Any mode devoted to digital data communication restricted to the specified bandwidth of the frequency segment, including narrowband modes, for example RTTY, Packet, PSK, MT63, Olivia, ALE, JT65, WSPR, FT8, SIM31, etc. Some common usage frequencies have been identified in foot notes as appropriate.
- Digital Voice:** Any mode based on digital encoded voice, restricted to the specified bandwidth and application of the frequency segment. The non-voice digital embedded content must be an ancillary data, not the main purpose of the communication, except during emergency communications. Digital Voice users should first check if the channel is already in use by other stations and modes (including analog).
- DX:** Intercontinental communications
- EME:** Earth-Moon-Earth, Meteor Scatter, Auroral Scatter and other weak-signal modes
- Image modes:** Any analogue or digital image modes within the appropriate bandwidth, for example SSTV and FAX generally not exceeding 6 kHz.
- Narrowband modes:**  
Narrow bandwidth modes include CW, RTTY, PSK, JT65, WSPR, FT8, SIM31 or other modes with similar bandwidth not exceeding 500Hz.
- Phone:** Phone operation includes, SSB, DSB AM, FM and Digital Voice modes with similar bandwidth not exceeding 6 kHz. On 50 MHz and above, the maximum bandwidth not exceed 25 kHz.
- Satellite:** This segment should be kept clear of other operating modes.
- USB/LSB:** For SSB phone operations below 10 MHz lower sideband (LSB) is used while upper sideband (USB) is used above 10 MHz.  
Exception: On 60 m band (5.3 MHz) upper sideband (USB) is used.
- WB:** Wide bandwidth modes including FM.

## **Contests**

Contest activity below 30 MHz should be restricted to the 160 m, 80 m, 40 m, 20 m, 15 m and 10 m bands. Non-contesting radio amateurs are encouraged to also use the contest-free bands during large international contests. Member societies are encouraged to publish contest operating segments clearly in the rules of their contests and that those segments are considered with due respect to the IARU band plans.



## **Emergency communications**

Amateur Radio emergency communications should have priority over all other usage, especially on their specified Emergency Center of Activity (CoA) frequencies during emergency communication operations.



## Individual Band Plans

### Part One

#### Low Frequency (LF) – Ultra High Frequency (UHF)

##### LF

##### 2200m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
135.7-137.8	500	CW, QRSS and digimodes	Secondary Amateur

Foot note: WSPR 136.0 kHz  
JT65 136.13 kHz

##### MF

##### 630m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
472-479	500	CW and digimodes	Secondary Amateur

Footnote: WSPR 474.2 kHz

##### 160m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
1800 – 1830	200	CW	PRIMARY AMATEUR
1830 - 1840	500	CW and Narrowband modes 1836 kHz – QRP Centre of Activity	
1840 - 2000	2700	All modes	

Foot note: WSPR 1836.6 kHz  
JT65 1838 kHz  
FT8 1840 kHz


**HF  
80m Band**

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
3500 - 3510	200	CW, DX	PRIMARY AMATEUR
3510 - 3535	200	CW	
3535 - 3600	2700	CW, Phone, Digi modes 3560 kHz – QRP CoA	
3600 - 3775	2700	CW, Digi modes, Phone 3600 – Emergency CoA (all modes $\pm$ 5 kHz) 3690 kHz – Digital Voice CoA 3690 kHz – SSB QRP CoA 3735 kHz – Image CoA	
3775 - 3800	2700	CW, Phone, DX	
3800 - 3900	2700	CW, Phone, Digimodes 3795 – DX Phone CoA 3845 kHz – Image CoA	

Foot note: WSPR 3568.6 kHz  
 JT65 3570 kHz  
 FT8 3573 kHz

**60m Band**

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
5351.5 - 5354	500	CW, Narrowband modes - digimodes	Secondary Amateur
5354 - 5366	2700	All modes – USB for phone operation	
5366 – 5366.5	Footnote	Weak signal modes	

Footnote: Maximum bandwidth suggested 20Hz



### 40m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
7000 - 7030	200	CW	PRIMARY AMATEUR, AMATEUR- SATELLITE
7030 - 7040	2700	CW, NB, Phone 7030 kHz – QRP CoA	
7040 – 7060	2700	All modes, Narrowband modes, Phone 7070 kHz – Digital Voice CoA, 7090 kHz – SSB QRP CoA	
7060 - 7100	2700	All modes, 7095 – DX Phone CoA	
7100 - 7200	2700	All modes, 7110 kHz – Emergency CoA Frequency (all modes $\pm$ 5 kHz) 7165 kHz – Image CoA	PRIMARY AMATEUR

Foot note: WSPR 7038.6 kHz  
 JT65 7076 kHz  
 FT8 7074 kHz  
 RTTY DX 7040 kHz

### 30m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
10110 - 10130	200	CW 10116 kHz – QRP CoA	Secondary Amateur
10130 - 10150	500	CW, Narrowband -digimodes	

Footnote: (1) Some Administrations allow phone in the segment 10115-10140 kHz.  
 (2) WSPR 10138.6 kHz  
 JT65 10138.0 kHz  
 FT8 10136.0 kHz




**20m Band**

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic Usage</i>	ITU R3 Status
14000 - 14070	200	CW, 14055 kHz – QRS CoA, 14060 kHz – QRP CoA	PRIMARY AMATEUR, AMATEUR- SATELLITE
14070 - 14110	500	CW, Narrowband modes  14100 kHz – International Beacon, $\pm$ 500 Hz guard band for beacons	
14100 - 14112	2700	CW, Narrowband - digimodes, Phone	
14112 - 14250	2700	CW, Phone  14300 kHz – Global Emergency Centre of Activity (all modes $\pm$ 5 kHz), 14130 kHz – Digital Voice Centre of Activity, 14195 kHz DX Phone Centre of Activity, 14230 kHz – Image Centre of Activity, 14285 kHz – SSB QRP Centre of Activity	PRIMARY AMATEUR
14250 - 14350			

Footnote: WSPR 14095.6 kHz  
 JT65 14076.0 kHz  
 FT8 14074.0 kHz



### 17m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
18068 - 18095	200	CW 18086 kHz – QRP Centre of Activity	PRIMARY AMATEUR, AMATEUR- SATELLITE
18095-18110	2700	CW, Narrowband – digimodes	
18110-18120	2700	CW, Narrowband, Phone 18110 kHz – International Beacon, $\pm$ 500 Hz guard band for beacons	
18120-18168	2700	CW, Phone 18130 kHz – SSB QRP Centre of Activity, 18160 kHz – Digital Voice Centre of Activity. 18160kHz – Emergency CoA Frequency (all modes $\pm$ 5 kHz)	

Foot note:    WSPR 18104.6 kHz  
                   JT65  18102.0 kHz  
                   FT8  18100.0 kHz



### 15m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
21000 - 21070	200	CW 21055 kHz – QRS CoA, 21060 kHz – QRP CoA	PRIMARY AMATEUR, AMATEUR- SATELLITE
21070 - 21110	500	CW, Narrowband modes	
21110 - 21125	2700	CW, Narrowband – digimodes	
21125 - 21150	2700 (Footnote (1))	CW, Narrowband – digimodes Satellite – only uplink (Footnote (2)) 21150 kHz – International Beacon, $\pm$ 500 Hz guard band for beacons	
21150 - 21450	2700 (Footnote (1))	CW, Phone Satellite– only uplink (Footnote (2)) 21180 kHz – Digital Voice CoA, 21295 kHz – DX Phone CoA, 21340 kHz – Image CoA, 21360 kHz – Global Emergency CoA Frequency (all modes $\pm$ 5 kHz)	

Foot note: WSPR 21.0946 kHz

JT65 21076.0 kHz

FT8 21074.0 kHz

(1) No bandwidth restriction for the amateur satellite service.

(2) No amateur satellite allocation has been made in the R1 and R2 bandplan.



### 12m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
24890 - 24915	200	CW 24906 kHz – QRP CoA	PRIMARY AMATEUR, AMATEUR- SATELLITE
24915 - 24930	500	CW, Narrowband modes	
24930 - 24940	2700	CW, Narrowband modes, DX, Phone 24930 kHz – International Beacon, ± 500 Hz guard band for beacons, 24950 kHz – SSB QRP CoA, 24960 kHz – Digital CoA	
24940 - 24990	2700	CW, Phone	

Foot note: WSPR 24924.6 kHz

JT65 24917.0 kHz

FT8 24915.0 kHz


**10m Band**

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
28000 - 28070	200	CW 28055 kHz – QRS CoA	PRIMARY AMATEUR, AMATEUR- SATELLITE
28070 - 28150	500	CW, Narrowband modes	
28150 - 28190	500	CW, Narrowband modes, DX,	
28190 - 28201	200	Beacons 28200 kHz -- International Beacon $\pm$ 500 Hz guard band for beacons.	
28201 - 28225	200	Beacons - Continuous duty	
28225 - 29100	2700	All modes 28330 kHz – Digital Voice CoA, 28360 kHz – QRP CoA, 28495 kHz – DX CoA, 28680 kHz – Image CoA.	
29100 – 29300	6000	All modes	
29300 - 29510	6000	Satellite – uplink and downlink	
29510 – 29590	6000	All modes FM repeater input	
29520 – 29620	6000	All Modes, FM Simplex 29600 kHz – International Calling Channel	
29620 – 29700	6000	All Modes FM Repeater output	

Foot note: WSPR 28124.6 kHz  
 JT65 28076.0 kHz  
 FT8 28074.0 kHz


**VHF  
6m Band**

Frequencies (MHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
50-50.1	200	CW Beacons: International beacons 50.020-50.080 MHz	PRIMARY AMATEUR
50.1-50.5	2700	CW, Phone, Narrowband, Digi modes. 50.110 MHz – DX CoA	
50.5-54	25,000	All modes, WB	

- Foot note:
- (1) In some administrations, other (non-amateur) services are granted primary status on this band. Amateurs should take precautionary measures to avoid interfering with these services.
  - (2) WSPR 50.2937 MHz  
JT65 50.2760 MHz  
FT8 50.3130 MHz

**2m Band**

Frequencies (MHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
144-144.025	2700	Narrowband – digimodes (Note 1)	PRIMARY AMATEUR, AMATEUR- SATELLITE
144.025-144.035		EME – weak signal	
144.035-145.8	25,000	All modes 144.1 MHz – DX CoA	
145.8-146	25,000	All modes Satellites	
146-148	25,000	All Modes	PRIMARY AMATEUR

Footnote:

- (1) Designers and operators of satellites using 144.0-144.025 MHz shall not transmit below 144.0025 MHz so that a necessary guard band is provided at the bottom band edge.
- (2) WSPR on 144.4890 MHz



- (3) 144.800 MHz suggested APRS Spot Freq.
- (4) As of August 2018, 144.390 MHz is utilised by MARTS, RAST, SARTS, ORARI and 144.640 MHz is utilised by CRAC, CTARL, HARTS as APRS spot frequency.
- (4) 145.825 MHz suggested amateur-satellite APRS spot frequency
- (5) 144.100 suggested DX calling frequency

**UHF**  
**70cm Band**

Frequencies (MHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
430-431.9	25,000	All Modes	Secondary Amateur
431.9-432.240	2700	EME Weak signal	
432.240-435	25,000	All modes	
435-438	25,000	Satellites – All modes	Secondary Amateur, Amateur - Satellite (Footnote (2))
438-440	25,000	All modes	Secondary Amateur

Footnote:

- (1) This band is heavily used by ISM and other unlicensed services. Amateurs should take precautionary measures not to cause interference to other users when operating on this band.
- (2) Permitted on a non-interference basis



### 23cm Band

Frequencies (MHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
1240-1260		All modes	Secondary Amateur
1260-1270		Satellites, all modes. Limited to the Earth-to-Space direction only.	Secondary Amateur, Amateur - Satellite (Footnote (1))
1270-1296		All modes	Secondary Amateur
1296-1297	2700	EME Weak signal, SSB, Digimodes	
1297-1300		All modes	

Footnote:

(1) Permitted on a non-interference basis

### 13cm band

Frequencies (MHz)	BW (Hz)	Preferred Mode and us <i>Generic</i> age	ITU R3 Status
2300-2303.750		All modes	Secondary Amateur
2303.750-2304.0	2700	Weak signal. CW, Phone, Digimodes	
2304.0-2304.1	2700	Weak signal, EME. CW, Phone, Digimodes	
2304.1-2304.3	2700	Weak signal, Calling Frequency - 2304.100	
2304.3-2304.4	2700	Beacons CW, Digimodes	
2304.3-2400.0		All Modes	
2400-2450.0		Satellite All modes –	Secondary Amateur, Amateur - Satellite (Footnote (1))

Footnote:

(1) Permitted on a non-interference basis





## Part 2

### Super High Frequency (SHF) to Extremely High Frequency (EHF)

#### SHF

##### 9cm Band

Frequencies (MHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
3300-3345.8		All Modes	Secondary Amateur
3345.8-3352.5		Radio Astronomy protected band. No operation.	
3352.5-3400.0		All Modes	
3400.0-3400.3	2700	CW, Phone, Digimodes Satellite, EME – Calling Frequency 3400.10 MHz.	Secondary Amateur, Amateur - Satellite (Footnote (1))
3400.3-3410.0	2700	CW, Phone, Digimodes Weak Signal,	
3410.0-3455.5		All Modes	Secondary Amateur
3455.5-3456.3		CW, SSB, Digimodes, NBFM Weak signal– Calling Frequency 3456.10 MHz	
3456.3-3457.0	2700	Beacons, Digimodes Beacons	
3457.0-3500		All Modes	

Footnote:

(1) Permitted on a non-interference basis



### 5cm Band

Frequencies (MHz)	BW (Hz)	Preferred Mode and usage <i>Generic</i>	ITU R3 Status
5650-5670		Satellites, all modes. Limited to the Earth-to-Space direction only.	Secondary Amateur, Amateur - Satellite (Footnote (1))
5670-5760		All modes	Secondary Amateur
5760-5760.3	2700	EME, weak signal, Calling Frequency 5760.1 MHz	
5760.3-5761	2700	Beacons, Digimodes Beacon	
5761-5765		All modes, Weak signal	
5765-5830		All modes	
5830-5850		Satellites, all modes. Limited to the Space-to-Earth direction only.	Secondary Amateur, Amateur - Satellite
5850-5925		All modes	Secondary Amateur

Footnote:

(1) Permitted on a non-interference basis

### 3cm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
10.0-10.368		All Modes	Secondary Amateur
10.368-10.3683	2700	Weak signal Calling Frequency - 10.3681 GHz	
10.3683-10.3684		Beacons, All modes	
10.3684 – 10.45		All modes	
10.45-10.50		All modes, Satellite	Secondary Amateur, Amateur - Satellite



### 1.2cm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
24.0 - 24.048		All Modes	PRIMARY AMATEUR, AMATEUR - SATELLITE
24.048 - 24.04875	2700	All Modes, Narrow band Centre of Activity – 24.0482 GHz	
24.04875 - 24.0488	2700	Beacons, Digi modes	
24.0488 - 24.048995	2700	Satellite, Beacons No restrictions on Satellite modes and bandwidth.	
24.049 – 24.050	2700	Narrow band Satellite	
24.050 - 24.250		Wide band CoA – 24.150 GHz	Secondary Amateur

### EHF

#### 6mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
47.00-47.088		All modes	PRIMARY AMATEUR, AMATEUR - SATELLITE
47.088-47.090	2700	All modes Narrow band CoA – 47.08820 GHz  Satellite – No bandwidth restrictions	
47.090-47.200		All modes	



### 4mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
76.0-77.5		All modes Narrow band CoA – 76.0322 GHz	Secondary Amateur, Amateur - Satellite
77.5-78.0	2700	All modes Narrow band CoA – 77.5002 GHz. Satellite – No bandwidth Restrictions	PRIMARY AMATEUR, AMATEUR - SATELLITE
78.0-79.0		All Modes	Secondary Amateur, Amateur - Satellite
79.0-81.0		All modes	

### 2.5mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
122.250-122.251	2700	All modes	Secondary Amateur
122.251-123.000		All modes	

### 2.0mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
134.0-134.928		All modes Satellite	PRIMARY AMATEUR, AMATEUR - SATELLITE
134.928-134.930	2700	Narrow band CoA – 134.930 GHz	
134.930-136.0		All modes	
136.0-141.00		All modes	Secondary Amateur, Amateur - Satellite



### 1.0mm band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
241.0-248.0		All modes	Secondary Amateur, Amateur - Satellite
248.0-248.01		All modes Satellite and narrow band.	PRIMARY AMATEUR, AMATEUR - SATELLITE
248.01-250.0		All modes	

### 275GHz to 3000GHz

The ITU has not allocated this segment to any radio service. Requests to use this segment should be directed to the radiocommunications regulator in their country.