



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

Edition 74
7 October 2017
Jacques Verleijen, ON4AVJ

Dear Friends,

The General Conference of IARU-R1 decided to confirm my reappointment as chairman of the VHF/UHF/ μ Wave committee for the next 3 years.

Jann Traszewski, DG8NGN, is the new vice-chairman.

We achieved quite a progress and I am certain that the decisions we made in Landshut will promote the use of our bands. This is necessary because they are really under pressure from other spectrum users.

IARU-R1 Conference Landshut (DL)

17 - 22 September 2017

During those 5 days, we had 3 meetings of the C5 committee (VHF/UHF & μ Wave) during two and a half days. There were in total 56 papers to discuss about contesting, bandplanning, organisation and operating practice. There were 18 Member Societies (MS) present at the meetings and 7 MS were represented by proxy.

The discussions resulted in 29 recommendations.

You can find all recommendations in the minutes of the final plenary meeting on the IARU-R1 website (<http://iaru-r1.org/index.php/downloads/func-startdown/977/>).

On Monday we started with the discussions about the different reports from the coordinators and the formal approval of the Vienna 2016 recommendations (LA17_C5_REC_01)

We discussed also the position to be taken during WRC 2019 and the future WRC's. This was presented by Ole LA2RR. This is very important to defend our bands.

Recommendation LA17_C5_Rec_02

It is proposed that all IARU bodies and member societies use every opportunity to exert pressure on national regulators to implement all the recommendations that protect the amateur bands.

During the session in the afternoon, we discussed other operational matters.

Some of our countries will be confronted with Licence Shared Access (LSA). As the LSA framework is new, and may play an important role in future access to spectrum, it may be relevant for IARU Region 1 to clarify how support can be given to the different national discussions and negotiations. This would add value to what IARU provides to the member societies and help provide common approaches.

Recommendation LA17_C5_Rec_24

It is proposed that IARU Region 1 create guidance and prerequisites on how Licence Shared Access (LSA) may work in an Amateur Radio context. This can support member societies to prepare for future national discussions where LSA is proposed to be the future way for amateur radio to retain access to spectrum.

The rest of the day, we discussed how to manage the contest in the future and the organisation of the new VHF Handbook (see further).

Seen the many proposals about contesting and bandplanning we decided to have two working groups during the Tuesday meeting.

You will find the conclusions of the contest group further on in this newsletter.

Bandplanning & spectrum issues

6m band

We discussed about the future bandplanning and the use of new digital applications. The synchronized beacon project was also discussed.

Recommendation LA17_C5_Rec_05

It is recommended that the text of the 50MHz bandplan in the VHF Managers handbook is modified by; Remove "In many countries in the African part of Region 1 (see footnotes accompanying the LA17_C5_19 RSGB - 50 MHz Band Plan (52 - 54 MHz) ITU frequency allocation table) the 50 - 54 MHz band is allocated to the Amateur Service on a primary basis. These Countries may refer to the SARL Band plan."

Add a 52 - 54 MHz section to the IARU Region 1 band plan as ALL Modes with this usage footnote:

In those Region 1 countries where 52 - 54 MHz (or parts thereof) is allocated, its use should be planned on the basis of up to 4 x 500 kHz blocks which may be sub-divided to suit digital applications. Amateurs using digital transmission methods must also ensure that their transmissions do not spread beyond band edges.

Recommendation LA17_C5_Rec_06

It is recommended that the text of the 50MHz bandplan in the VHF Managers handbook is modified to amend the modes section with a footnote that "legacy usage for MGM is accepted, but effort should be made to move this to 50.300-50.400 Mhz. Usage by operators may vary due to restrictions on national allocations"

Recommendation LA17_C5_Rec_07

It is recommended that the VHF Handbook Section 11.3 (50 MHz beacons) to be updated to include the following:

- **50 MHz Synchronised beacons may optionally also transmit on 50.4xx when not transmitting in their 50.0xx synchronised scheme time slot.**
- **If they use this dual-frequency option, the beacon callsign on each frequency should be slightly different to assist reception and reporting systems. For example, to append /S and /B onto the callsign to indicate Synchronised and ordinary Beacon frequency respectively**
- **Synchronised Beacons should detect loss/failure of GPS and mute transmissions on their synchronised frequency assignment (50.0xx). However, they remain free to transmit on their (optional) 50.4xx assignment (where they may revert to a CW only to indicate the problem)**
- **Consider the advantages of adaptive MGM and remote control for propagation events**
- **50 MHz users and propagation experts are encouraged to propose multiplex sequences, with due consideration for access to remote beacon locations/re-programming**
- **Both transmit and receive software should be flexible to support the above including for example the use of more than one time slot, if a multiplex is sparse during roll out**

[Recommendation LA17_C5_Rec_26](#)

It is recommended that the following general footnote is added to the 50MHz band plan:

- Experiments using wider bandwidth digital modes may take place in the 50 MHz band within the 50.5-52 MHz segment where local conditions permit, on the basis it does not cause interference to other users (including narrowband/beacon use)
- noting that potential options for this include around 50.6, 51.0 or 51.7 MHz and maximum bandwidth of around 50 kHz
- That Member Societies encourage such 50 MHz digital experiments to support innovation and development of the band and report results back to IARU-R1 and to remove the specific designation for RTTY at 50.6 MHz (as per the review proposed by Varna Rec VA14-C5-04)

2 m band

[Recommendation LA17_C5_Rec_08](#)

It is recommended that footnotes 'g' and 'h' of the 2m bandplan are deleted.

[Recommendation LA17_C5_Rec_09](#)

To introduce an Experimental Machine Generated Mode ("EMGM") segment on the 2 m, 70 and 23 cm bands for weak signal narrow band modes.

144,491 – 144,493 MHz (BW: 500Hz)

432,491 – 432,493 MHz (BW: 500Hz)

1296,741 – 1296,743 MHz (BW: 500Hz)

[Recommendation LA17_C5_Rec_10](#)

It is recommended that the 2m bandplan in the VHF Managers handbook is modified to show

Frequency, MHz Max BW Mode / Usage

144.025 - 144.100 500 Hz Telegraphy

144.100 - 144.150 500 Hz Telegraphy & MGM

144.150 - 144.200 2 700 Hz Telegraphy, SSB, MGM

144.200 - 144.400 2 700 Hz Telegraphy & SSB

and to remove the PSK31 spot frequency.

[Recommendation LA17_C5_Rec_25](#)

It is recommended to delete footnote ii from the 145MHz band plan regarding cross band repeaters.

70 cm band

[Recommendation LA17_C5_Rec_11](#)

It is recommended that footnote m. of the 70cm bandplan be copied to 434.000-434.594MHz and the words, 'centre frequency of' and 'horizontal polarization' be removed to allow broadband digital experiments.

13 cm band

[Recommendation LA17_C5_Rec_12](#)

It is recommended that the text shown 2304 to 2306 MHz about being an alternative location for narrowband working be copied to 2400 to 2402 MHz and frequency/footnotes modified accordingly.

5GHz

Recommendation LA17_C5_Rec_13

It is proposed to amend the 5,7 GHz Band Plan in the VHF Managers Handbook to more clearly designate the 5 760 – 5 762 MHz range as ‘preferred’ and to remove the 2,7 kHz bandwidth restriction at 5 650.0 – 5 668.0 MHz

Millimetre bands

Recommendation LA17_C5_Rec_14

In order to protect the 24 and 47GHz band it is recommended that;

- IARU member societies fully engage with their national administrations to ensure they are fully aware of the radio amateur interest in their countries in the 24 GHz and 47 GHz bands.
- IARU member societies ensure their national administrations actively support the protection of the amateur radio services in the 24 GHz and 47 GHz bands in the WRC-19 preparatory studies.
- IARU member societies encourage their national interest groups to publicise and highlight their achievements in these frequency bands (including by webpages, social media, YouTube, etc.)

Recommendation LA17_C5_Rec_15

In order to protect and develop the use of the millimetre wave bands it is recommended that Member Societies should;

- recognise the importance of the millimetre wave frequency bands as territory for experimentation and innovation.
- recognise that the ability to exploit these frequencies reflects the true amateur radio spirit of self-learning and training.
- encourage national interest-group organisations to provide a forum for efficient sharing of experiences and ideas amongst their amateur communities for the use of these bands.
- facilitate the organisation of events and meetings (including contests) that can allow like-minded enthusiasts to exchange ideas.
- take steps to highlight and promote activity and experimentation in this area with their national and regional administrations.

VHF Contesting

This working group was led by S53WW. He reported on the work of the Contesting Sub-group. They had sought consensus on all papers so some had been modified to obtain agreement. Some recommendations were adopted by the plenary:

Recommendation LA17_C5_Rec_16

It is proposed add the following new text to the 5.3.2 chapter (Contest Sections) of the current VHF Managers handbook:

Section SINGLE – LOW POWER: stations operated by a single operator, with no operational assistance of another person during the contest, transmitting with less than 100W PEP and using single directional antenna (with only one radiating element - i.e. 9 element Yagi or 4 element loop) for transmit and receive (144 MHz only).

Section MULTI – LOW POWER: stations operated by multiple operators transmitting with less than 100W PEP and using single directional antenna (with only one radiating element - i.e. 9 element Yagi or 4 element loop) for transmit and receive (144 MHz only).

Recommendation LA17_C5_Rec_17

It is recommended to amend the second paragraph of the Chapter 5.3.11:
The claimed contact shall be disqualified for any error in the information logged by the station. When there is high evidence that the error is due to the wrongly logged information of the transmitting station (i.e. wrong date/time or call/UL) such a LOG shall not be used for adjudication purposes.

Recommendation LA17_C5_Rec_18

It is proposed to modify section 5.3.11 of the VHF Managers handbook as follows;
The final judging of the entries shall be the responsibility of the organising society, whose decision shall be final. Entrants deliberately contravening any of these rules, attempting fraud or flagrantly disregarding the IARU Region 1 bandplans shall be disqualified. Each VHF Manager and/or national Contest Committee can propose to the contest organizer disqualification or penalization of an entrant. The claimed contact shall be disqualified for any error in the information logged by the station.
Any error in the exchanged information logged by a station is liable to result in the loss of all points for that contact, subject to review and confirmation by the contest organiser.

Recommendation LA17_C5_Rec_19

If an entrant will attempt to complete a QSO with a secondary method (as Internet chat channel, DX Cluster, talk-back on another amateur band, telephone, etc.), or improperly use any means for self-spotting he will receive from the C5 Contesting WG a Yellow Card. The list of stations that receive Yellow Cards will be published at the end of the Final Classification.

An entrant or operator receiving two yellow cards in three consecutive IARU Region 1 contests (50-70/VHF/USHF) will be disqualified. If the entrant is in a multi-operator category, all listed operators are so affected.

C5 Contesting WG will be responsible for these actions; every National VHF Contest Manager could suggest such penalizations.

Recommendation LA17_C5_Rec_20

It is recommended to incorporate the MGM Operating Procedure for Contests detailed in paper LA17_C5_48 into the VHF Managers Handbook

Recommendation LA17_C5_Rec_21

It is recommended that the following definitions are incorporated into the rules for IARU Region 1 50/70 MHz, 145 MHz and UHF/Microwaves Contests

- **Station:** set of antennas, transmitters and receivers used during the contest on each frequency band (i.e. multiband setups are composed of multiple stations).
- **Location:** geographical area with diameter of no more than 500 meters where the station resides during the contest.
- **Call Sign:** identification of the station during the contest. Added prefix and/or suffix do not generate different call sign (i.e. S50AAA/p or DL/S50AAA are the same call sign as S50AAA).
- **Operator:** an individual that operates the station during the contest using the station's call sign. Operator may reside inside (local operator) or outside (remote operator) the location. During the contest an operator may operate only stations that form one entry.
- **Entries:**
 - o **Multi operator:** stations from the same location, operated by more than one

operator and using one callsign on all bands.

o Single operator: stations from the same location, operated by a single operator and using one callsign on all bands, with no operational assistance of another person during the contest.

6 HOURS section time rule: The 6-hour time segment can be divided into maximum two periods. The time of the first QSO sets the start time of the first period. When operating in two periods, the pause between the periods must be longer than 2 hours.

The first-time difference of 2 hours or more between two consecutive QSOs marks the pause segment. Only the QSOs that fall into the combined 6-hour time segment will be counted for points.

Participants are welcome to operate longer than 6 hours and in such case, they shall send their complete log (the contest robot will automatically extract the 6 hours' part from the log, while the rest of the log entries will be used for cross-checking purposes).

The organisation and management of contests will be done in the future by a contest group, therefore we adopted following recommendation:

[Recommendation LA17_C5_Rec_27](#)

It is recommended that a Contest working Group is formed with the following terms of reference (see further)

Operational issues

On the last day of the C5 committee, we discussed operational matters.

There was a long discussion about interoperability between the different digital voice modes.

We adopted following recommendation:

[Recommendation LA17_C5_Rec_22](#)

It is recommended that the IARU encourages development of Digital Voice Interoperability through articles in the VHF newsletter, website etc.

There was also an information paper from RSGB about Amateur Transponders on Geosynchronous and Geostationary Satellites

There is a need for a more accurate locator system; the new system proposed by RSGB will be implemented. There is no change for the first 6 digits, it is just an extension of the existing system

[Recommendation LA17_C5_Rec_23](#)

It is recommended that the content of paper LA17_C5_17 replaces the appropriate chapter in the VHF Managers Handbook for the locator system.

Mathias Klug, DH4FAJ, was appointed as the new beacons co-ordinator.

Survey of the use of frequencies above 148 MHz

The chairmen of VHF committees in the 3 regions have been asked by the IARU Administrative Council to provide information on spectrum usage to support their work in defending our allocations. This has to be completed as soon as possible and the results are needed by the beginning of 2018.

This will be done by a task group, who will prepare the survey and stimulate all MS to cooperate. Members proposed for this task group were: G6JYB, EI3IO, ON6TI, DG8NGN

ON4AVJ

Recommendation LA17_C5_Rec_29

It is recommended that a task group is formed within the C5 Committee to compile a survey as requested by the IARU AC, to ensure it is completed by all the Member Societies and send the conclusions to IARU AC by the beginning of 2018.

New organisation for VHF contests

The biggest achievement for the C5 committee in this conference a new way of dealing with contest matters.

We decided to make a working group which is led by a contest co-ordinator and contains people skilled in contest and IT matters.

This working group has the authority to change the rules of IARU Region 1 contests giving the C5 committee more time to discuss more strategic topics and saving a lot of time.

There is no more organizing society anymore. Seen the technical (IT) evolution this was not practical anymore.

We decided to make a working group who is led by a contest co-ordinator. This working group has the authority to change the rules. This gives to the C5 committee more time to discuss more strategic topics and will save a lot of time.

Here are the terms of reference for this working group:

C5 Contest Working Group Terms of Reference

Objectives

1) Organisation and conduct of IARU-R1 VHF/UHF/SHF contests including:

- Collecting logs
- Evaluating and judging of the received logs
- Publication of official results in a timely manner
- Preparation of awards and certificates

2) Encouragement of new participants, modes, activity, and use of the higher frequency bands

3) Promotion of IARU-R1 VHF/UHF/SHF to encourage participation – by website and other means such as social media

Responsibilities

1) To engage testers both electronically, and at major events such as Friedrichshafen where an annual forum and awards ceremony might occur

2) To maintain and modify contest rules as appropriate

3) To further develop contest organisation

4) To decide when and how the changes to the contest rules and contest organisation would be implemented

5) To maintain an appropriate 'Contesting Handbook' that would be the master reference for the Organisation and Rules of IARU Region-1 VHF/UHF/SHF Contests - including any directly associated procedures and items such as log file formats

6) To arrange for contest information, rules and results to be easily found online

7) To coordinate the development of the contest robot

8) Annual budgeting and expenditure, in cooperation with the C5 Chairman. This budget needs to be approved by the EC.

9) To provide a yearly report to the EC

10) To provide reports to C5 meetings

11) To operate in an open and transparent way including:-

- Regular consultation of contest managers and contesters
- Ensure that there is at least 6 months' notice period before any agreed contest rule changes are implemented
- In case of serious problems, appeals (or strategic issues), C5/EC would continue to be the arbiter

Group Membership

1) The Working Group consists of:

- C5 Contest Co-Ordinator
- C5 Chair
- up to seven additional ordinary members

2) Members shall be active contesters. Of the ordinary members, at least one needs to be:

- Robot/IT expert
- VHF/UHF specialist
- Microwave specialist

Here are the members of the working group:

- Contest co-ordinator: Robert, S53WW
- Members: OE1MCU, OK1VAO, F5LEN, OZ5TG, IV3KKW, OM3BH, HA0LC

New VHF managers handbook

During our Vienna meeting, we decided to re-arrange the VHF handbook.

VIE16_C5_Rec_02:

To Update the VHF Handbook as per proposal C5_40. The chairman will also prepare a new template/model of the handbook who will consider the actual matters without the loss of historical data. (see also point 8.2). In the meanwhile the actual handbook (7.x) will be the reference.

I prepared the new version who was available for comments by our Wiki (see newsletter 72).

This new version was discussed during this conference.

Many members of C5 wanted another division, but there was no alternative ready.

There was disagreement on how this work should go forward. ON4AVJ proposed two votes.

The first to decide whether to use the old handbook or the version he was asked to provide

at Vienna. The second vote to decide to choose between the two layouts at the

next interim conference. ARI understood that in Vienna there was a vote for a change and

there should be no return to the 'old version'.

Both votes were adopted.

So the new VHF handbook, version 8.00 will be available as soon as all recommendations will be integrate.

The alternative version will be presented at the next interim meeting by the authors of the second motion.

Useful Information

C5 Chairman: Jacques Verleijen, ON4AVJ

C5 Vice chairman : Jann Traszewski, DG8NGN

Contest co-ordinator: Robert Vilhar, S53WW

Beacons co-ordinator: Matthias 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/Documents/VHF/Handbook-7.51.pdf
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 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.