



International Amateur Radio Union Region 1 VHF - UHF - μ W Newsletter

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Editorial

This is an urgent newsletter on behalf of our Irish friends. They have amazing news about additional space in the lower VHF bands. I cannot wait until there is more news about our Interim meeting in Vienna, because it is important for IRTS that possible feedback needs to be given before 31 July.

New Band Plans for New Spectrum

Introduction

In Ireland additional spectrum covering all modes including MGM has been allocated to the amateur service on a national secondary basis at 30 to 49 MHz and 54 to 69.9 MHz by ComReg, the Irish Regulator. In addition the current 4 metre 70 MHz band in Ireland has been extended. The band limits are now 69.9 MHz to 70.5 MHz, which means the current IARU Region 1 band plan can be fully implemented.

The grant of additional low VHF spectrum comes as a result of IRTS input to recent consultation processes. The new frequency bands are listed among the bands available generally to radio amateurs in Annex 1 of a recently revised version of the Irish Amateur Station Licence Guidelines document ComReg 09/45 R4 which is available on the ComReg.ie website.

In May 2018 IRTS initiated a public consultation process in respect of how spectrum in the range 30 – 69.9 MHz newly allocated to the amateur service on a national secondary basis in Ireland should be utilised. Comments were gratefully received from LY2YR, G3XBM, KU3M, EI8EJB, EI7GL and EI8JA and many of the issues raised have been incorporated into a revision of the band plans.

The IRTS “new spectrum sub-committee” now believes that another opportunity for interested parties to be able to comment on how this spectrum should be used in Ireland would be beneficial. Previously draft band plans have been provided to IARU VHF/spectrum managers in countries having frequency allocations or assignments to the Amateur Service in the range 30 - 49 MHz and 54 – 69.9 MHz, as well as to the Chairman of the IARU Region 1 VHF and Microwave Committee. These initial band plans have now been revised.

Any comments should be sent to newspectrum@irts.ie before end July 2018.

The New Spectrum available in Ireland 70 MHz

30 – 49 MHz (8 metre band)

Currently there is no regional or international allocation to the amateur service in this part of the radio spectrum in any of the ITU Regions. However in propagation study terms the absence of reliable continuous and identifiable signals in these frequency bands causes problems and means that the progress of a propagation event starting in the HF range and identified using beacons at 28

MHz cannot be reliably tracked as it progresses towards 50 MHz and onwards towards 70 MHz. Nor can general experimentation take place with amateurs in countries which have a national allocation. In the 1990s a CEPT DSI consultative process raised this issue as a result of input to the consultation process. They believed that beacons could be located at appropriate geographical sites, chosen in order to minimise the possibility of interference to other radio services. The DSI report queried whether the ISM band centred on 40.68 MHz would be appropriate, the beacons possibly using frequencies interleaved with on-site paging. It was felt that a secondary allocation to the amateur service would also seem appropriate.

IARU has encouraged national Member Societies to deploy multi-band beacon clusters covering low VHF between about 30 MHz and about 70 MHz. Beacon clusters should wherever possible provide signals at around 40 MHz and around 60 MHz to supplement those beacons already providing emissions at 30 MHz, 50 MHz and 70 MHz and amateurs are encouraged to set up and maintain automated monitoring stations in order to contribute measurement results to the scientific community. A common transmission format is proposed to aid the reception of multiple clusters. In the last number of years Denmark, and the UK have authorised such beacons near 40 MHz e.g. on 40.071 and 40.050 MHz respectively, Slovenia has released the band 40.66-40.70 MHz to the amateur service and South Africa has released the band 40.675-40.685 MHz.

Based on comments received IRTS has developed a draft revised Band Plan for the frequency band 40 – 44 MHz, a new 8 metre band; see Annex 1 to this document. For the time being usage of 30 – 40 MHz and 44 – 49 MHz has not been planned. IRTS considers that the band most likely to be transverted to an IF of 28 – 30 MHz might be 40 – 42 MHz.

54 – 69.9 MHz (5 metre band)

In a similar manner to the direction taken at 40 MHz an allocation in the vicinity of 60 MHz is considered advantageous to facilitate scientific research. The UK already has an amateur propagation beacon on 60.050 MHz. Historically the 5 metre amateur band in 1949 was 58.5 – 60 MHz and in earlier times 56 - 60 MHz. The same band extended to 69.9 MHz would therefore seem appropriate for amateur propagation studies and experimentation on a national secondary basis. Similarly to 40 MHz the band most likely to be transverted to an IF of 28 – 30 MHz is considered to be 58 – 60 MHz. The 5metre band will also facilitate digital television in addition to all other modes and links the 4 metre and 6 metre allocations, although we have to await the outcome of the 2019 ITU World Radiocommunication Conference to determine whether the Amateur service in Region 1 will gain general access to the 52 – 54 MHz frequency band. Based on comments received IRTS has developed a draft revised Band Plan for the frequency band 54 – 69.9 MHz, a new 8 metre band; see Annex 2 to this document.

IARU Band Plans

The VHF and microwave committee of IARU Region 1 prepares, revises and maintains the official IARU Region 1 band plans for the 50 MHz, 70MHz, 145 MHz, 435 MHz and the microwave bands. VHF Managers are requested to give maximum publicity to the adopted band plans. In view of the many newcomers, regular repetition of the publication of the band plans is considered advisable. Member Societies, and particularly their VHF Managers or VHF Committees are strongly tasked to promote adherence to the adopted band plans by all VHF/UHF/Microwaves amateurs in their country. Concerning the usage column in the band plans, operators should take notice of these agreements which are made for operating convenience, but no right to reserved frequencies should be derived from a mention in the Usage column or from referenced notes. Users should be aware that these band plans are generic for all members states of IARU-R1.They can be more detailed in some Member States due to practical reasons or legislation. Therefore IARU advises amateur licensees to study and implement their national band plans where these vary from the IARU plans.

Next Steps

IRTS would be grateful to receive any further views you may have concerning the draft revised band plans for the new spectrum available in Ireland. This document provides the background to the award of additional radio spectrum to the Amateur Service in Ireland on a national and secondary basis. The draft revised band plans at Annex 1 and Annex 2 (loosely based on the current 50 – 54 MHz IARU band plan) are proposed as a starting point for discussions. A response not later than 31 July 2018 would be appreciated. Responses please to [*newspectrum@irts.ie*](mailto:newspectrum@irts.ie)

Irish Radio Transmitters Society

www.irts.ie

3 July 2018

40 – 44 MHz (8 metre) Band plan

Frequency	Maximum Bandwidth	Mode (a)	Usage
40.000 40.100	1000 Hz	Telegraphy MGM	<u>Lower Beacon Band</u> 40.071 (Denmark) and 40.050 (UK) operational
40.100 40.200	500 Hz	Telegraphy	40.150 CW centre of activity and CW calling frequency. 40.190 – 40.200 future intercontinental CW DX sub-band
40.200 40.300	2700 Hz	Telegraphy SSB	40.200 future CW and SSB intercontinental DX calling frequency 40.200 – 40.230 future intercontinental SSB DX sub-band 40.250 SSB centre of activity and SSB calling frequency. 40.285 SSB cross-band centre of activity
40.300 40.660	2700 Hz	Telegraphy MGM	40.305 PSK Centre of activity 40.310 -40.320 future EME centre of activity 40.320 -40.380 MS centre of activity 40.400-40.450 FT8 centre of activity 40.540 -40.580 Simplex FM Internet Voice Gateways 40.600 DV calling 40.650 SSTV Note: Avoid 40.49-40.51 (3 rd harmonic falls close to 121.5 the aeronautical distress frequency)
40.660 40.680	1000 Hz	Telegraphy MGM	<u>Upper Beacon Band (Subject to change)</u> 40.661 – 40.674 Slovenia 40.675 – 40.679 South Africa Applicable for countries where Amateur Service allocation is limited to all or part of the ISM band 40.66 – 40.70 MHz
40.680 40.700	2700 Hz	Telegraphy MGM SSB	SSB frequencies 40.681, 40.684, 40.687, 40.690, 40.693, 40.696 SSB calling frequency 40.681 MHz (Subject to change) Applicable for countries where Amateur Service is limited to all or parts of the ISM band 40.66 – 40.70 MHz
40.700 42.000	12 kHz	All Modes	40.710-40.890 FM/DV Repeater Inputs, 20 kHz spacing 18.1 MHz I/P-O/P (paired with 58.810 – 58.990) 41.210 -41.390 FM/DV Repeater Inputs, 20 kHz spacing 41.410 -41.590 FM/DV Simplex 41.510 FM calling frequency 41.810 – 41.990 FM repeaters output channels, 20 kHz spacing
42.000 44.000	500 KHz	All modes	Could be paired with 52 – 54 MHz (subject to the outcome of WRC-19 and/or the CEPT ECA

54 – 69.9 MHz (5 metre) Band plan

Frequency	Maximum Bandwidth	Mode (a)	Usage
54.000 56.000	500 kHz	All modes	Could be paired with 42-44 MHz Note: R2 BC NTSC video carrier 55.25 MHz
56.000 56.500	2700 Hz	Telegraphy MGM (Narrowband)	56.305 PSK Centre of activity 56.310 – 56.320 EME centre of activity 56.320 – 56.380 MS centre of activity
56.500 59.500	12 kHz	All Modes	56.510 SSTV 56.540 – 56.580 Simplex FM Internet Voice Gateways 56.550 Image frequency 56.620 – 56.750 Digital communications 56.630 DV calling 56.210 – 56.390 2.6 MHz I/P-O/P FM/DV repeater Input channels, (20 kHz spacing) 56.410 – 56.590 FM/DV Simplex 56.510 FM calling frequency 56.810 – 56.990 2.6 MHz I/P-O/P FM/DV repeaters output channels, (20 kHz spacing) 58.810 – 58.990 18.1 MHz I/P-O/P FM/DV repeaters output channels, (20 kHz spacing) paired with 40.710-40.890 Note: R2 BC NTSC colorburst 58.30 MHz
59.500 59.700	2700 Hz	Telegraphy SSB	59.600 SSB centre of activity and SSB calling frequency 59.685 SSB cross band centre of activity
59.700 59.800	2700 Hz	Telegraphy MGM	59.710 FT8 centre of activity and calling Note: R2 BC NTSC sound carrier 59.75 MHz
59.800 59.900	500 Hz	Telegraphy	59.850 CW centre of activity and calling frequency
59.900 60.100	1000 Hz	Telegraphy MGM	Beacon Band 60.050 (UK) operational 60.013 (Ireland) planned
60.100 69.900	8 MHz	Experimental Broadband	Centre Frequency 65.00

Vienna Interim Meeting 2019

The next Vienna meeting will be held in the weekend from 26-28th April 2019 at the usual Intercity Hotel in Vienna. Details will be sent to the Member Societies as soon as possible in a newsletter. If we respect the timing like in 2016 the proposals are expected somewhere in January 2019.

Like I said in an earlier newsletter I would like to ask the Member Societies to focus on strategic matters, other than on detailed issues. Mainly how to promote activity on our bands. So it would be appreciated to have some contributions about your good practices and experiences.

Contest News

Improvements of the contest robot

During our last conference we agreed to make a contest working group, which will deal with the details of contesting (rules, etc). Unfortunately we did not take the financial aspects into account.

The contest working group made a list of requirements for the improvement of the IARU-R1 contest robot. This means an investment to achieve those improvements; but the General Conference was strict in budgeting the C5 committee.

So we cannot achieve all the requirements and we had to prioritise. The collection of the log is one of the fundamental processes to produce good quality judging.

This was done those next last months and it past the test phase successfully.

Collecting logs

There are a lot of contest robots in use, made by several Member Societies. The only thing they need are logs... So there is need of a central server/robot to collect logs who can guarantee a good quality.

First of all I want to commemorate Andrzej Pająk - SP7NJX (RIP) for his work. It is now more than 10 years that this server was the first one to collect all contests logs, for all VHF & up contest over Europe, and it is still in use. This is a prove that the VHF contest community need a central server to collect logs.

Of course after 10 years it is becoming outdated and there is need for more quality in the collected logs. This can be one of the major tasks of the IARU-R1 contest robot, and maybe more.

There are for the moment no agreements where to up/download logs.

Something to discuss in Vienna and in the conference. I hope that we will have a lot of proposals dealing with those kind of management issues; instead of contest details.

Useful Information

C5 Chairman: Jacques Verleijen, ON4AVJ
C5 Vice chairman: Jann Traschewski, DG8NGN
Contest co-ordinator: Robert Vilhar, S53WW
Beacons co-ordinator: Mathias Klug, DH4FAJ
Satellite co-ordinator: Graham Shirville, G3VZV
Spectrum specialist: Murray Niman, G6JYB

Website: <http://www.iaru-r1.org/index.php/vhfuhsshf>

Handbook: <http://www.iaru-r1.org/index.php/downloads/func-startdown/991/>
Current Edition: v8.01

Newsletters: <http://www.iaru-r1.org/index.php/documents/Documents/Newsletters/VHF-Newsletters>

Wiki <http://iaruwiki.oevsv.at>

Contest robot http://iaru.oevsv.at/v_upld/prg_list.php

Mailing list VHF managers and liaison officers

If you are not on this mailing list and you are a VHF manager of your country please send a mail to ON4AVJ@uba.be

Use of the IARU R1 C5 Wiki

If you are an official Member Society representative, but have no login and you want to participate to the discussions on the Wiki, please write a mail to ON4AVJ@uba.be.