IARU Region 3 Band Plan Using a New Format

March 12, 2019

1. Introduction

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

This version using a new format was adopted at the 17th IARU Region 3 Conference, Seoul, September 2018.

2. Proposed Region 3 Band Plan Using a New Format

At the 16th 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.

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.

3. Future work

If IARU Region 3 societies and other Regions have comments/views on this band plan to be considered by the IARU Region 3, please contact the Secretary of Region 3 "Secretary@iaru-r3.org".



Attachment

IARU REGION 3 BAND PLANS Using a New Format

Introductory Notes

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

This version was adopted at the IARU R3 17th Conference, Seoul, September 2018.

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</i> Usage	ITU 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

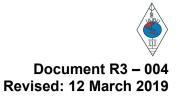
Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> Usage	ITU R3 Status
472-479	500	CW and digimodes	Secondary Amateur

Footnote: WSPR 474.2 kHz

160m Band

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> Usage	ITU R3 Status
1800 – 1830	200	CW	
1830 - 1840	500	CW and Narrowband modes 1836 kHz - QRP Centre of Activity	Primary Amateur
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 Generic Usage	ITU R3 Status
3500 - 3510	200	CW, DX	
3510 - 3535	200	CW	
3535 - 3600	2700	CW, Phone, Digi modes 3560 kHz - QRP CoA	
3600 - 3775	2700	CW, Digi modes, Phone 3.600 - Emergency CoA (all modes ± 5 kHz) 3690 kHz - Digital Voice CoA 3690 kHz - SSB QRP CoA 3735 kHz - Image CoA	Primary Amateur
3775 - 3800	2700	CW, Phone, DX	
3800 - 3900	2700	CW, Phone, Digimodes 3795 - DX Phone CoA 3845 kHz – Image CoA	

Foot note: WSPR 3592.6 kHz

JT65 3576 kHz



Frequencies (kHz)	BW (Hz)	Preferred Mode and Generic usage	ITU R3 Status
5351.5 - 5354	500	CW, Narrowband modes - digimodes	
5354 - 5366	2700	All modes – USB for phone operation	Secondary
5366 – 5366.5	Refer to Footnote *1	Weak signal modes	Amateur

Footnote: *1 Maximum bandwidth suggested 20Hz

Frequencies (kHz)	BW (Hz)	Preferred Mode and Generic usage	ITU R3 Status
7000 - 7030	200	CW	
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	Primary Amateur
7060 - 7100	2700	All modes, 7095 – DX Phone CoA	
7100 - 7200	2700	All modes, 7110 kHz - Emergency CoA Frequency (all modes ± 5 kHz) 7165 kHz – Image CoA	



Foot note: WSPR 7038.6 kHz

JT65 7076 kHz

FT8 7074 kHz RTTY DX 7040 kHz

30m Band

Engage in (I-II-)	BW (Hz)	Preferred Mode and	ITU R3 Status
Frequencies (kHz)		Generic usage	
10110 10120	200	CW	
10110 - 10130	200	10116 kHz – QRP CoA	Secondary
10120 10150	500	CW, Narrowband	Amateur
10130 - 10150	500	-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

Frequencies (kHz)	BW (Hz)	Preferred Mode and Generic Usage	ITU R3 Status
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14000 - 14070	200	CW, 14055 kHz – QRS CoA, 14060 kHz – QRP CoA	
14070 - 14110	500	CW, Narrowband modes 14100 kHz - International Beacon, ± 500 Hz guard band for beacons	
14100 - 14112	2700	CW, Narrowband - digimodes, Phone	
14112 - 14350	2700	CW, Phone 14.300 kHz - Global Emergency Centre of Activity (all modes ± 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

Footnote: WSPR 14095.6 kHz

JT65 14076.0 kHz FT8 14074.0 kHz

Frequencies (kHz)	BW (Hz)	Preferred Mode and Generic usage	ITU R3 Status
18068 - 18095	200	CW	Primary



10005 10110	2500	18086 kHz – QRP Centre of Activity CW, Narrowband –	
18095-18110	2700	digimodes	
18110-18120	2700	CW, Narrowband, Phone 18.110 kHz - International Beacon, ± 500 Hz guard band for beacons	Amateur
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 ± 5 kHz)	

Foot note: WSPR 18104.6 kHz

JT65 18102.0 kHz FT8 18100.0 kHz

Frequencies (MHz)	BW (Hz)	Preferred Mode and Generic	ITU R3 Status
		usage	
21000 - 21070	200	CW	Primary Amateur



Foot note: WSPR 21.0946 kHz

JT65 21076.0 kHz FT8 21074.0 kHz

Frequencies (MHz)	BW (Hz)	Preferred Mode and Generic usage	ITU R3 Status
24890 - 24915	200	CW	Primary Amateur



		24906 kHz – QRP CoA
24915 - 24930	500	CW, Narrowband modes
		CW, Narrowband modes,
		DX, Phone
24930 - 24940	2700	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

Frequencies (kHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
28000 - 28070	200	CW 28055 kHz – QRS CoA	Primary Amateur
28070 - 28150	500	CW, Narrowband modes	
28150 - 28190	500	CW, Narrowband modes, DX,	
28190 - 28201	200	Beacons 28200 kHz - International Beacon ± 500 Hz guard band for beacons.	
28201 - 28225	200	Beacons - Continuous duty	
28225 - 29100	2700	All modes 28330 kHz – Digital Voice CoA,	



		1	
		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	Primary Amateur,
2,310 2,370	0000	FM repeater input	Amateur - Satellite
		All Modes, FM Simplex	
29520 – 29620	6000	29600 kHz – International	
		Calling Channel	Primary Amateur
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	Primary Amateur



		Beacons: International beacons	
		50.020-50.080 MHz	
		CW, Phone, Narrowband, Digi	
50.1-50.5	2700	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	BW	Preferred Mode and Generic	ITU R3 Status
(MHz)	(Hz)	usage	
		Narrowband – digimodes	
		(Note 1)	Primary Amateur,
144-144.025	2700	The satellite segment should be	Amateur - Satellite
		kept clear of all terrestrial	
		operation.	
144.025-144.035		EME – weak signal	
144 025 145 9	25,000	All modes	Primary Amateur
144.035-145.8	25,000	144.1 MHz – DX CoA	
		All modes Satellites	Drimany
145.8-146	25,000	The satellite segment should be	Primary Amateur - Satellite
143.6-140		kept clear of all terrestrial	Amateur - Satemite
		operation.	
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) 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
431.9-432.240	2700	EME Weak signal	Amateur
432.240-435	25,000	All modes	
			Secondary
435-438	25,000	Satellites - All modes	Amateur
			- Satellite
438-440	25,000	All modes	Secondary
430-440	25,000	All modes	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.

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	Secondary Amateur-Satellite



		only.	
1270-1296		All modes	
1296-1297	2700	EME Weak signal, SSB, Digimodes	Secondary Amateur
1297-1300		All modes	

13cm band

Frequencies (MHz)	BW (Hz)	Preferred Mode and us Generic age	ITU R3 Status
2300-2303.750		All modes	
2303.750-2304.0	2700	Weak signal. CW, Phone, Digimodes	
2304.0-2304.1	2700	Weak signal, EME. CW, Phone, Digimodes	Secondary
2304.1-2304.3	2700	Weak signal, Calling Frequency - 2304.100	Amateur
2304.3-2304.4	2700	Beacons CW, Digimodes	
2304.3-2400.0		All Modes	
2400-2450.0		Satellite All modes – Permitted on a non- interference basis	Secondary Amateur, Amateur- satellite

Part 2 Super High Frequency (SHF) to Extremely High Frequency (EHF)

SHF

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

Frequencies (MHz)	BW	Preferred Mode and usage	ITU R3 Status
riequencies (MHZ)	(Hz)	Generic	110 K3 Status
		Satellites, all modes. Limited	Secondary
5650-5670		to the Earth-to-space direction	Amateur, Amateur-
		only.	satellite
5670-5760		All modes	Secondary



5760-5760.3	2700	EME, weak signal, Calling Frequency 5760.1 MHz	Amateur
5760.3-5761	2700	Beacons, Digimodes Beacon	
5761-5765		All modes, Weak signal	Secondary Amateur
5765-5850		All modes	Timatean
		Satellites, all modes. Limited	Secondary
5830-5850		to the Space-to-Earth	Amateur, Amateur-
		direction only.	satellite
5850-5925		All modes	Secondary
3030-3923		All modes	Amateur

3cm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and Generic usage	ITU R3 Status
10.0-10.368		All Modes	
10.368-10.3683	2700	Weak signal Calling Frequency - 10.3681 GHz Beacons, All modes	Secondary Amateur
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	
24.048 - 24.04875	2700	All Modes, Narrow band Centre of Activity - 24.0482 GHz	Primary Amateur
24.04875 - 24.0488	2700	Beacons, Digi modes	
24.0488 - 24.048995	2700	Satellite, Beacons No restrictions on Satellite modes and bandwidth.	Primary Amateur,
24.049 - 24050	2700	Narrow band Satellite	Amateur - Satellite
24.050 - 24.250		Wide band CoA – 24.150 GHz	Secondary Amateur, Amateur – Satellite

EHF 6mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
47.00-47.088		All modes	Primary
47.088-47.090	2700	All modes, Narrow band CoA - 47.08820 GHz,	Amateur, Amateur - Satellite



	Satellite - No bandwidth	
	Restrictions	
47.090-47.200	All modes	

4mm Band

Frequencies (GHz)	BW (Hz)	Preferred Mode and Generic 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	co-Primary AMATEUR, Amateur- Satellite*1
78.0-79.0		All Modes	Secondary
79.0-81.0		All modes	Amateur, Amateur - Satellite

Footnote:

2.5mm Band

Engagemains (CHz)	DW (II-)	Preferred Mode and	ITU R3 Status
Frequencies (GHz)	BW (Hz)	Generic usage	
122.250-122.251	2700	All modes	~ .
122.251-123.000		All modes	Secondary Amateur

2.0mm Band

^{*1} The amateur and amateur satellite services share this band with radiolocation and radio astronomy, all of which are accorded primary status



Frequencies (GHz)	BW (Hz)	Preferred Mode and <i>Generic</i> usage	ITU R3 Status
134.0-134.928		All modes Satellite	Primary
134.928-134.930	2700	Narrow band CoA - 134.930 GHz	Amateur, Amateur – Satellite
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 Generic usage	ITU R3 Status
241.0-248.0		All modes	Secondary
248.0-248.01		All modes Satellite and narrow band.	Amateur, Amateur - Satellite
248.01-250.0		All modes	Primary Amateur, Amateur - Satellite

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.
