

# RSGB 2021 Band Plan

QuickLinks:- Updated: January-2021

Recent Changes		2018 Change	es Older Changes
<u>Notes</u>	<u>LF</u>	<u>MF</u> <u>H</u>	<u> </u>
<u>VHF</u>	<u>UHF</u>	Microwave	mmWave

NB: These band plans are largely based on those agreed at IARU Region-1 General Conferences with some local differences on frequencies above 430 MHz.

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#### Description **Date** 2019 3-Dec-2018 2M: Removal of old Microwave talkback from 144.175 2M: More generic Digital Usage term in place of AX25 or TCPIP usage on 144.925, 144.9375, 144.950 3-Dec-2018 2M: Correction to Simplex Channel designation to V16-V47, (was V16-V48) 3-Dec-2018 2M: Correction to Simplex Channel designation in Footnote-3 to V47 (was V46) 3-Dec-2018 2020 11-Dec-2019 60m: Editorial - Added hyperlink for 5MHz guidance page 70cm: Removal of BW limits in 430-431.9, 433.6-434.0, 435-440 to facilitate new digital modes 7-Dec-2019 70cm: Added General Note re FM/DV bandwidth 7-Dec-2019 70cm: Removal of CW-only EME centre. 432.0-432.1 now more generic CW/MGM 7-Dec-2019 23cm: Deleted PSK31 CoA at 1296.138 9-Dec-2019 23cm: Deleted redundant Notes 3 & 4 9-Dec-2019 11-Dec-2019 2mm: Added information note re NoV access to frequencies >275 GHz by Full Licensees 9-Dec-2019 Notes Page: Added CoA definition 9-Dec-2019 Notes Page: SSB usage guidance editorial update to 7053 from 7043 11-Dec-2019 Notes Page: Updated NoV bands reference to include 71 MHz and >275 GHz 2021 2-Dec-2020 15M: Added Note-1 for non-exclusive satellite usage designation in 21.125 - 21.145 10M: Removal of Maxium Bandwidth limits in 29.000-29.510 to faciliate wideband experimentation 2-Dec-2020 10M: Added Note-1 regarding experimental wideband operation 2-Dec-2020 2-Dec-2020 6M: Split of the 50.500-52 MHz range into more specific IARU-aligned segments 2-Dec-2020 6M: Deletion of 50.510 SSTV and 50.550 MHz Image designations 6M: Gateways now FMDV (and shorter description as not all are on common IARU channels) 2-Dec-2020 6M: Deletion of IARU Repeater Outputs at 51.9 MHz - not used in the UK 2-Dec-2020 2-Dec-2020 6M: Editorial update to Note-2

6M: Typo fixed - removed duplicate Note-5 (Excel only)

2M: Deleted 144.200 MHz Random MS SSB

Notes: Shortened 28 MHz

Notes: Shortened 3.5 MHz

6M: Note-5 usage - 50.770/790 designation moved to 51.970/990

4M: 70.25 Meteor Scatter and 70.20 SSB updated from calling to centre

70cm: 432.370 MHz FSK441 calling renamed to Meteor Scatter calling

70cm: Removal of Fast Scan (Analogue) TV and Note-4 that related to it

Notes: Added new Transmitter Setup and Linearity general note

6M: Wideband experimentation Note-6 updated in line with new IARU band plan

2M: Deletion of Note-7 re older EME range of 144.110-144.160 (to align with 144.100-144.150 band edges)

70cm: Split of 435-438 MHz to more clearly designate Satellite and Wideband experimentation

13cm: Removal of 500 Hz subsection to simplify the 2320.00-2323.800 narrowband segment

9cm: Editorials - correction of narrowband segment to be 3400-3400.8 and former EU17 note removed

2-Dec-2020

4-Dec-2020

4-Dec-2020

2-Dec-2020

2-Dec-2020 2-Dec-2020

4-Dec-2020

4-Dec-2020

4-Dec-2020

4-Dec-2020

4-Dec-2020

9-Dec-2020

9-Dec-2020 9-Dec-2020

Date	Description
15-Dec-17	60M: Note-4 has WRC-15 Frequencies added and WRC notes added in Usage column
15-Dec-17	60M: WSPR removed from 5290 kHz
15-Dec-17	60M: 5362-5370 UK Data usage note removed to avoid WRC-15 overlap, WSPR added

15-Dec-17	60M: 5403 USB usage deleted	
	0000 MIL II I ( III ) ( OL III )	200 L L L C CNL V/ C

15-Dec-17 2300 MHz: Updated Licence note as Channel Isles operation is now permitted under latest NoV terms

15-Dec-17 6M: Updated SBP description - deleted 'future'

15-Dec-17 6M: Deleted 50.6 RTTY

15-Dec-17 6M: Added new Note-6 for Digital Experimentation

15-Dec-17 2M: CW Band now starts at 144.100 not 144.110

15-Dec-17 2M: 144.138 PSK31 deleted

15-Dec-17 2M: Unified segments so SSB/MGM etc now runs rom 144.150-144.400

15-Dec-17 2M: Removed unnecessary extra line 144.195-144.205 MHz Random MS SSB as part of simplification

15-Dec-17 2M: Added Personal Weak Signal Beacons (144.491-144.493) in Beacon Guard band

15-Dec-17 2M: Removed 'centre' for Image modes as they are near a band edge

15-Dec-17 2M: Slight changes/clarifications to usage English for RAYNET, MS Calling, Note-7 etc

16-Dec-17 70cm: Beacon band upper limit corrected to IARU 432.490, from 432.500

16-Dec-17 70cm: Added 432.491-432.493 MHz Personal Weak Signal MGM Beacons (BW: 500 Hz max)

16-Dec-17 70cm: 434.4750-434.5250 MHz Internet voice gateways now DV only

16-Dec-17 70cm: 433.8000-434.2500 MHz Digital communications - ADDED '& Experiments'

16-Dec-17 70cm: Added 434.0000 Low Power Non-NoV Personal Hot-Spot usage
16-Dec-17 70cm: Added 438.8000 Low Power Non-NoV Personal Hot-Spot usage
16-Dec-17 70cm: Editorial - Merged usage for 433.7000-433.7750 MHz (Note 10)
16-Dec-17 70cm: 430.250-430.300 MHz UK DV 9 MHz reverse-split repeaters - Outputs
16-Dec-17 70cm: Added 439.250-439.300 MHz UK DV 9 MHz reverse-split repeaters - Inputs

16-Dec-17 70cm: Deleted 432.0880 MHz PSK31 centre of activity

16-Dec-17 23cm: Added 1296.741-1296.743 MHz Personal Weak Signal MGM Beacons

16-Dec-17 13cm: Updated Note-2 to add 2400-2402 alternative narrowband use in other countries

16-Dec-17 6cm: Introduce BW Column and reformat

16-Dec-17 6cm: Remove 5668 beacons and clarify names for preferred and alternative narrowband centres

16-Dec-17 Notes: Added 5MHz to 'No contests' bands

8-Jan-18 Highlighted Full Licensees Only on 600m, 60m, 146MHz, 2300MHz

8-Jan-18 60M: Clarify it is UK Usage Plan only. Further info - http://rsgb.org/main/operating/band-plans/hf/5mhz/

8-Jan-18 146MHz: Updated Power Limit from 25 to 50W

3-Dec-18 2M: Removal of old Microwave talkback from 144.175

3-Dec-18 2M: More generic Digital Usage term in place of AX25 or TCPIP usage on 144.925, 144.9375, 144.950

3-Dec-18
2M: Correction to Simplex Channel designation to V16-V47, (was V16-V48)
3-Dec-18
2M: Correction to Simplex Channel designation in Footnote-3 to V47 (was V46)

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Date Description
18-Dec-07 Changes to 75,500 – 76,000MHz allocation, deletion of usage between 142,000 – 144,000MHz
24-Dec-07 Notes moved from "4mm down" worksheet to the new "Notes" worksheet. Notes from the IARU Region 1 Band Plan added to
23-Nov-08 Changed the effectivity date for 40m band plan to 29/3/09 and amended all other to 1/1/09
23-Nov-08 Changed the note re date of conference from which the band plan is taken - note that this change is made on each worksheet
23-Nov-08 Complete change to 40m band plan, inc notes on the same worksheet
23-Nov-08 Added in QRP CoA at 18,130kHz and 18,150kHz digital voice centre of activity to 17m plan
23-Nov-08 Added in QRP CoA at 24,950kHz and 24,960kHz digital voice centre of activity to 12m plan
23-Nov-08 Added 3,630kHz - digital voice Center of Activity to 80m plan
23-Nov-08 Added 14,130kHz - digital voice centre of activity to 20m plan
23-Nov-08 Added 21,180kHz - digital voice centre of activity to 15m plan
23-Nov-08 Added 28,330kHz - digital voice centre of activity to 10m plan
23-Nov-08 Complete change to 136kHz plan
25-Nov-08 6M Band Plan: added 50.400MHz WSPR beacons
25-Nov-08 6M Band Plan: 50.710-50.910MHz: added DV to FM repeater outputs
25-Nov-08 6M Band Plan: 51.210-51.410MHz: added DV to FM repeater inputs + (Note 4)
25-Nov-08 6M Band Plan: 51.430-51.590MHz: added DV to FM simplex channels + (Note 4) also added simplex for clarification
25-Nov-08 6M Band Plan: added 'IARU common channels' designation to Internet gateways
25-Nov-08 6M Band Plan: added Note 4
26-Nov-08 4M Band Plan: 70.030MHz: added WSPR beacons
26-Nov-08 2M Band Plan: DELETED 144.000-144.035 MHz Moonbounce (EME) exclusive
26-Nov-08 2M Band Plan: DELETED 144.120-144.150 MHz Moonbounce (EME) MGM (JT65)
26-Nov-08 2M Band Plan: DELETED 144.150-144.160 MHz FAI and Moonbounce (EME) activity SSB
26-Nov-08 2M Band Plan: added EME MGM activity (Note 7)
26-Nov-08 2M Band Plan: 144.000-144.110MHz: added Telegraphy (including EME CW) to Usage column
26-Nov-08 2M Band Plan: 144.110-144.150MHz: added Telegraphy and MGM to Usage column
26-Nov-08 2M Band Plan: 144.150-144.180MHz: added Telegraphy, MGM and SSB to Usage column
26-Nov-08 2M Band Plan 144.490-144.500MHz: added 144.4905MHz +/- 500Hz WSPR beacons and beacon guard band
26-Nov-08 2M Band Plan: 144.900-145.1935MHz: added DV to FM repeater inputs + (Note 5)
26-Nov-08 2M Band Plan: 145.5935-145.7935MHz: added DV to FM repeater outputs
26-Nov-08 2M Band Plan: 145.200-145.5935MHz: added DV to FM simplex channels + (Note 5)(Note-6)
26-Nov-08 2M Band Plan: added 144.6125 MHz UK Digital Voice (DV) calling + (Note 5) (Note 6)(Note-9)
26-Nov-08 2M Band Plan: added 'IARU Common Channels' designation to 145MHz Internet Gateways
26-Nov-08 2M Band Plan: added Note 5
26-Nov-08 2M Band Plan: added Note 6
26-Nov-08 2M Band Plan: added Note 7
26-Nov-08 2M Band Plan: added Note 8
27-Nov-08 70cm Band Plan: 432.9940-433.3810: added DV to FM repeater outputs
27-Nov-08 70cm Band Plan: 434.5940-434.9810: added DV to FM repeater outputs + (Note 12)
27-Nov-08 70cm Band Plan: 433.3940-433.5810MHz added DV to FM simplex channels + (Note 12), (Note 13)
27-Nov-08 70cm Band Plan: 433.450MHz added Note 5 and 438.6125 for Digital Voice (DV) calling
27-Nov-08 70cm Band Plan: added Note 12
27-Nov-08 70cm Band Plan: added Note 13
29-Nov-08 23cm Band Plan: added Notes 5, 6
29-Nov-08 23cm Band Plan: added Notes 7, 8
29-Nov-08 23cm Band Plan: amended 1296.500-1296.800 - Image/ Data Centres & Transponder Outputs
29-Nov-08 23cm Band Plan: added DV to FM Repeater and Simplex segments (Notes-5, 6) plus reformatting
29-Nov-08 23cm Band Plan: added 'IARU common channels' designation to 1297 FM Gateways
29-Nov-08 23cm Band Plan: added 1296.750-1296.800 Local Beacons, 10W erp max
29-Nov-08 13cm Band Plan: added 2320.750-2320.800 Local Beacons, 10W erp max
30-Nov-08 9cm band Plan: added migration of EME activity from 3456 to 3400MHz + (Note 1)
30-Nov-08 9cm Band Plan: added 3400.750-3400.800 and designations for Local & Propagation Beacons
30-Nov-08 9cm Band Plan: DELETED 3456 MHz designation
30-Nov-08 9cm Band Plan: added 3400.750-3400.800 and designations for Local & Propagation Beacons
30-Nov-08 9cm Band Plan: added new 3402-3410 & 3410-3475MHz segments (Notes-2,3)
30-Nov-08 9cm Band Plan: added Note 2 and Note 3
30-Nov-08 6cm Band Plan: added 5760 MHz designations for Local & Propagation Beacons and 5668.8 usage
30-Nov-08 3cm Band Plan: added 10368.750-10369.800 and designations for Local & Propagation Beacons
30-Nov-08 12mm Band Plan: added 24048.750-24048.800 and designations for Local & Propagation Beacons
30-Nov-08 Formatting corrections on most microwave bands for Service/User descriptions
30-Nov-08 Added Digital Voice DV note to main Notes page
 1-Dec-08 40m Band Plan: Clarified Amateur Satellite Service Licence Note for 7.1-7.2 MHz
 1-Dec-08 Added 50.630MHz for Digital Voice
15-Dec-08 Change to the frequencies in the 7MHz note
17-Dec-08 70cm Band Plan: removed reference to 20 kHz necessary bandwidth at 435.000-438.000MHz
23-Dec-08 Added note "Where no DX traffic is involved, the contest segment should not include 7,175 - 7,200kHz."
 9-Jan-09 Editorial changes to sub-header and some cell formatting changes.
14-Jan-09 Typo corrections on 2.3GHz Note-2 and 3.4 GHz Note-1
 6-Mar-09 Corrected QRP freg on 17m band to 18086kHz
12-Dec-09 Added 51.510MHz FM calling frequency
21-Dec-09 Amended Notes 3&8 in the 23cm Band Plan (esp for 1240/1MHz & 1298/9MHz areas) to emphasise replanning
21-Dec-09 Added new Note 4 to 3410-3475MHz range
21-Dec-09 Corrected Narrowband BW to 500Hz on Notes page
21-Dec-09 Added Beacons and 1.3GHz to Notes Page
 2-Jan-10 Added words "Propagation Beacons only" to 432.4000-432.5000 MHz record
 2-Jan-10 Highlighted 432.8000-432.9900 MHz line in RED and made the words read "UK Beacons (Note 9)"
 8-Jan-10 Changed the word "Bandplan" to "Band Plan"
26-Jan-10 In "Notes" worksheet "Experimentation with NBFM Packet Radio on 29 MHz": 20.210 changed to 29.210 & "included" changed to
16-Dec-11 40M: Added Note 2 on Data and PSK31 at 7040kHz+ since the 2009 re-plan
16-Dec-11 40M: Deleted CW contest preferred segment; reformatted 7,060-7,100 MHz
16-Dec-11 10M: Amended FM/Repeater channels as per Sun City 2011
16-Dec-11 6M: 50.000-50.500 MHz major changes as per Sun City 2011
16-Dec-11 6M: 50.700-52.000 MHz changes for RAYNET, 25kHz and added IARU Repeater Outputs
16-Dec-11 4M: Changes to narrowband and beacon frequencies
16-Dec-11 2M: Footnote 10 added for RAYNET Changes
16-Dec-11 2M: Footnote 11 added for 144.975/145.575
16-Dec-11 70cm: Footnote 10 amended for RAYNET Changes
16-Dec-11 70cm: 437MHz designated for DATV centre of activity
16-Dec-11 70cm: Deleted MPT1327 designations, Added DV 9MHz split repeaters (approx freqs)
16-Dec-11 23cm: Widespread changes to data and repeater allocations -inc new Note 9
16-Dec-11 23cm: deleted 1296.370 FSK441 as per Sun City 2011
16-Dec-11 23cm: replaced 1298-1300 MHz with Sun City 2011 recommendations
16-Dec-11 13cm: Amended narrowband BW, replaced packet, updated formatting
16-Dec-11 76GHz: Other bands info moved to bottom of new 134GHz tab
16-Dec-11 134GHz: Added new bandplan tab inc new 134.928 MHz narrowband segment
 5-Apr-12 Corrected Telegraphy typos for 80 and 20m band
 5-Apr-12 Clarify VHF calling freqs, DV vs FM operating (added Note-12)
 5-Apr-12 Removed redundant AM footnote from 30m
 16-Jul-12 4M: Corrected WSPR beacons frequency typo (from 70.091 to 70.090 MHz)
 16-Jul-12 2M: Updated band plan for Digiital Communications in 144.8-145.0 MHz (esp for DV & FM Internet Gateways)
 16-Jul-12 2M: 145.2125 specifically for FM Gateways (though assignments may be reduced to protect 145.200 MHz E-S uplinks)
 9-Dec-12 Added Intro Tab
 9-Dec-12 Amendments Tab split into Latest and Older Changes Tabs
 9-Dec-12 Amended Notes Tab for clarifications for AM Operation, 472kHz, 5MHz, 2.3GHz, 3.4GHz
 9-Dec-12 136kHz: Updated countries in Radio Reg note - removed Libya, added South Sudan
 9-Dec-12 2M: amended 144.600 RTTY to Centre of Activity, DELETED superfluous second 144.600 RTTY line
 9-Dec-12 13cm: Added Note-4 and highlight due to spectrum release expected in 2350-2390 MHz
 9-Dec-12 9cm: Highlighted 3410+ spectrum release area (Note-4)
 9-Dec-12 10GHz: replaced 10,080 MHz packet links
12-Dec-12 600M: Added tab for new WRC-12 band - 472-479 kHz
12-Dec-12 60M: Added tab for UK 5MHz (experimental) frequencies
19-Dec-12 80M: Added missing 2.7kHz Bandwidth text at 3,775-3,800kHz.
19-Dec-12 600M: Amended Note-3 to clarify AM usage/bandwidth
19-Dec-12 2M: Added Note-13 for withdrawal of 145.2125 FM Gateways
19-Dec-12 70cm: Note-14 added for 437MHz DATV
19-Dec-12 23cm: Note-10 added for 23cm DATV
19-Dec-12 Finalised Notes Tab and new 60m tab
16-Jan-13 Updated Intro Tab, page margins
 22-Jul-13 10M: Removed downlink-only restriction on 29.3-29.5 MHz Amateur Satellites
 22-Jul-13 60M: Highlighted line added for 5290 kHz Beacons and WSPR
 22-Jul-13 4M: Fax designation removed from 70.300 MHz
 22-Jul-13 2M: WSPR Changed from 144.4905 to 144.4920 MHz
 22-Jul-13 2M: Note-14 added to highlight NBFM, to faciliate move of DV Gateway use from 144.875 to 144.8125
 22-Jul-13 2M: 'IARU Common Channel' designation added to most 144.8 DV Gateway frequencies
 22-Jul-13 70cm: Deletion of 439.9875 POCSAG Centre
 22-Jul-13 70cm: Deletion of 432.5-432.6 Linear Transponder Inputs
 22-Jul-13 70cm: Deletion of 432.6-432.8 Linear Transponder Outputs
29-Jul-13 136kHz - Power limit text amended to 'erp' as per UK license, from 'eirp'
 29-Jul-13 60M: Added UK Frequency Usage notes for CW QRP, Emergency Comms and Data modes
 29-Jul-13 60M: Moved all-modes/bandwidth note to below table
 29-Jul-13 6M: Added Note-6 re migration of Gateways from 51.9 MHz, to 50.5 MHz IARU Common Channels
27-Nov-13 6M: 51.9 MHz Gateways and Note-6 deleted, following migration to 50.5 MHz IARU Common channels
27-Nov-13 6M: Merged IARU-aligned Repeater Outputs at 51.9MHz to a single block following Gateway migrations to 50.5MHz
27-Nov-13 2M: 144.8125 MHz now IARU Common channel for DV gateways (moved from 144.875)
27-Nov-13 2M: 144.875 MHz vacant channel now 'tbd' following completion of IARU DV Gateway alignments
27-Nov-13 2M: Updated Note-14 to emphasise NBFM use of 144.800
27-Nov-13 2M: Added Note-15 to indicate 144.875 - 144.975 designations are subject to review and potential change
15-Dec-13 60M: Added 5,317 kHz - AM 6kHz max. bandwidth
15-Dec-13 60M: Added 5,403.5kHz - USB common international frequency
 1-Jan-15 Notes Tab - MGM and WSPR notes added
 1-Jan-15 Notes Tab - revised text for 472 kHz, 2.3GHz and 3.4GHz due to licence changes
 1-Jan-15 146-147MHz: New band plan added copied from October 2014
 1-Jan-15 2300-2302MHz: New band plan added, as per RadCom Jan-2014
 1-Jan-15 600M: Licensing notes now refer to new licence terms, not NoV
 1-Jan-15 600M: Inserted new usage note for 472-475 and 475-479
 1-Jan-15 60M: Licensing notes amended to refer to new licence terms, not NoV
 1-Jan-15 10M: 29,000-29,100 amended to 6kHz all modes and accommodate AM usage
 1-Jan-15 4M: WSPR designation corrected to 70.091, from 70.090 MHz
 1-Jan-15 4M: RTTY designation removed from 70.300 MHz
 1-Jan-15 2M: Added new 144.000-144.025 All modes / Satellite segment
 1-Jan-15 2M: 144.050 MHz Telegraphy calling renamed to Centre
 1-Jan-15 2M: 144.300 MHz SSB calling now Centre
 1-Jan-15 2M: 144.500 MHz SSTV calling now Image Modes centre
 1-Jan-15 2M: 144.525 MHz ATV SSB Talk-back deleted
 1-Jan-15 2M: Note-8 simplified for 144.550 AM usage
 1-Jan-15 2M: 144.600 RTTY renamed to Data centre of activity (MGM, RTTY, etc.,)'
 1-Jan-15 2M: 144.700 MHz FAX deleted
 1-Jan-15 2M: 144.875-144.9125 packet deleted
 1-Jan-15 2M: 144.925-144.950 packet updated
 1-Jan-15 2M: 144.975 wideband packet deleted, future usage tbd
 1-Jan-15 2M: 145.2125 FM Internet Gateways deleted, Note-13 blanked
 1-Jan-15 2M: 145.300 RTTY deleted
 1-Jan-15 2M: 145.5875 included for Note-11
 1-Jan-15 2M: Note-15 deleted following Packet review
 1-Jan-15 13cm: Removed 2350-2390 MHz and Note-4
 1-Jan-15 13cm: Realigned usage and Note-1 in 2321-22 to FM/DV as per IARU-R1 plan and to act as a narrowband guardband
 1-Jan-15 13cm: Removed EME and altered usage to all modes in 2390-2400
 1-Jan-15 13cm: Reduced designationsl in 2310-2320 MHz
 1-Jan-15 13cm: Reset 2322-2350 to generic wideband modes
 1-Jan-15 9cm: Removed 3410-3475 MHz and Note-4
 1-Jan-15 9cm: Added bandwidth column
 1-Jan-15 9cm: Revised usage notes, including addition of DATV repeater outputs
 1-Jan-15 3cm: Added bandwidth column
 1-Jan-15 3cm: Deleted Note-1 as wideband usage is to be aligned based on Note-2
 1-Jan-15 3cm: Removed obsolete linear tranponder, repeater and datalink usage
 1-Jan-15 3cm: Added current TV and Voice Repeater usage
 1-Jan-15 3cm: Revised 10-10.125 GHz - including yellow highlight and new Note-4 for Primary User issues
 2-Jan-15 Notes Tab - eSSB note added, yellow highlights updated
 2-Jan-15 70cm: Note-3 re FAX deleted and removed from 433.700 MHz
 2-Jan-15 70cm: 432.700 MHz FAX deleted
 2-Jan-15 70cm: 432.600 and 433.600 RTTY deleted
 2-Jan-15 70cm: Added missing Licence power restriction for 430-432 MHz
 2-Jan-15 70cm: Fixed typo in Note-1 for case of 'i.e.'
 2-Jan-15 2300-2302MHz: Power limit corrected
 3-Jan-15 70cm: Updated Note-8 for all Internet Gateways as 12.5kHz Channels, 5W (7dBW) max, attended-only
 3-Jan-15 70cm: Updated 430.0125-430.0750 MHz Gateways to refer to Note-8
 3-Jan-15 70cm: Updated 431.0750-431.1750 MHz Gateways to refer to Note-8
 3-Jan-15 70cm: Updated 433.9500-434.0500 MHz Gateways to refer to Note-8
 3-Jan-15 70cm: Updated 434.4750-434.5250 MHz Gateways to refer to Note-8
 3-Jan-15 70cm: 432.3500 MHz shortened description to Microwave talkback as per 2m, as its not an official calling channel
 3-Jan-15 70cm: 432.800 -432.900 UK Beacon band deleted as new frequencies are in the IARU segment
 3-Jan-15 70cm: Note-9 re UK beacon band deleted
30-Nov-15 10M: 29.530 Internet Gateways deleted from IARU Repeater segment
30-Nov-15 10M: 29.630 Internet Gateways deleted from IARU Repeater segment
30-Nov-15 10M: 29.210 Internet Gateways moved to 29.280
30-Nov-15 10M: 29.270 Internet Gateways Channel added
30-Nov-15 160M: Added 32W (15dBW) max Licence Power limit note for 1850-2000 kHz
30-Nov-15 4M: Added 160W (22dBW) Power limit edit
30-Nov-15 6M: Added 100W (20dBW) Power limit to 51-52 MHz Licence note
30-Nov-15 70cm: Neutralised direction for RAYNET 7.6MHz talkthrough on 430.800 / 438.400 MHz
30-Nov-15 Notes: AM bandwidth in all-modes segments clarified
30-Nov-15 70cm: 430.0125-430.0750 MHz Internet voice gateways clarified as FM
30-Nov-15 70cm: 431.0750-431.1750 MHz Internet voice gateways clarified as DV
 8-Jan-16 70cm: 432.4000-432.5000 Beacons - Remove obsolete Note-9 reference
28-Jan-16 70cm: 430.400-430.775 MHz UK DV 9 MHz split repeaters - Inputs (Added frequencies)
28-Jan-16 70cm: 439.400-439.775 MHz UK DV 9 MHz split repeaters - Outputs (Added frequencies)
 1-Jun-16 30M: Narrowband modes amended to start at 10,130 (was 10,140)
 1-Jun-16 80M: 200Hz Narrowband modes segment added at 3,570-3,580 - was Telegraphy only
 1-Jun-16 80M: Clarified 3,700-3,775 and 3,775-3,800 (editorial changes only)
 1-Jun-16 10M: Clarified 28,320-29,000 (editorial changes only)
 1-Jun-16 6M: Deleted 50.401 MHz WSPR beacons +/- 500Hz
 1-Jun-16 4M: Deleted 70.091 MHz WSPR beacons +/- 500Hz
 1-Jun-16 2M: Deleted 144.4920 MHz +/- 500Hz WSPR beacons
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1-Jun-16 146 MHz: Updated NoV expiry wording (editorial)

17-Jan-17 60M: Note-4 added - Contacts within the UK should avoid the WRC-15 allocation (5351.5 – 5366.5 kHz) if possible

### Notes to the Band Plan

ITU-R radio regulation RR 1.152 and Recommendation SM.328 (extract):

Necessary bandwidth: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

Foundation and Intermediate Licence holders are advised to check their licences for the permitted power limits and conditions applicable to their class of licence.

CW, SSB and those modes listed as Centres of Activity, plus AM (Consideration should be given to **All Modes** 

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 500Hz bandwidth, including CW, RTTY, PSK, etc

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

Below 10MHz use lower sideband (LSB), above 10MHz use upper sideband (USB). Note the lowest Sideband usage dial settings for LSB Voice modes are 1843, 3603 and 7053kHz on 160, 80 and 40m. Note that on

5MHz USB is used.

**Amplitude** Modulation (AM) Amplitude Modulation (AM) with a bandwidth greater than 2.7kHz is acceptable in the all-modes segments provided users consider adjacent channel activity when selecting operating frequencies

(Davos 2005)

Extended SSB (eSSB)

Digital Voice (DV)

Extended SSB (eSSB) is only acceptable in the all-modes segments provided users consider adjacent channel activity when selecting operating frequencies

Users of Digital Voice (DV) should check that the channel is not in use by other modes (CT08\_C5\_Rec20).

FM Repeater & **Gateway Access Beacons** 

CTCSS Access is recommended. Toneburst access is being withdrawn in line with IARU-R1

recommendations

Propagation Beacon Sub-bands are highlighted - Please avoid transmitting in them!!

MGM

M(achine) G(enerated) M(ode) indicates those transmission modes relying fully on computer processing such as RTTY, AMTOR, PSK31, JTxx, FSK441 and the like. This does not include Digital Voice (DV) or Digital Data (DD)

Above 30 MHz, WSPR frequencies in the band plan are the centre of the transmitted frequency (not the suppressed carrier frequency or the VFO dial setting).

**Transmitter Setup** and Linearity

WSPR

Close attention should be given to power amplifier linearity to control the final transmitted bandwidth and avoid spectral regrowth affecting adjacent users. In particular this can be a major issue when operating digital modes. It is recommended that operators do not use more power than is necessary, and that care is taken to ensure sound cards, interfaces, and other equipment are properly set up so as to minimise the potential for interference.

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

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

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

#### Transmitting frequencies

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

Centre of Activity (CoA)

A guide to where users of a particular mode or activity tend to operate. The bandplan does not give such users precedence over other modes or activities

### 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.

### 472-479 kHz

Access is available to Full Licensees only - see licence schedule for additional condtions

### 1.8MHz

Radio Amateurs in countries that have a SSB allocation ONLY below 1840kHz, 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 phone allocations in accordance with the Region 1 Band Plan (UBA - Davos 2005)

### 3.5MHz

Inter-Continental operations should be given priority in the segments 3500 - 3510kHz and 3775 - 3800kHz

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

3510 - 3600kHz may be used for unmanned ARDF beacons (CW, A1A) (Recommendation DV05\_C4\_Rec\_12)

### 5MHz

Access is available to Full Licensees only - see licence schedule for additional condtions

### 7MHz

The band segment 7040 - 7060kHz may be used for automatic controlled data stations (unattended) traffic in the areas of Africa south from the equator during local daylight hours.

Where no DX traffic is involved, the contest segment should not include 7,175 - 7,200kHz.

### 10MHz

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 10120kHz to 10140kHz 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 10MHz band.

Operators should not transmit on frequencies between 29.3 and 29.51MHz to avoid interference to amateur satellite downlinks

### **Experimentation with NBFM Packet Radio at 29MHz:**

Preferred operating frequencies on each 10kHz from 29.210 to 29.290MHz inclusive should be used. A deviation of +/- 2.5kHz being used with 2.5kHz as maximum modulation frequency.

### 1.3GHz

The band is subject to re-planning. It is also shared with air traffic radar

### 2.3 GHz (2310-2350 and 2390-2400MHz)

Operation is subject to specific licence conditions and guidance - see also the Ofcom PSSR statement

### 3.4GHz (3400-3410 MHz)

Operation is subject to specific licence conditions and guidance - see also the Ofcom PSSR statement

## Innovation Bands: 70.5-71.5 MHz, 146-147 MHz, 2300-2302 MHz and >275 GHz

Access to these bands requires an appropriate NoV, which is available to Full Licensees only

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

136 kHz	Necessary Bandwidth	UK Usage
135.7-137.8 kHz	200	CW, QRSS and narrow-band digital modes
LICENCE NOTES:	Amateur Service 1 Watt (0 dBW)	·

**R.R. 5.67B** The use of the band 135.7-137.8kHz in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Lebanon, Syrian Arab Republic Sudan, South Sudan and Tunisia is limited to fixed and maritime mobile services. The amateur service shall not be used in the above-mentioned countries in the band 135.7-137.8kHz, and this should be taken into account by the countries authorising such use (WRC-12)

IARU Region-1 does not have a formal band plan for this allocation, but has a usage recommendation (Note-1) Access to this band is available to Full Licensees only

472 kHz (600m)	Necessary Bandwidth	UK Usage
472-479 kHz	500	CW, QRSS and narrow-band digital modes (Note-1)
(Note-2)		

Note-1: Usage recommendation: - 472-475 kHz CW-only 200Hz max BW, 475-479 kHz - CW & Digimodes

**Note-2:** It should be emphasised that this band is available on a non-interference basis to existing services. UK amateurs should be aware that some overseas stations may be restricted in their use of transmit frequency in order avoid interference to nearby radionavigation service Non-Directional Beacons

**LICENCE NOTES**: Amateur Service **Secondary User. Full Licensees only - 5 Watts eirp maximum**Note that specific conditions regarding this band are specified by the Licence Schedule notes

R.R. 5.80B 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)

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

1.8 MHz (160m)	Necessary	UK Usage
	Bandwidth	
1,810-1,838 kHz	200 Hz	Telegraphy
1,838-1,840	500 Hz	Narrow band modes
1,840-1,843	2.7 kHz	All modes
1,843-2,000	2.7 kHz	Telephony (Note 1), Telegraphy
		1,836 kHz QRP (low power) Centre of Activity,
		1,960 kHz DF Contest beacons (14dBW)

Note 1: Lowest LSB carrier frequency (dial setting) should be 1,843 kHz.

AX25 packet should not be used on the 1.8 MHz band.

LICENCE NOTES: 1,810-1,850 kHz Primary User: 1810-1830 kHz on a non-interference basis to stations outside of the UK.

1,850-2,000 kHz **Secondary User: 32W (15dBW) Maximum** 

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

3.5 MHz (80m)	Necessary	UK Usage
	Bandwidth	
3,500-3,510 kHz	200 Hz	Telegraphy - Priority for inter-continental operation
3,510-3,560	200 Hz	Telegraphy - contest preferred. 3,555 kHz - QRS (slow telegraphy) Centre of Activity
3,560-3,570	200 Hz	Telegraphy 3,560 kHz - QRP (low power) Centre of Activity
3,570-3,580	200 Hz	Narrow band modes
3,580-3,590	500 Hz	Narrow band modes
3,590-3,600	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
3,600-3,620	2.7 kHz	All modes - automatically controlled data stations (unattended), (Note 1)
3,600-3,650	2.7 kHz	All modes - Phone contest preferred, (Note 1). 3,630kHz - digital voice Center of Activity
3,650-3,700	2.7 kHz	All modes - Telephony, Telegraphy
		3,663 kHz may be used for UK emergency comms traffic.
		3,690 kHz SSB QRP (low power) Centre of Activity.
3,700-3,775	2.7 kHz	All modes - Phone contest preferred
		3,735 kHz Image mode Centre of Activity
		3,760 kHz IARU Region 1 Emergency Centre of Activity
3,775-3,800	2.7 kHz	All modes - Phone contest preferred
		Priority for inter-continental telephony (SSB) operation
Note 1: Lowest LSB	carrier frequency	(dial setting) should be 3,603 kHz.
LICENCE NOTES: I	Primary User: S	hared with other user services:

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

#### Access to this band is available to Full Licensees only

See Licence Schedule notes for specific conditions

5 MHz (60m)	Available	UK Usage
	Width	
5258.5 - 5264.0 kHz	5.5 kHz	5262 kHz - CW QRP Centre of Activity
5276.0 - 5284.0	8 kHz	5278.5 kHz - may be used for UK emergency comms traffic
5288.5 - 5292.0	3.5 kHz	Beacons on 5290 kHz (Note-2)
5298.0 - 5307.0	9 kHz	
5313.0 - 5323.0	10 kHz	5317 kHz - AM 6kHz max. bandwidth
5333.0 - 5338.0	5 kHz	
5354.0 - 5358.0	4 kHz	Within WRC-15 Band
5362.0 - 5374.5	12.5 kHz	Partly within WRC-15 band, WSPR
5378.0 - 5382.0	4 kHz	
5395.0 - 5401.5	6.5 kHz	
5403.5 - 5406.5	3 kHz	

Unless indicated, usage is all-modes (necessary bandwidth to be within channel limits)

Note 1: Upper Sideband is recommended for SSB activity.

Note 2: Activity should avoid interference to the experimental beacons on 5290 kHz

Note 3: Amplitude Modulation is permitted with a maximum bandwidth of 6kHz, on frequencies with at least 6kHz available width

Note 4: Contacts within the UK should avoid the WRC-15 band (5351.5 - 5366.5 kHz) if possible

For the latest current guidance refer to the RSGB website

LICENCE NOTES: Full Licensees only Secondary User: 100W max

Note that specific conditions regarding operating, transmission bandwidth, power and antennas are specified in the Licence

#### Notes to the Usage Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

7 MHz (40m)	Necessary	UK Usage
	Bandwidth	
7,000-7,040 kHz	200 Hz	Telegraphy. 7,030 kHz - QRP Centre of Activity
7,040-7,047	500 Hz	Narrow band modes (Note 2)
7,047-7,050	500 Hz	Narrow band modes, automatically controlled data stations (unattended)
7,050-7,053	2.7 kHz	All modes, automatically controlled data stations (unattended), (Note 1)
7,053-7,060	2.7 kHz	All modes, digimodes
7,060-7,100	2.7 kHz	All modes, SSB Contest Preferred Segment
		digital voice 7,070kHz; SSB QRP Centre of Activity 7,090 kHz
7,100-7,130	2.7 kHz	All modes, 7,110kHz - Region 1 Emergency Centre of Activity.
7,130-7,200	2.7 kHz	All modes, SSB Contest Preferred Segment; 7,165kHz - Image Centre of Activity
7,175-7,200	2.7 kHz	All modes, priority for intercontinental operation

Note 1: Lowest LSB carrier frequency (dial setting) should be 7,053 kHz.

Note 2: PSK31 activity starts from 7,040kHz.

Since 2009, the narrow band modes segment starts at 7,040kHz.

LICENCE NOTES: 7,000-7,100 kHz Amateur and Amateur Satellite Service - Primary User.

7,100-7,200 kHz Amateur Service - Primary User.

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

10 MHz (30m)	Neccesary Bandwidth	UK Usage
10,100-10,130 kHz		Telegraphy (CW) 10,116 kHz - QRP (low power) Centre of Activity
10,130-10,150		Narrow band modes Automatically controlled data stations (unattended) should avoid the use of the 10 MHz band

The 10 MHz band is allocated to the Amateur Service only on a Secondary basis. The IARU has agreed that only CW and other narrow bandwidth modes are to be used on this band. Likewise the band is not to be used for contests and bulletins. SSB may be used on the 10 MHz band during emergencies involving the immediate safety of life and property, and only by stations actually involved with the handling of emergency traffic. The band segment 10,120-10,140 kHz may only be used for SSB transmissions in the area of Africa south of the equator during local daylight hours.

LICENCE NOTES: Amateur Service - Secondary User.

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

14MHz (20m)	Necessary	UK Usage
	Bandwidth	
14,000-14,060 kHz	200 Hz	Telegraphy - contest preferred
		14,055 kHz QRS (slow telegraphy Centre of Activity
14,060-14,070	200 Hz	Telegraphy
		14,060 kHz QRP (low power) Centre of Activity
14,070-14,089	500 Hz	Narrow band modes
14,089-14,099	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
14,099-14,101		IBP - reserved exclusively for beacons
14,101-14,112	2.7 kHz	All modes - automatically controlled data stations (unattended)
14,112-14,125	2.7 kHz	All modes (excluding digimodes)
14,125-14,300	2.7 kHz	All modes - SSB contest preferred segment
		14,130kHz - digital voice centre of activity
		14,195+- 5 kHz Priority for Dxpeditions
		14,230 kHz - Image Centre of Activity.
		14,285 kHz - QRP Centre of Activity
14,300-14,350	2.7 kHz	All modes
		14,300 kHz Global Emergency Centre of Activity
LICENCE NOTES: A	L Amateur Servi	l ce - Primary User.
14	,000-14,250 kl	Hz Amateur Satellite Service - Primary User.

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

18 MHz (17m)	Necessary	UK Usage	
	Bandwidth		
18,068-18,095 kHz	200 Hz	Telegraphy 18,086 kHz QRP (low power) Centre of Activity.	
18,095-18,105	500 Hz	Narrow band modes	
18,105-18,109	500 Hz	Narrow band modes - automatically controlled data stations (unattended)	
18,109-18,111		IBP - reserved exclusively for beacons	
18,111-18,120	2.7 kHz	All modes - automatically controlled data stations (unattended)	
18,120-18,168	2.7 kHz	All modes, 18,130kHz SSB QRP centre of activity	
		18,150kHz digital voice centre of activity	
		18,160 kHz Global Emergency Centre of Activity	
LICENCE NOTES: Ar	LICENCE NOTES: Amateur and Amateur Satellite Service - Primary User.		
The band is not to be	used for contest	s or bulletins.	

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

21 MHz (15m)	Neccesary Bandwidth	UK Usage	
21,000-21,070 kHz	200 Hz	Telegraphy	
		21,055 kHz QRS (slow telegraphy) Centre of Activity.	
		21,060 kHz QRP (low power) Centre of Activity	
21,070-21,090	500 Hz	Narrow band modes	
21,090-21,110	500 Hz	Narrow band modes - automatically controlled data stations (unattended)	
21,110-21,120	2.7 kHz	All modes (excluding SSB) - automatically controlled data stations (unattended)	
21,120-21,149	500 Hz	Narrow band modes	
21,149-21,151		IBP - reserved exclusively for beacons	
21,151-21,450	2.7 kHz	All modes.	
		21,180kHz - digital voice centre of activity	
		21,285 kHz - QRP Centre of Activity.	
		21,340 kHz - Image Centre of Activity.	
		21,360 kHz - Global Emergency Centre of Activity	
Note 1: 21,125-21,24	45 is also design	ated for use by amateur satellites	
LICENCE NOTES: A	mateur and Am	ateur Satellite Service - Primary User.	

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

	Dan duvidable		
	Bandwidth		
24,890-24,915 kHz	200 Hz	Telegraphy	
		24,906 kHz QRP (low power) centre of activity	
24,915-24,925	500 Hz	Narrow band modes	
24,925-24,929	500 Hz	Narrow band modes - automatically controlled data stations (unattended)	
24.929-24.931		IBP - reserved exclusively for beacons	
24,931-24,940	2700	All modes - automatically controlled data stations (unattended)	
24,940-24,990	2700	All modes, 24,950kHz SSB QRP Centre of Activity	
		24,960kHz digital voice centre of activity	
LICENCE NOTES: Ama	ateur and Ama	ateur Satellite Service - Primary User.	
The band is not to be us	sed for contest	s or bulletins.	

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

28 MHz (10m)	Necessary Bandwidth	UK Usage			
28,000-28,070 kHz	200 Hz	Telegraphy			
20,000-20,070 KHZ	200 HZ	28,055 kHz QRS (slow telegraphy) Centre of Activity.			
		28,060 kHz QRP (low power) Centre of Activity.			
20 070 20 420	500 Hz				
28,070-28,120		Narrow band modes			
28,120-28,150	500 Hz	Narrow band modes - automatically controlled data stations (unattended)			
28,150-28,190	500 Hz	Narrow band modes			
28,190-28,199		IBP - regional time shared beacons			
28,199-28,201		IBP - world wide time shared beacons			
28,201-28,225	0.7111	IBP - continuous-duty beacons			
28,225-28,300	2.7 kHz	All modes - beacons			
28,300-28,320	2.7 kHz	All modes - automatically controlled data stations (unattended)			
28,320-29,000	2.7 kHz	All modes			
		28,330 kHz - Digital Voice centre of activity			
		28,360 kHz - QRP Centre of Activity.			
		28,680 kHz - Image Centre of Activity.			
29,000-29,100	-	All modes - See Note-1 regarding 29,000-29,510 kHz			
29,100-29,200	-	All modes - FM simplex - 10 kHz channels			
29,200-29,300	-	All modes - automatically controlled data stations (unattended)			
		29,270 kHz UK Internet voice gateway - unattended			
		29,280 kHz UK Internet voice gateway - unattended			
		29,290 kHz UK Internet voice gateway - unattended			
29,300-29,510	-	Satellite links			
29,510-29,520		Guard channel			
29,520-29,590	6 kHz	All modes - FM repeater inputs (RH1-RH8)			
29,600	6 kHz	All modes - FM calling channel			
29,610	6 kHz	All modes - FM simplex repeater (parrot) - input and output			
29,620-29,700	6 kHz	All modes - FM repeater outputs (RH1-RH8)			

**Note-1:** Experimental wide bandwidth operation within 29,000 - 29510 must be on a non-interference basis to other stations, including the amateur satellite service segment at 29300 - 29510 kHz.

**LICENCE NOTES:** Amateur and Amateur Satellite Service - **Primary User:** 26dBW permitted Beacons may be established for D.F. competitions except within 50km of NGR SK985640 (Waddington)

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

50 MHz (6m)	Necessary Bandwidth	UK Usage	
50.000-50.100 MHz	500 Hz	Telegraphy Only (except for Beacon Project) Note-2	
		<b>50.000-50.030</b> MHz reserved for Synchronised Beacon Project (Note 2) Region-1: 50.000-50.010; Region-2: 50.010-50.020; Region-3: 50.020-50.030	
		50.050 MHz Future International Centre of Activity 50.090 MHz Intercontinental DX Centre of Activity (Note 1)	
50.100-50.200	2.7 kHz	SSB/Telegraphy - International Preferred 50.100-50.130 MHz Intercontinental DX Telegraphy & SSB (Note 1) 50.110 MHz Intercontinental DX Centre of Activity	
		50.130-50.200 MHz General International Telegraphy & SSB 50.150 MHz International Centre of Activity	
50.200-50.300	2.7 kHz	SSB/Telegraphy - General Usage 50.285 MHz Crossband Centre of Activity	
50.300-50.400	2.7 kHz	MGM/Narrowband/Telegraphy 50.305 MHz PSK Centre of Activity 50.310-50.320 MHz EME 50.320-50.380 MHz MS	
50.400-50.500		Propagation Beacons Only	
50.500-50.700	-	All Modes. 50.520 MHz FM/DV Internet voice gateway 50.530 MHz FM/DV Internet voice gateway 50.540 MHz FM/DV Internet voice gateway 50.600-50.700 MHz Digital communications 50.630 MHz Digital Voice (DV) calling	
50.700-50.900	12 kHz	50.710-50.890 MHz <b>FM/DV</b> Repeater Outputs (10 kHz channel spacing)	
50.900-51.200	-	All Modes	
51.200-51.400	12 kHz	51.210-51.390 MHz <b>FM/DV</b> Repeater Inputs (10 KHz channel spacing) (Note 4)	
51.400-52.000	-	All Modes 51.410-51.590 MHz FM/DV Simplex (Note 3) (Note 4) 51.510 MHz FM calling frequency 51.530 MHz GB2RS news broadcast and slow morse 51.650 & 51.750 MHz See Note 5 (25kHz aligned)	
		51.970 & 51.990 MHz See Note 5	

Note 1: Only to be used between stations in different continents (not for intra-European QSOs).

Note 2: 50.0-50.1MHz is currently shared with Propagation Beacons. These are due to be migrated

to 50.4-50.5 MHz, to create more space for Telegraphy and a new Synchronised Beacon Project

Note 3: 20 kHz channel spacing. Channel centre frequencies start at 51.430 MHz.

Note 4: Embedded data traffic is allowed with digital voice (DV)

Note 5: May be used for Emergency Communications and Community Events

Note-6: Digital Experiments to support innovation may occur around 50.6, 51.0 or 51.7 MHz

with maximum bandwidths of 50, 200 and 500 kHz respectively on a shared non-interference basis

LICENCE NOTES: Amateur Service 50.0-51.0 MHz - Primary User.

Amateur Service 51.0-52.0 MHz - Secondary User: 100W (20dBW) max

Available on the basis on non-interference to other services (inside or outside the UK).

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

70 MHz (4m)	Necessary Bandwidth	UK Usage (Note 1)		
70.000-70.090 MHz	1 kHz	Propagation Beacons only		
70.000-70.090 WIT12	I KI IZ	Fropagation beacons only		
70.090-70.100	1 kHz	Personal Beacons		
70.100-70.250	2.7 kHz	Narrow Band modes		
		70.185 MHz Cross-band activity centre		
		70.200 MHz CW/SSB centre		
		70.250 MHz MS centre		
70.250-70.294	12 kHz	All Modes		
		70.260 MHz AM/FM calling		
		70.270 MHz MGM centre of activity		
70.294-70.500	12 kHz	All modes channelised operations using 12.5 kHz spacing.		
70.204 70.000	12 1112	70.3000 MHz		
		70.3125 MHz Digital modes		
		70.3250 MHz DX Cluster		
		70.3375 MHz Digital modes		
		70.3500 MHz Internet voice gateway (Note 2)		
		70.3625 MHz Internet voice gateway		
		70.3750 MHz See Note 2		
		70.3875 MHz Internet voice gateway		
		70.4000 MHz See Note 2		
		70.4125 MHz Internet voice gateway		
		70.4250 MHz FM simplex - used by GB2RS news broadcast		
		70.4375 MHz Digital modes (special projects)		
		70.4500 MHz FM calling		
		70.4625 MHz Digital modes		
		70.4750 MHz		
		70.4875 MHz Digital modes		
Note 4. Uses a book				

Note 1: Usage by operators in other countries may be influenced by restrictions in their national allocations

Note 2: May be used for Emergency Communications and Community Events

LICENCE NOTES: Amateur Service 70.0-70.5 MHz Secondary User: 160W (22dBW) Maximum

Available on the basis of non-interference to other services (inside or outside the UK).

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

144 MHz (2m)	4 MHz (2m) Necessary UK Usage Bandwidth	
144.000-144.025 MHz	2700Hz	All modes - including Satellite downlinks
144.025-144.100 MHz	500Hz	Telegraphy (including EME CW)
	000.12	144.050 MHz Telegraphy Centre of Activity
		144.100 MHz Random MS telegraphy calling (Note 1)
		144.100 MHZ Kandom MS telegraphy calling (Note 1)
144.100-144.150	500Hz	Telegraphy and MGM
		EME MGM activity
144.150-144.400	2700Hz	Telegraphy, MGM and SSB
		144.250 MHz GB2RS news broadcast and slow Morse
		144.260 MHz See Note 10
		144.300 MHz SSB Centre of Activity
		144.370 MHz MGM MS calling
44.400-144.490		Propagation Beacons only
44.490-144.500		Beacon guard band
		144.491-144.493 MHz Personal Weak Signal MGM Beacons (BW: 500 Hz max)
144.500-144.794	20 kHz	All Modes (Note-8)
		144.500 MHz Image Modes (SSTV, Fax etc)
		144.600 MHz Data Centre of Activity (MGM, RTTY etc)
		144.6125 MHz UK Digital Voice (DV) calling (Note 9)
		144.625-144.675 MHz See Note 10
		144.750 MHz ATV Talk-back
		144.775-144.794 MHz See Note 10
144.794-144.990	12 kHz	MGM / Digital Communications
		144.800-144.9875 MHz Digital modes (including unattended)
		144.8000 MHz Unconnected nets - APRS, UiView etc (Note 14)
		144.8125 MHz DV Internet voice gateway (IARU common channel)
		144.8250 MHz DV Internet voice gateway (IARU common channel)
		144.8375 MHz DV Internet voice gateway (IARU common channel)
		144.8500 MHz DV Internet voice gateway (IARU common channel)
		144.8625 MHz DV Internet voice gateway (IARU common channel)
		144.9250 MHz Digital usage
		144.9375 MHz Digital usage
		144.9500 MHz Digital usage
		144.9625 MHz FM Internet voice gateway
		144.9750, 144.9875 MHz tbd (Note 11)
144.990-145.1935	12 kHz	FM/DV RV48 - RV63 Repeater input exclusive (Note 2) (Note 5)
145.200	12 kHz	FM/DV Space communications (e.g. I.S.S.) - Earth-to-Space
145.200	12 KHZ	145.2000 MHz (Note 4) & (Note 10)
145.200-145.5935	12 kHz	<b>FM/DV</b> V16-V47 FM/DV simplex (Note 3) (Note 5) (Note-6)
145.200-145.5955	12 KHZ	
		145.2250 MHz See Note 10
		145.2375 MHz FM Internet voice gateway (IARU common channel)
		145.2500 MHz Used for slow Morse transmissions
		145.2875 MHz FM Internet voice gateway (IARU common channel)
		145.3375 MHz FM Internet voice gateway (IARU common channel)
	1	145.5000 MHz FM calling (Note 12)
	1	145.5250 MHz Used for GB2RS news broadcast.
	1	145.5500 MHz Used for rally/exhibition talk-in
	1	145.5750, 145.5875 MHz (Note 11)
145.5935-145.7935	12 kHz	FM/DV RV48 - RV63 Repeater output (Note 2)
145.800	12 kHz	FM/DV Space communications (e.g. I.S.S.) - Space-Earth
145.806-146.000	12 kHz	All Modes - Satellite exclusive
	I	

Note 2: 12.5kHz channels numbered RV48-RV63. RV48 input = 145.000 MHz, output=145.600 MHz.

Note 3: 12.5kHz simplex channels numbered V16-V47. V16=145.200 MHz.

**Note 4:** Emergency Communications Groups utilising this frequency should take steps to avoid interference to ISS operations in non-emergency situations.

Note 5: Embedded data traffic is allowed with digital voice (DV)

Note 6: Simplex use only - no DV gateways

Note 7: not used

**Note 8:** Amplitude Modulation (AM) is acceptable within the All Modes segment. AM usage is typically found on 144.550MHz. Users should consider adjacent channel activity when selecting operating frequencies

Note 9: In other countries IARU Region-1 recommend 145.375 MHz

Note 10: May be used for Emergency Communications and Community Events

Note 11: May be used for repeaters in other IARU Region-1 countries

Note 12: DV users are asked not to use this channel, and use 144.6125 MHz for calling.

Note 13: not used

Note 14: 144.800 use should be NBFM to avoid interference to 144.8125 DV Gateways

LICENCE NOTES: Amateur Service and Amateur Satellite Service - Primary User.

Beacons may be established for DF competitions except within 50 km of TA 012869 (Scarborough)

#### Access to this band requires an appropriate NoV, which is available to Full Licensees only

Note that the current NoVs last for up to one year prior to expiry on 31st October For further information see the 146-147 MHz FAQ or contact vhf.manager@rgsb.org.uk

146-147 MHz	Necessary	UK Usage	
(2m extension)	Bandwidth		
146.000-146.900 MHz	500kHz	Wideband Digital Modes (High speed data , DATV etc)	
		146.500 MHz Centre frequency for wideband modes (Note 1)	
146.900-147.000	12kHz	Narrowband Digital Modes including Digital Voice	
		146.9000	
		146.9125	
		146.9250	
		146.9375 Not available in/near Scotland (see Licence Notes & NoV terms)	
		146.9500	
		146.9625	
		146.9750	
		146.9875	

Note-1: Users of wideband modes must ensure their spectral emissions are contained with the band limits

LICENCE NOTES: Full Licensees only, with NoV, 50W erp max - not available in the Isle of Man or Channel Isles

Note that additional restrictions on geographic location, antenna height and upper frequency limit are specified by the NoV terms

It should be emphasised that this band is UK-specific and is available on a non-interference basis to existing services. Upper Band limit 147.000 MHz (or 146.93750 where applicable) are absolute limits and not centre frequencies The absolute band frequency limit in or within 40km of Scotland is 146.93750 MHz - see NoV schedule

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

430 MHz (70cm)	Necessary	UK Usage		
IARU Recommendation	Bandwidth			
430.0000-431.9810 MHz		430.0125-430.0750 MHz FM Internet voice gateways (Notes 7, 8)		
All modes		430.250-430.300 MHz UK DV 9 MHz reverse-split repeaters - Outputs		
430.4000-430.5750		430.400-430.775 MHz UK DV 9 MHz split repeaters - Inputs		
digital links		100 0000 MIL 7 0 MIL T II (I		
430.6000-430.9250		430.8000 MHz 7.6 MHz Talkthrough (Note 10)		
digital repeaters		430.8250-430.9750 MHz RU66-RU78 7.6 MHz split repeaters – outputs  See licence exclusion note; 431-432 MHz		
		430.9900-431.9000 MHz Digital Communications		
		431.0750-431.1750 MHz DV Internet voice gateways (Note 8)		
		To the root is the root is the second of t		
432.0000-432.1000	500 Hz	432.0500 MHz Telegraphy centre of activity		
Telegraphy, MGM				
432.1000-432.4000	2700 Hz	432.2000 MHz SSB centre of activity		
SSB, Telegraphy, MGM		432.3500 MHz Microwave talkback (Europe)		
		432.3700 MHz Meteor Scatter centre		
432.4000-432.4900	500 Hz	Propagation Beacons only		
432.4000-432.4900	300 112	432.491-432.493 MHz Personal Weak Signal MGM Beacons (BW: 500 Hz max)		
		gramman canal (contains)		
432.5000-432.9940	25 kHz	432.5000 MHz Narrow band SSTV activity centre		
All modes	(Note 11)	432.6250-432.6750 MHz Digital communications (25 kHz channels)		
Non-channelised		432.7750 MHz 1.6 MHz Talkthrough - Base TX (Note 10)		
432.9940-433.3810	25 kHz	433.0000-433.3750 MHz (RB0-RB15) RU240-RU270		
FM repeater outputs	(Note 11)	FM/DV repeater outputs (25 kHz channels) in UK only		
in UK only (Note 1) 433.3940-433.5810	25 kHz	422 4000 MHz 11272: IA DI I Dogion 4 CCTV (FM/AFCIV)		
433.3940-433.3610	(Note 11)	433.4000 MHz U272; IARU Region 1 SSTV (FM/AFSK) 433.4250 MHz U274		
FM/DV (Notes 12, 13)	(Note 11)	433.4500 MHz U276 (Note 5)		
Simplex		433.4750 MHz U278		
Channels		433.5000 MHz U280 FM Calling channel		
		433.5250 MHz U282		
		433.5500 MHz U284 Used for Rally/Exhibition talk-in		
		433.5750 MHz U286		
400 0000 404 0000		100 0050 0750 MILL BY 11 (05 III )		
433.6000-434.0000 All modes		433.6250-6750 MHz Digital communications (25 kHz channels)		
433.800 MHz for		433.7000-433.7750 MHz (Note 10)		
APRS where 144.800		433.8000-434.2500 MHz Digital communications & Experiments		
MHz cannot be used.		1400.0000 404.2000 Wil 12 Digital communications a Experiments		
		'		
434.000-434.5940	25 kHz	434.0000 Low Power Non-NoV Personal Hot-Spot usage		
	(Note 11)	433.9500-434.0500 MHz Internet voice gateways (Note 8)		
		404 0750 Miles 4 0 Miles Tellaborough - Makila TV (Nicka 40)		
		434.3750 MHz 1.6 MHz Talkthrough - Mobile TX (Note 10) 434.4750-434.5250 MHz DV Internet voice gateways (Note 8)		
		TOT. TI OU TOT. J2 JO IVII IZ DV IIILEITIEL VUICE YALEWAYS (NOLE O)		
434.5940-434.9810	25 kHz	434.6000-434.9750 MHz (RB0-RB15) RU240-RU270		
FM repeater inputs in UK	(Note 11)	FM/DV repeater inputs (25 kHz channels) in UK only (Note 12).		
435.0000-436.0000		Satellites only		
436.0000-438.0000		Satellites and Experimental DATV/Data		
		437.0000 Experimental DATV/Data Centre of Activity (Note 14)		
438.0000-440.0000		438.0250-438.1750 MHz IARU Region 1 Digital communications		
All modes		438.2000-439.4250 MHz (Note 1)		
7 til 1110uG3		438.4000 MHz 7.6 MHz Talkthrough (Note 10)		
		438.4250-438.5750 MHz RU66-RU78 7.6MHz split repeaters – inputs		
		438.6125 MHz UK DV calling (Note 12) (Note 13)		
		438.8000 Low Power Non-NoV Personal Hot-Spot usage		
		439.6000-440.0000 MHz Digital communications		
		439.250-439.300 MHz UK DV 9 MHz reverse-split repeaters - Inputs		
		439.400-439.775 MHz UK DV 9 MHz split repeaters - Outputs		
Note 1: In Switzerland, Ger	many and Aust	ria, repeater inputs are 431.050-431.825 MHz with 25 kHz spacing and outputs		

Note 1: In Switzerland, Germany and Austria, repeater inputs are 431.050-431.825 MHz with 25 kHz spacing and outputs 438.650-439.425 MHz. In Belgium, France and the Netherlands repeater outputs are 430.025-430.375 MHz with 12.5 kHz spacing and inputs at 431.625-431.975 MHz. In other European countries repeater inputs are 433.000-433.375 MHz with 25 kHz spacing and outputs at 434.600-434.975 MHz, i.e. the reverse of the UK allocation.

Note 2: 430-440 MHz FM/DV maximum bandwidths are 12.5 or 25 kHz as appropriate

Note 4: not used

Note 5: In other countries IARU Region-1 recommend 433.450 MHz for DV calling

**Note 7:** Users must accept interference from repeater output channels in France and the Netherlands at 430.025-430.575 MHz.

Users with sites that allow propagation to other countries (notably France and the Netherlands) must survey the proposed frequency before use to ensure that they will not cause interference to users in those countries.

Note 8: All Internet voice gateways: 12.5kHz channels, maximum deviation +-2.4kHz, maximum erp 5W (7 dBW),

attended-only operation in the presence of the NoV holder.

Note 10: May be used for Emergency Communications and Community Events

Note 11: IARU Region 1 recommended maximum bandwidths are 12.5 or 20 kHz

Note 12: Embedded data traffic is allowed with digital voice (DV)

Note 13: Simplex use only - no DV gateways

Note 14: QPSK 2 Mega-symbols/second maximum recommended

LICENCE NOTES: Amateur Service: Secondary User. Amateur Satellite Service: 435-438MHz: Secondary User **Exclusion:** 431-432 MHz not available within 100km radius of Charing Cross, London.

Power Restriction: 430-432 MHz is 40W erp maximum

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

1.3 GHz (23cm)	Necessary Bandwidth	UK Usage		
1240.000-1240.500	2700Hz	Alternative narrowband segment - see Note 7 1240.00-1240.750 MHz		
1240.500-1240.750		Alternative Propagation Beacon Segment		
1240.750-1241.000	20kHz	FM/DV Repeater Inputs		
<b>1241.000-1241.750</b> All modes	150 kHz	<b>DD</b> High Speed Digital Data - 5 x 150kHz channels 1241.075, 1241.225, 1241.375, 1241.525, 1241.675 MHz (+/- 75 kHz)		
<b>1241.750-1242.000</b> All modes	20kHz	25 kHz Channels available for <b>FM/DV</b> use 1241.775-1241.975 MHz		
<b>1242.000-1249.000</b> ATV		TV Repeaters (Note 9) New DATV repeater inputs (Note-10) Original ATV repeater inputs: 1248, 1249		
1249.000-1249.250	20kHz	FM/DV Repeater Outputs, 25kHz channels (Note 9) 1249.025-1249.225 MHz		
1250.00		In order to prevent interference to Primary Users, caution must be exercised prior to using 1250-1290MHz in the UK		
<b>1,260.000-1,270.000</b> Satellites		Amateur Satellite Service - Earth to Space uplinks only		
1290.00				
1290.994-1291.481	20 kHz	FM/DV Repeater Inputs (Note-5) 1291.000-1291.375 MHz (RM0-RM15) 25 kHz spacing		
<b>1291.494-1296.000</b> All modes		All Modes		
<b>1296.000-1296.150</b> Telegraphy, MGM	500 Hz	Preferred narrowband segment 1296.000-1296.025 MHz Moonbounce		
<b>1296.150-1296.800</b> Telegraphy, SSB and MGM (Note 1)	2700 Hz	1296.200 MHz Narrow band centre of activity 1296.400-1296.600 MHz Linear transponder input 1296.500 MHz Image Mode Centre of Activity (SSTV, Fax etc) 1296.600 MHz Narrowband Data Centre of Activity (MGM, RTTY etc) 1296.600-1296.700 MHz Linear transponder output		
		1296.741-1296.743 MHz Personal Weak Signal MGM Beacons		
1296.800-1296.994		1296.750-1296.800 MHz		
Beacons exclusive				
1296.994-1297.481	20 kHz	<b>FM/DV</b> Repeater Outputs (Note-5) 1297.000-1297.375 MHz (RM0-RM15)		
<b>1297.494-1297.981</b> FM/DV simplex (Notes 2, 5, 6)	20 kHz	FM/DV Simplex (Note-5)(Note-6) 25 kHz spacing 1297.500-1297.750 MHz (SM20-SM30) 1297.725 MHz Digital Voice (DV) Calling (IARU recommended) 1297.900-1297.975 MHz FM Internet voice gateways (IARU common channels, 25kHz)		
<b>1298.000-1299.000</b> All modes	20 kHz	All Modes General mixed analogue or digital use in channels 1298.025-1298.975 MHz (RS1-RS39)		
<b>1299.000-1299.750</b> All modes	150 kHz	<b>DD</b> High Speed Digital Data - 5 x 150kHz channels 1299.075, 1299.225, 1299.375, 1299.525, 1299.675 MHz (+/- 75 kHz)		
<b>1299.750-1300.000</b> All modes	20 kHz	25 kHz Channels available for <b>FM/DV</b> use 1299.775-1299.975 MHz		
<b>1300.000-1325.000</b> ATV		TV repeaters (UK only) (Note 9) New DATV repeater outputs (Note-10) Original ATV repeater outputs: 1308.0, 1310.0, 1311.5, 1312.0, 1316.0, 1318.5 MHz		

Note 2: Stations in countries that do not have access to 1298-1300 MHz may also use the FM simplex segment

for digital communications.

Note 5: Embedded data traffic is allowed with digital voice (DV)

Note 6: Simplex use only - no DV gateways

**Note 7:** 1240.000-1240.750 has been designated by IARU as an alternative centre for narrowband activity and beacons Operations in this range should be on a flexible basis to enable coordinated activation of this alternate usage

Note 8: The band 1240-1300MHz is subject to major replanning. Contact the Microwave Manager for further information

Note 8: The band 1240-1300MHz is subject to major replanning. Contact the Microwave Manager for further information

Note 9: Repeaters and Migration to DATV, inc option for new DATV simplex are subject to further development and coordination

Note-10: QPSK 4 Mega-symbols/second maximum recommended

**LICENCE NOTES**: Amateur Service: **Secondary User:** 

Amateur Satellite Service: 1,260-1,270 MHz: **Secondary User** *Earth to Space only:* In the sub-band 1,298-1,300 MHz unattended operation is not allowed within 50km of SS206127 (Bude),

SE202577 (Harrogate), or in Northern Ireland.

#### Access to this band requires an appropriate NoV, which is available to Full Licensees only

Please note that the current NoVs last for up to three years prior to expiry For further information see the RSGB Website

2300-2302 MHz	Necessary	UK Usage
	Bandwidth	
2300.000-2300.400	2.7 kHz	Narrowband Modes (including CW SSB, MGM)
		2300.350-2300.400 Attended Beacons
2300.400-2301.800	500 kHz	Wideband Modes (NBFM, DV, Data , DATV etc) - Note-1 Note-2 for centre frequency recommendations
2301.800-2302.000	2.7kHz	Narrowband Modes (including CW SSB, MGM) EME Usage

Note-1: Users of wideband modes must ensure their spectral emissions are contained with the band limits

Note-2: Recommended centre frequencies: DV/NBFM Voice etc 2300.500 MHz, Wideband Data/DATV - 2301.100 MHz

LICENCE NOTES: Full Licensees only, with NoV, 400W max - not available in the Isle of Man

Note that additional restrictions on usage are specified by the NoV terms

It should be emphasised that this is UK-specific and is available on a non-interference basis to existing services.

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

UK Usage		Necessary Bandwidth	2.3 GHz (13cm) IARU Recommendation
		Banawiath	2,310.000-2,320.000 MHz
Hz. Panastar links	2,310.000-2,310.500 MHz	200 kHz	Sub-regional
12 Repeater links	2,310.000-2,310.300 WINZ	200 KHZ	(National band plans)
Hz High speed data	2,311.000-2,315.000 MHz		(National band plans)
		2.7 kHz	2,320.000-2,320.800
Hz Moonbounce	2,320.000-2,320.025 MHz		
SSB centre of activity	2,320.200 MHz		
dz Local Beacons, 10W erp max	2,320.750-2,320.800 MHz		
Hz Propagation Beacons only	2,320.800-2,320.990 MHz		2,320.800-2,321.000
			Beacons exclusive
e 1	FM/DV - see also Note 1	20 kHz	2,321.000-2,322.000
uding data, ATV	Wideband Modes, includir		2,322.000-2,350.000
	All modes		2,390.000-2,400.000
ATV repeater outputs	2,435.000 MHz		2,400.000-2,450.000
ATV repeater outputs	2,440.000 MHz		Satellites
Segment Hz Moonbounce SSB centre of activity Hz Local Beacons, 10W erp max Hz Propagation Beacons only  et 1  uding data, ATV  ATV repeater outputs	Preferred Narrowband Se 2,320.000-2,320.025 MHz 2,320.200 MHz 2,320.750-2,320.800 MHz 2,320.800-2,320.990 MHz  FM/DV - see also Note 1  Wideband Modes, including All modes 2,435.000 MHz	20 kHz	Beacons exclusive  2,321.000-2,322.000  2,322.000-2,350.000  2,390.000-2,400.000  2,400.000-2,450.000

**Note 1:** Stations in countries which do not have access to the all modes section 2,322-2,400 MHz, may use the segment 2,321-2,322 MHz for data transmission.

**Note 2:** Stations in countries that do not have access to the narrow band segment 2,320-2,322 MHz, use the alternative narrow band segments 2,304-2,306 MHz, 2,308-2,310 MHz and 2400-2402 MHz

Note 3: The segment 2,433-2,443 MHz may be used for ATV if no satellite is using the segment.

LICENCE NOTES: Amateur Service - Secondary User: Users must accept interference from ISM users.

Amateur Satellite Service: 2,400-2,450 MHz - Secondary User: Users must accept interference from ISM users

Operation in 2310-2350 and 2390-2400 MHz are subject to specific conditions and guidance

In the sub-bands 2,310.000-2,310.4125 and 2,392-2,450 MHz

unattended operation is not allowed within 50km of SS206127 (Bude) or SE202577 (Harrogate).

ISM = Industrial, scientific and medical.

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

3.4 GHz (9cm) IARU Recommendation	Necessary Bandwidth	UK Usage
3,400.000-3,400.800 MHz	2.7 kHz	Narrowband Modes (including CW SSB, MGM, EME)
		3,400.100 MHz Centre of activity (Note 1)
		3,400.750-3,400.800 MHz Local Beacons, 10W erp max
3,400.800-3,400.995		3,400.800-3,400.995 MHz Propagation Beacons only
Propagation Beacons		
3,400.000-3,401.000	200 kHz	3,401.000-3,402.000 MHz Data, Remote control
3,402.000-3,410.000		Wideband Modes, including DATV Repeater Outputs
All modes (Notes 2, 3)		2400 MHz to promote harmoniced usage and activity

Note 1: EME has migrated from 3456 MHz to 3400 MHz to promote harmonised usage and activity

Note 2: Stations in many European countries have access to 3400-3410 MHz as permitted by the CEPT ECA Table

Note 3: Amateur Satellite downlinks planned

LICENCE NOTES: Amateur Service - Secondary User - Subject to specific conditions and guidance

#### **Notes to the Band Plan**

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

5.7 GHz (6cm)	Necessary	UK Usage
IARU Recommendation	Bandwidth	
5,650.000-5,668.000 M	Hz	All Modes
Satellite uplinks		Amateur Satellite Service - Earth to Space only
5,668.000-5,670.000	2.7kHz	5,668.200 MHz Alternative narrowband centre
5,670.000-5,680.000		All Modes
5.755.000-5,760.000		All Modes
5,760.000-5,762.000	2.7kHz	Narrowband Modes (including CW, SSB, MGM, EME)
0,7 00.000 0,7 02.000	2.7 1012	5,760.100 MHz Preferred centre of activity
		5,760.750-5,760.800 MHz Local Beacons, 10W erp max
5760.800-5760.995		5,760.800-5,760.995 MHz <b>Propagation Beacons only</b>
Propagation Beacons		
5,762.000-5,765.000		All Modes
5,820.000-5,830.000		All Modes
5,830.000-5,850.000		All Modes
Satellite downlinks		Amateur Satellite Service - Space to Earth only
Satellite downlinks		Annateur Satellite Service - Space to Earth Only
LICENCE NOTES: Am	nateur Service: 5,650-5	5,680 MHz - <b>Secondary User.</b>
	,	850 MHz - Secondary User: Users must accept interference from ISM users.
· ·		: 5,650-5,670 MHz and 5,830-5,850 MHz - <b>Secondary User</b> : <i>Users must accept</i>
inte	erference from ISM us	ers.
Un	attended operation is p	permitted for remote control, digital modes and beacons, except in the sub-bands
5,6	70-5,680 MHz within 5	50 km of SS206127 (Bude) and SE202577 (Harrogate).
ISI	M = Industrial, scientific	c and medical
Ì		

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

10 GHz (3cm)	Necessary	UK Usage
IARU Recommendation	Bandwidth	· ·
10,000.000-10,125.000 MHz		Note-4
All modes		10,065 MHz ATV Repeater Outputs
10,225.000-10,250.000		
All modes		10,240 MHz ATV Repeaters
10,250.000-10,350.000		
Digital modes		
10,350.000-10,368.000		10,352.5-10,368 MHz Wideband modes (Note-2)
All modes	0.71.11-	40,000,40,070 MHz
10,368.000-10,370.000	2.7 kHz	10,368-10,370 MHz Narrowband modes (Note-3)
Narrowband telegraphy EME/SSB		10,368.1 MHz Centre of activity
EIVIE/SSB		10,368.750-10,368.800 MHz
10,368.800-10,368.995		10,368.800-10,368.995 MHz Propagation Beacons only
Propagation Beacons		10,300.000-10,300.333 WHZ 110pagation beacons only
l ropagation beacons		
10,370.000-10,450.000		10,371 MHz Voice repeaters RX
All modes		10,425 MHz ATV Repeaters
		7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
10,450.000-10,475.000		10,400-10,475 MHz Unattended operation
All modes and satellites		10,450-10,452 MHz Alternative narrowband segment (Note-3)
		10,471 MHz Voice repeaters TX
10,475.000-10,500.000		
All modes and satellites		Amateur Satellite Service ONLY (Note-5)
Note 1: Deleted	· · · · · ·	
-		,350-10,400 MHz to encourage compatibility with narrowband systems
		arrowband segment in countries where 10,368 MHz is not available
	=	ased Primary User utilisation and NoV restrictions
<b>Note 5:</b> 10,475-10,500 MHz is	allocated ONLY	to the Amateur Satellite Service and <b>NOT</b> to the Amateur Service.
LIGHUSE NOTES A		u – La la au
LICENCE NOTES: Amateur S		·
		10,450-10,500 MHz - <b>Secondary User</b> .
		ermitted for remote control, digital modes and beacons
		0,000-10,125 MHz within 50 km of SO916223 (Cheltenham),
55206127	<u>(Buae), SK985</u>	640 (Waddington) and SE202577 (Harrogate).

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

24 GHz (12mm)	UK Usage	
IARU Recommendation		
24,000.000-24,050.000 MHz		
Satellites	24,025 MHz Preferred operating frequency wideband equipment 24,048.2 MHz Narrow band center of activity 24,048.750-24,048.800 MHz Local Beacons, 10W erp max	
24,048.800-24,048.995	24,048.800-24,048.995 MHz	
Propagation Beacons 24,050.000-24,250.000 All modes		
LICENCE NOTES: Amateur Se	ervice: 24,000-24,050 MHz - <b>Primary User:</b> Users must accept interference from ISM users.	
	24,050-24,150 MHz - <b>Secondary User:</b> May only be used with the written permission of Ofcom.  Users must accept interference from ISM users.  24,150-24,250 MHz - <b>Secondary User:</b> Users must accept interference from ISM users.	
Amateur S	Satellite Service: 24,000-24,050 MHz - <b>Primary User</b> : Users must accept intereference from ISM users.	
Unattended operation is permitted for remote control, digital modes and beacons, except		
in the sub	-bands 24,000-24,050 MHz within 50 km of SK985640 (Waddington) and SE202577 (Harrogate).	
ISM = Inc	lustrial, scientific and medical	

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

47 GHz (6mm)	UK Usage
IARU Recommendation	
47,000.000-47,200.000 MHz	47,088.2 MHz Centre of narrowband activity
47,088.000-47,090.000	47,088.8-47,089.0 MHz Propagation Beacons only
narrow band segment	
Unattende	I ervice and Amateur Satellite Service - <b>Primary User.</b> ed operation is permitted for remote control, digital modes and beacons, except within 50 km of (Waddington) and SE202577 (Harrogate).

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

76 GHz (4mm)	UK Usage
IARU Recommendation	
75,500-76,000 MHz	
All modes (preferred)	75,976.200 MHz IARU Region 1 preferred centre of activity
76,000.000-77,500.000	
All modes	
77,500-78,000	77,500.200 MHz Alternative IARU recommended Narrowband segment
All modes (preferred)	
78,000-81,000	
All modes	
LICENCE NOTES:	
75,500-75,875 MHz Amate	eur Service and Amateur Satellite Service - <b>Secondary User.</b>
75,875-76,000 MHz Amate	eur Service and Amateur Satellite Service - <b>Primary User.</b>
76,000-77,500 MHz Amate	eur Service and Amateur Satellite Service - Secondary User.
77,500-78,000 MHz Amate	eur Service and Amateur Satellite Service - <b>Primary User.</b>
78,000-81,000 MHz Amate	eur service and Amateur Satellite Service - <b>Secondary User.</b>
Ur	nattended operation is permitted for remote control, digital modes and beacons, except within 50 km of
Sh	(985640 (Waddington) and SE202577 (Harrogate).

#### Notes to the Band Plan

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.

The following band plan is largely based on that agreed at IARU Region 1 General Conferences with some local differences on on frequencies above 430 MHz.

134 GHz (2mm)	UK Usage
IARU Recommendation	
134,000-134,928 MHz	
All modes	
134,928 -134,930 Narrowband modes	IARU Region-1 preferred centre of activity
	134,928.800 - 134,928.990 Propagation Beacons Only
134,930 -136,000	
All modes	
, ,	ateur Service and Amateur Satellite Service - <b>Primary User.</b> Jnattended operation is permitted for remote control, digital modes and beacons, except within 50 km of SK985640 (Waddington) and SE202577 (Harrogate).

The following bands are also allocated to the Amateur Service and the Amateur Satellite Service:-	
122,250-123,000 MHz	Amateur Service only, Secondary User
136,000-141,000 MHz	Secondary User
241,000-248,000 MHz	Secondary User
248,000-250,000 MHz	Primary User

#### Notes to the Band Plan

Note-1: Access to frequencies >275 GHz by Full Licensees is also possible by NoV

#### ITU-R Recommendation SM.328 (extract)

**Necessary bandwidth**: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider adjacent channel activity when selecting operating frequencies.