



## **General Conference, Davos, 11 to 16 September 2005**

<p><b>Report of the proceedings at the Final Plenary of the IARU Region 1 Conference, Davos, 15 September 2005</b></p>
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Note:

The President welcomed delegates and observers to the Final Plenary

The Agenda was approved.

Petar Miličić, 9A6A, presented the proposal for the venue of the next Conference in October 2008 in Cavtat, Croatia. The room costs at the 5\* hotel would be Euro 65 or 75 per night, depending on whether it was a sea view room.

Rizkallah Azrak, OD5RI, gave a short presentation on the offer to host the General Conference in Beirut. In response to a question, it was stated that the 5\* hotel room costs could be as low as \$100 US per night

Ballot papers relating to the election of the EC were collected from Heads of Delegation, having been distributed the previous evening. The EBC retired to count the vote.

The meeting then proceeded to consider the recommendations from the Conference Committees.

### **Recommendations of Committee C2 – Finance and Credentials**

#### ***DV05\_C2\_Rec\_01***

***That the societies whose names are appended hereto (Attached as Annex to Recommendation DV05\_C2\_Rec\_01), comprising 47 societies, plus the nine societies represented by proxy be formally accredited to vote at the 2005 Davos IARU Region 1 Conference.***

Recommended by SRAL, seconded by NRRL, approved unanimously

#### ***DV05\_C2\_Rec\_02 - Paper DV05\_C2\_02***

***That the Region 1 audited financial statements for 2002, 2003 and 2004 be accepted.***

Recommended by SARL, seconded by DARC, approved unanimously

In making this recommendation, the Committee recognised that as a result of the handover from the previous Treasurer, all had not been found to be in good order, but the Committee accepted the actions that had been taken by the new EC to regularise the position were in the best interests of good housekeeping.

#### ***DV05\_C2\_Rec\_03***

***That the EC should re-examine the handover process between successive Treasurers to ensure that there is full transparency of all decisions involving the finances of the Region.***

Recommended by CARS, seconded by RAAG, approved unanimously

#### ***DV05\_C2\_Rec\_04 – Paper DV05\_C2\_02***

***That the budget proposals for 2006/7/8 be accepted as submitted.***

In making this recommendation the Committee asked that the EC reconsider other opportunities to support the future growth of amateur radio by using some of the accumulated surplus in the Region's accounts.

Recommended by DARC, seconded by NRRL, approved unanimously

It was noted that it was not necessary to vote on recommendations 05 and 06, as these had been incorporated in the budget approved in recommendation 04

#### ***DV05\_C2\_Rec\_07- Paper DV05\_C2\_03***

This recommendation was also considered in Committee C3 and was considered in the Final Plenary under C3 Recommendation 32

#### ***DV05\_C2\_Rec\_08 - Paper DV05\_C2\_05***

This recommendation was also considered in Committee C3 and was considered in the Final Plenary under C3 Recommendation 16

#### ***Paper DV05\_C2\_07***

#### ***DV05\_C2\_Rec\_09***

This recommendation was also considered in Committee C3 and was considered in the Final Plenary under C3 Recommendation 18

This concluded the discussion of matters from Committee C2

Ballot papers to vote on the venue of the next Region 1 Conference were distributed to Heads of Delegation.

A procedural question was raised by one society on the way in which EC election papers had been collected. Several societies expressed satisfaction with the way the election had been conducted.

## **Recommendations of Committee C3 - Administration and Organisational**

Note: Recommendations for appointments to WG Chairman and Coordinators were not considered at this stage but deferred to a later Agenda item

#### ***DV05\_C3\_Rec\_02***

***That the reports of the EMC WG and from the WG meeting on Sunday 11<sup>th</sup> September be approved.***

Proposed by EDR, seconded by VERON, approved unanimously

**DV05\_C3\_Rec\_04**

***That the Report of the EUROCOM Working Group and the Report prepared in Conference on 11<sup>th</sup> September 2005 be accepted.***

Proposed by REF, seconded by OeVSV, approved unanimously

**DV05\_C3\_Rec\_08**

***That the EC be asked to progress the work on the rationalisation of the Standing Recommendations, and to bring this work to a conclusion in early 2006.***

Proposed by CARS, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_09**

***Acceptance of AC Resolution 01-1(revised 2003) concerning the Morse Code***

Proposed by CRC, seconded by CARS, approved unanimously

**DV05\_C3\_Rec\_10**

***Acceptance of AC Resolution 02-1 and 04-1 concerning interference from powerline communications.***

Recommended by CARS, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_11**

***Acceptance of AC Resolution 03-1 concerning the implementation of Article 25 of the International Radio Regulations***

Proposed by VERON, seconded by RAAG, approved unanimously

It was noted that AC resolution 02-2 concerning World Amateur Radio Day 2003 was no longer relevant.

**DV05\_C3\_Rec\_12**

***The ERC Chairman should be a member of the EC.***

Proposed by OeVSV, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_13**

***a) That Article A7 of the IARU Region 1 Constitution be amended to read***

***A.7.1 This Constitution shall only be amended by a decision of a least a two-thirds majority of the total number of the IARU Region 1 Member Societies which are eligible to vote, by voting procedures as stated in the Bye-Laws***

***A.7.2. The Bye-Laws shall only be amended by a decision of a simple majority of the total number of the IARU Region 1 Member Societies which are eligible to vote, by voting procedures as stated in the Bye-Laws***

**b) That an addition be made to Article 7:**

**A.7.3. Eligibility to vote is defined in the Bylaws (Section 6.7)**

**c) That a new Bylaw (6.7.2) be introduced as follows:**

**B.6.7.2 At other times when a ballot is being conducted, a Member Society that has not fulfilled all its financial obligations by the end of the month prior to the month in which a vote is initiated, shall not be granted the right to vote in the ballot**

**d) Should there be insufficient number of Member Societies present at the 2005 General Conference to approve this change, then the Secretary be authorised to conduct a postal ballot on the matter.**

Proposed by CARS, seconded by RSGB, approved unanimously

#### **DV05\_C3\_Rec\_14**

**That the conference adopts the following proposals namely:**

- a) Selection and ratification of the International President be stopped and replaced by election**
- b) The post of Vice-President be replaced by three elected Vice-Presidents one from each region**
- c) The total elected membership of the Administrative Council be reduced to seven**
- d) The International President be elected from within the Vice-Presidents by secret ballot amongst all Member Societies through an appropriate system of weighted voting**
- e) The regional Vice-President shall not be an office holder in his/her region.**
- f) The elections of a regional Vice-President and the additional regional member be by secret ballot.**
- g) The Constitutions of the International IARU and all three IARU Regions be amended accordingly.**
- h) That if these proposals are adopted by conference, the Region 1 Executive Committee is directed to canvas for these changes to be adopted by Regions 2 and 3 and the Administrative Council.**

Proposed by RSGB, seconded by RAAG, approved unanimously

RSGB will prepare the proposal to move forward the recommendation, including the necessary Constitution changes, submitting the proposal to the EC for onward transmission to the IS.

A list of societies supporting the proposal will be included with the paper submitted by RSGB.

#### **DV05\_C3\_Rec\_15**

##### **Recommendation**

**That the Region 1 Constitution be amended by the addition of an extra clause in the Constitution and a matching one in the Bylaws, together with renumbering of subsequent clauses in the Bylaws. Should there be insufficient number of Member Societies present at the 2005 General Conference to approve this change, then the Secretary be authorised to conduct a postal ballot on the matter.**

**The new policy, if approved, would become operational from the term of office starting after the 2005 Region 1 Conference.**

**New Clause for the Constitution:**

**A.4.14 Each Executive Committee member shall normally serve no more than three consecutive terms of office. One term of office is the period of office as defined in A.4.13. Exceptionally (for example when a particular EC member has unique skills which need to be retained for the time being on the EC) the outgoing Executive Committee may recommend to the General Conference that that member of the EC should be allowed to stand for election for a further term of office in excess of the three consecutive terms. The justification for such exceptional circumstances shall be explained to the General Conference by way of a paper from the Executive Committee and the decision of Conference on the matter shall be by a simple majority of those voting.**

**New Clause for the Bylaws:**

**B.5.4 Candidates standing for election for the Executive Committee shall meet the requirements set out in Article A.4.14 of the Constitution.**

**Clauses B5.4 – B 5.12 shall be re-numbered as a result of this addition**

Proposed by NRRL, seconded by CARS approved with 2 abstentions

**DV05\_C3\_Rec\_16 (Paper DV05\_C3\_49)**

**That the Conference mandates the EC to reconsider the basis of cost sharing whilst at the same time maintaining the principle of some element of General Conference costs being paid by the hosting society.**

Proposed by DARC, seconded by REP, approved unanimously

**DV05\_C3\_Rec\_17**

**That the General Conference authorises the EC to set up a project along the lines set out in paper DV05\_C3\_50, to produce proposals for consideration and action and that Bob Whelan, G3PJT, be asked to chair the project.**

Proposed by HRS, seconded by CRC, approved unanimously

**DV05\_C3\_Rec\_18**

**That paper DV05\_C3\_51 be rejected as it stands, but that OeVSV be invited to submit a detailed project justification for past and ongoing work against PLC, which, subject to approval by the EMC WG and the EC could be partly funded by the Region.**

Proposed by RSGB, seconded by DARC, approved unanimously

**DV05\_C3\_Rec\_19**

**Conference recommends the creation of an IARU Region 1 Spectrum Defence Fund to address the possible threats to the amateur spectrum. The Fund's primary objective will be to support the work of the Region's specialist committees and assist National Societies, subject to approval by the EC or IARU Region 1 General Conference. Donations to this fund are voluntary and supplemented by restructuring the Regional budget to provide funding for this purpose. A fund budget will be developed each year, and will form part of the Proposed Annual Budget.**

Proposed by OeVSV, seconded by VERON, approved unanimously

**DV05\_C3\_Rec\_20**

***That a narrow allocation, even on a shared basis, is sought in the vicinity of 5 MHz, with the ultimate goal to have an allocation of 100 kHz in the 5MHz band***

Proposed by VERON, seconded by SARL, approved unanimously

**DV05\_C3\_Rec\_21**

***The Committee recommends that Member Societies undertake actions to be included in their national preparatory body for WRC07***

Proposed by CRC, seconded by RSGB, approved unanimously

**DV05\_C3\_Rec\_22**

***Conference recommends that the principles for action set out in paper C3\_48 be passed to the EMC WG and the Eurocom WG to be taken into account in framing their work programme for the next three years.***

Proposed by IRTS, seconded by RSGB, approved unanimously

**DV05\_C3\_Rec\_24 (paper DV05\_C3\_26)**

***That Conference endorse the proposed RRWG work programme with CEPT on TR 6101 and 6102, including the Entry Level Licence programme and general radio amateur licence issues.***

Proposed by HRS, seconded by MRASZ, approved unanimously

**DV05\_C3\_Rec\_25**

***That Conference acknowledges the launch of the RSGB's International Amateur Radio Examination; recognises the suitability of the Examination and associated material for use worldwide; suggests adoption of the Examination by administrations which need a qualification system for Radio Amateurs that they cannot easily supply themselves; supports future developments by the RSGB relating to associated educational initiatives.***

Proposed by ROARS, seconded by OeVSV approved unanimously

**DV05\_C3\_Rec\_27**

***That the HST IARU Region 1 Championship be held every even year  
That the host of the HST World Championship 2007 be Serbia and Montenegro  
That the host of the HST IARU Region 1 Championship 2008 be Italy***

Proposed by MRASZ, seconded by BFRA, approved with one vote against

**DV05\_C3\_Rec\_28**

**The HST WG recommends to the Final Plenary that:**

- a) **A permanent IARU Region 1 HST Championship be organised every even year starting from 2006;**
- b) **The hosting society of the Championship be subsidised with CHF 2000 from Region 1 budget for covering part of its technical and organisational expenses.**

Proposed by RSM, seconded by DARC, approved unanimously

**DV05\_C3\_Rec\_30 (Paper DV05\_C3\_33)**

**The STARS Working Group recommends to the IARU Region 1 General Conference the approval of the Chairman's report (as amended by the Working Group Meeting – Paper DV05\_C3\_32) and that the work and activities of the STARS WG continues for a further three year period in accordance with the IARU Region 1 Constitution and Bye-Laws, the Working Group terms of reference and its action plan as outlined in Doc. DV05\_C3\_33 and related annexes.**

**The STARS Working Group recommends to the IARU Region 1 General Conference to make the following amendments to the Terms of Reference as presented in document DV05\_C3\_38:**

- **to replace the words “area coordinator” by the words “sub regional coordinator” in the paragraphs 2, 10 and 11**

Proposed by OeVSV, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_31**

**That the actions of the STARS project are directed to help the underdeveloped countries to create clubs for the promotion of amateur radio in developing countries. Consequently, national associations will be able to help to solve the administrative and structural problems of these clubs equipped by the project. The members of associations will be able to go there either as a resource, or to learn or teach how to use the equipment.**

Proposed by SARL, seconded by URA, approved unanimously

**DV05\_C3\_Rec\_32**

**That for the three years 2006-7-8 the Member Society fees to Region 1 (including the contribution to Fund 4, now renamed the Development Fund) be set at:**

**Society membership 50 or less: Flat rate of CHF 10**

**Society membership over 50: CHF 10 plus CHF 1.80 per member over 50**

**That the Secretary be instructed to conduct a postal ballot to amend the relevant sections of the Region 1 Constitution and Bye-Laws to put this change into effect.**

Proposed by CARS, seconded by SARL, approved unanimously

**DV05\_C3\_Rec\_33**

- 1 That IARU Region 1 announces a competition amongst Member Societies for best project concerning the amateur radio emergency communications structure, networks, equipment, training activities, etc. The Emergency communications coordinator in close cooperation with Member Societies should summarise the best features of the proposed projects in a pilot project.**
- 2 That IARU Region 1 starts looking for partners able to support financially the project. IARU Region 1 is held in high esteem throughout the whole Region. Besides the traditionally good and useful relations with important institutions such as European Commission, IARU Region 1 should take steps in establishing contacts with other internationally recognised institutions concerned with the problem such as the International Committee of the Red Cross, United Nations Office for Coordination of Humanitarian Affairs, United Nations Office for Project Services, etc. National governmental structures, such as Civil Defence or similar, should be reliable partners, too. Other possible team-mates could be found amongst producers and sellers of amateur radio equipment, producers of rescue equipment, etc.**
- 3 That IARU Region 1 selects three to five Member Societies in countries situated in different areas, vulnerable to different natural hazard to start the pilot project. The results should be reported at the next IARU Region 1 Conference in 2008 in order that a strategy for common Region 1 Amateur Radio Emergency Network may be discussed and relevant decisions taken.**
- 4 That the above three recommendations be forwarded to the IARU Region 1 Emergency Communications Coordinator for attention**

Proposed by RAAG, seconded by VERON, approved unanimously

**DV05\_C3\_Rec\_35**

**To set up an IARU Region 1 Working Group to support the amateur radio activities related to the International Space Station.**

**The recommendation was approved, on the basis that UBA would prepare terms of reference for the WG, and these would be reviewed by the EC, after which work would be put in place to create the Working Group and appoint a Chairman.**

Proposed by REF, seconded by IRTS, approved unanimously

**DV05\_C3\_Rec\_36**

**It is recommended to introduce the appointment of a Vice-Chairman or a Vice Co-ordinator to Working Groups and Committees. The bye-laws have to be amended accordingly. The Vice-Chairman will be appointed by the Working Group or Committee. The Vice Co-ordinator will be appointed by the Co-ordinator. The Chairman's / Co-ordinator's budget has to be shared with Vice-Chairman or Vice Co-ordinator. No financial implications should arise from this.**

Proposed by OeVSV, seconded by USKA, approved unanimously

**DV05\_C3\_37**

**That the Revised Terms of Reference for Committees and Working Groups (as amended in the sub-group meeting held 14 September) and set out in paper DV05\_C3\_38v2 be approved**

Proposed by BFRA, seconded by IRTS, approved unanimously

## **DV05\_C3\_38**

***That the Rules of the HST Championships as proposed by the HST WG be adopted***

Proposed by BFRA, seconded by ROARS, approved unanimously

Paper **DV05\_C3\_16** set out the Constitution and Bye-Laws of the Region as edited by the Region 1 Secretary to remove typographical errors carried over from previous versions of the Constitution and Bye-Laws. No material changes had been made to the document. It was agreed that the paper should be accepted as the Constitution and Bye-Laws of the Region and not put to postal voting unless a Member Society not represented at the Conference so required.

This concluded the discussion of matters from Committee C3

## **Recommendations of Committee C4 – HF Committee**

Note: C4 Recommendations have been re-numbered to be in sequence and do not align with the recommendation numbers in the report from the Committee.

### ***DV05\_C4\_Rec\_01 – Paper DV05\_C4\_33***

***That the IARU Region 1 Permanent HF Committee (C4) takes note of the progress made by the LF working group and of the individual approaches made by some Member Societies to their regulator for amateur access around 500kHz.***

***The Working Group requests continued support for its activities, which are sharing current issues concerning amateur access at 500kHz and coordination of individual approaches to the regulator.***

Proposed by RAAG, seconded by Slovenia, approved unanimously

### ***DV05\_C4\_Rec\_02***

***It is proposed that Recommendation 1.9.1.6, Brighton 1981, spot frequencies, is suppressed.***

Proposed by RSGB, seconded by OeVSV, approved unanimously

### ***DV05\_C4\_Rec\_03***

***It is proposed that the following frequencies be used as centre of activity for emergency traffic:***

#### ***Global Centre of Activity per band:***

***15m                    21,360kHz***

***17m                    18,160kHz***

***20m                    14,300kHz***

#### ***Region 1 Centre of Activity per band:***

***40m                    7,060kHz***

***80m                    3,760kHz***

***and further recommends that the C4 Committee accept that these frequencies be simply termed “Emergency Centre-of-Activity”.***

Proposed by MRASZ, seconded by SRAL, approved unanimously

**DV05\_C4\_Rec\_04**

***It is recommended that IARU Region 1 decides to request IARU, based on IARU Monitoring Service data from all regions, to apply increased pressure on the nations and military powers and alliances operating HF Over-The-Horizon (OTH) radars, in order to encourage them to program their OTH radars in such a way that infringements of the exclusive amateur radio bands are avoided as much as possible.***

Proposed by NRRL, seconded by DARC, approved unanimously

**DV05\_C4\_Rec\_05**

***The HF-Contest sub group is abolished.***

Proposed by CRC, seconded by EDR, approved with 2 abstentions

**DV05\_C4\_Rec\_06**

***It is recommended that C4 decides to discontinue its HF Contest Committee***

Proposed by VERON, seconded by ROARS, approved with 6 abstentions

**DV05\_C4\_Rec\_07**

***Non-contesting radio amateurs are recommended to use the contest-free HF bands (30, 17, and 12 m) during the largest international contests.***

Proposed by HRS, seconded by NRRL, approved with 2 against and 5 abstentions

**DV05\_C4\_Rec\_08**

***That Conference should discourage operation of unmanned beacon stations on 7 and 10MHz.***

Proposed by ZRS, seconded by SARL, approved unanimously

**DV05\_C4\_Rec\_09**

***Member Societies should encourage the operators of 10m FM repeaters in their country to add the requirement for users to transmit a sub-tone (CTCSS) on the input frequency and for operators to transmit such a sub-tone also on the output frequency. This requirement should be announced by the repeater itself, so users may then switch to the appropriate sub-tone.***

Proposed by RAAG, seconded by DARC, approved with one vote against

**DV05\_C4\_Rec\_10**

***It is recommended that RSQ reporting be used for digital modes below 30 MHz.***

Proposed by HRS, seconded by OeVSV, approved with 3 abstentions

**DV05\_C4\_Rec\_11**

***IARU Member Societies should encourage the development of improved openly specified modulation techniques, including corresponding modem hardware, which can be combined or integrated into channel-sharing digital network protocols.***

Proposed by RAAG, seconded by RSGB, approved unanimously

**DV05\_C4\_Rec\_12**

***It is recommended by the IARU Region 1 ARDF Working Group to include in the 3.5 MHz bandplan the new line "3,510-3,600 kHz - unmanned ARDF beacons (CW A1A)"***

Proposed by HRS, seconded by BFRA, approved with 2 abstentions

**DV05\_C4\_Rec\_13**

***It is recommended that the following proposed principles for new IARU Region 1 HF bandplans be accepted, and that the principles be included in the IARU Region 1 HF Manager's Handbook:***

***CW operation is accepted across all bands, except within beacon segments.***

***Telephony (including AM) is limited to certain telephony segments.***

***Digital data modes are limited to certain digital segments.***

***Digitised speech is considered a digital data mode regarding bandplan matters.***

***The current IARU Region 1 band plan is well known and receives a high degree of respect and adherence within the IARU Region 1; hence major changes to the bandplan are not necessary for the time being.***

Proposed by SARL, seconded by RAAG, approved with 4 abstentions

**DV05\_C4\_Rec\_14**

***That the bandplan created by the Bandplan Working Group be approved. (See Annex to recommendation DV05\_C4\_Rec\_14)***

Proposed by DARC, seconded by OeVSV, approved with 5 abstentions

A discussion took place on the changes that had been made, and whether they reflected the agreed bandplan principles in DV05\_C4\_Rec\_13. Iceland pointed out that paper DV05\_C4\_13 was not totally consistent with paper DV05\_C4\_11. However it was agreed that the bandplan should be considered as proposed.

The DXpedition window on the 14 MHz band should be expressed as 14195 +/- 5 kHz window.

It was noted that there were still a few points of clarification needed but that it was virtually complete, and should be approved on this basis, leaving the HF Committee to resolve the few remaining issues via e-mail after the Conference as quickly as possible.

**DV05\_C4\_Rec\_15**

***That until a majority of countries within Region 1 gain access to the extended band, the frequency segment 7,100-7,200 kHz should be used for CW/SSB only (2700 Hz maximum bandwidth).***

Proposed by CRC, seconded by SARL, approved with 2 abstentions

#### **DV05\_C4\_Rec\_16**

**The bandplan as shown for 40m is endorsed from 29 March 2009:**

**7,000 – 7,050 kHz NB CW  
7,050 – 7,075 kHz MB Digimode  
7,075 – 7,200 kHz WB Phone  
NB Bandwidth less than 200 Hz  
MB Bandwidth less than 500 Hz  
WB Bandwidth less than 2700 Hz**

Proposed by OeVSV, seconded by DARC, approved with 2 abstentions

#### **DV05\_C4\_Rec\_17**

**The new HF bandplan (as discussed and passed in the HF-committee) is approved and recommended for use from 1st January 2006.**

Proposed by ARI, seconded by DARC, approved with 2 abstentions

#### **DV05\_C4\_Rec\_18**

**It is recommended that the MOS reporting scale be used as a supplement to the RST reporting scale for digitised speech on frequencies below 30 MHz, and should be included in the HF Manager's Handbook.**

Proposed by NRRL, seconded by OeVSV, approved with 1 abstention

This concluded the discussion of matters from Committee C4

## **Recommendations of Committee C5 – VHF/UHF/Microwave Committee**

#### **DV05\_C5\_Rec\_01**

*That the following recommendations from the VIENNA 2004 meeting of the Region 1 VHF/UHF/Microwaves committee, already approved by the EC, be ratified*

- a. **To amend the 435 MHz bandplan by introducing an FM Telephony repeater system with an input-output frequency difference of 2 MHz ( details in Annex to Recommendation DV05\_C5\_Rec\_01(A))**
- b. **To change the frequencies of digital channels in the 435 MHz band according to the EDR proposal in Annex to Recommendation DV05\_C5\_Rec\_01(B)**
- c. **To add 433.800 MHz as a frequency for APRS ( with the note that this only applies in cases where 144.800 MHz cannot be used)**
- d. **To add in the usage column of the 1.3 GHz bandplan for 1272-1291 MHz DATV besides ATV.**
- e. **To amend the 47 GHz bandplan so that the NB segment lies between 47088 and 47090 MHz with 47088.200 MHz as the centre of activity.**
- f. **To amend the rules for all VHF and above IARU Region 1 contests with the rule: "All the equipment of the station (transmitters, receivers and antennas, etc) must be located within a single circle of no greater than 500 metres diameter. "**
- g. **To extend the frequencies for which the S9 level is –93 dBm from 144 MHz down to 30 MHz in IARU technical recommendation R1.**

Proposed by USKA, seconded by DARC, approved unanimously

**DV05\_C5\_Rec\_02**

**DELETED**

**DV05\_C5\_Rec\_03**

**Societies should collect information on possible threats to the VHF/UHF/Microwaves bands in their respective countries. This information is to be forwarded to the Allocations Coordinator for inclusion in a Threats Table.**

Proposed by SARL, seconded by OeVSV, approved unanimously

An example of such a table has been provided by RSGB in Annex to Recommendation DV05\_C5\_Rec\_03

**DV05\_C5\_Rec\_04**

**A column with maximum bandwidths will be added to 70 MHz, 435 MHz and 1,3 GHz bandplans. The resulting bandplans are in the Annex to Recommendation DV05\_C5\_Rec\_04**

Proposed by DARC, seconded by RSGB, approved unanimously

**DV05\_C5\_Rec\_05**

**The following footnote will be added to the 145 MHz bandplan:**

**Footnote i: It is recognised that in the IARU Region 1 rules for the Championships in Amateur Radio Direction Finding (ARDF) competitions, the frequencies for the unmanned beacons are in the segment 144.500 – 144.900 MHz. These beacons run low power and are on the air only during ARDF events.**

**The existing footnote f will be amended to read:**

**Footnote f: No unmanned stations shall use the all-mode segment, except for linear transponders and ARDF beacons. (Tel Aviv 1996, San Marino 2002)**

Proposed by OeVSV, seconded by CRC, approved with 1 abstention

**DV05\_C5\_Rec\_06**

**QSOs via Meteor Scatter have to be subject to the operating procedures as given in the Annex to Recommendation DV05\_C5\_Rec\_06**

Proposed by RSGB, seconded by VERON, approved unanimously

**DV05\_C5\_Rec\_07**

**In the 145 MHz bandplan the MGM segment of 144.135 – 144.165 MHz shall be extended to be 144.110 – 144.180 MHz. The relevant part of the 145 MHz bandplan is shown in Annex Rec 07-A:**

Proposed by RSGB, seconded by DARC, approved unanimously

#### **DV05\_C5\_Rec\_08**

- 1) ***In accordance with the IARU principle of using Primary and Primary Exclusive allocations in preference to secondary allocations, it is recommended that Amateur and Amateur Satellite weak-signal operation should, wherever possible, use the 500 MHz segment 75.5 GHz to 76.0 GHz as per CEPT Footnote EU35 in the European Frequency Tables. Region 1 societies in CEPT countries should encourage their administrations to implement EU35 as soon as possible. The IARU bandplan should be amended accordingly.***
- 2) ***In the bands above 76 GHz, for example 241 GHz, users are encouraged to use the Primary Exclusive allocations.***

Proposed by OeVSV, seconded by REF, approved unanimously

The 76 GHz bandplan is shown in Annex to recommendation DV05\_C5\_Rec\_08

#### **DV05\_C5\_Rec\_09**

***The following text [shown Appendix to recommendation DV05\_C5\_Rec09] will replace the existing text in the IARU Region 1 VHF, UHF/Microwaves and 50 MHz contest rules.***

Proposed by REF, seconded by Slovenia, approved unanimously

#### **DV05\_C5\_Rec\_10**

***It is recommended that the National Societies will run their ATV contests at the same time as the IARU Region 1 ATV contest takes place (1800 UTC – 1200 UTC).***

Proposed by VERON, seconded by RAAG, approved unanimously

#### **DV05\_C5\_Rec\_11**

***The Region 1 listeners contest on VHF/UHF/Microwaves shall be discontinued.***

Proposed by Slovenia, seconded by AFVL, approved with one vote against

This concluded the discussion of matters from Committee C5.

## **Appointment of Committee and Working Group Chairmen and Coordinators**

#### **DV05\_C3\_Rec\_01**

***That Wolfgang Hadel, DK2OM be appointed coordinator of IARU MS***

Proposed by RAAG, seconded by USKA, approved unanimously

#### **DV05\_C3\_Rec\_03**

***That Christian Verholt, OZ8CY, be appointed as EMC WG Chairman for a further three year period.***

Proposed by NRRL, seconded by REF, approved unanimously

#### **DV05\_C3\_Rec\_05**

***That Gaston Bertels, ON4WF, be appointed Chairman, EUROCOM WG, for a further three year period.***

Proposed by VERON, seconded by ARABiH, approved unanimously

**DV05\_C3\_Rec\_07**

***That Rizkallah Azrak, OD5RI, be appointed IPHA Coordinator.***

Proposed by OeVSV, seconded by KARS approved unanimously

**DV05\_C3\_Rec\_23**

***That Rainer Floesser, DL5NBZ, be appointed as Chairman of the ARDF working group for a further three year period.***

Proposed by RSM, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_26**

***That Bob Whelan, G3PJT be appointed Chairman of RRWG for the next three year period.***

Proposed by REF, seconded by HRS, approved unanimously

**DV05\_C3\_Rec\_29**

***That Oliver Tabakovski, Z32TO be appointed Chairman, HST WG for the next three year period.***

Proposed by BFRA, seconded by ARABiH, approved unanimously

**DV05\_C3\_Rec\_30 (part)**

***That Hans Welens, ON6WQ, be appointed STARS WG Chairman for the next three year period.***

Proposed by OeVSV, seconded by SARL, approved unanimously

**DV05\_C3\_Rec\_34**

***That Dr Seppo Sisatto, OH1VR be appointed IARU Region 1 Emergency Communications Coordinator***

Proposed by RSGB, seconded by VERON, approved unanimously

**DV05\_C4\_Rec\_40**

***That Colin Thomas G3PSM be appointed as HF Chairman.***

Proposed by CARS, seconded by DARC, approved with 1 abstention

***Other Recommendations (not numbered from the Committee final reports)***

***That Michael Kastelic, OE1MCU be appointed Chairman, VHF/UHF/Microwave Committee:***

Proposed by EDR, seconded by UBA, approved unanimously

***That Hans Blondeel Timmerman, PB2T, be appointed ERC Chairman***

Proposed by RSGB, seconded by CRC, approved unanimously

***That Martin Harrison, G3USF, be appointed HF Beacon Coordinator***

Proposed by KARS, seconded by SARL, approved unanimously

This concluded the appointments agreed at Conference

## **Results of the election for members of the Executive Committee**

The Chairman of the Election and Ballot Committee announced the voting for members of the Executive Committee, to serve for the next three year period.

For the post of President:	Ole Garpestad, LA2RR,	48 votes
For the post of Vice-President:	Tafa Diop, 6W1KI,	49 votes
For the post of Secretary,	Don Beattie G3BJ,	51 votes
For the post of Treasurer,	Andreas Thiemann, HB9JOE,	51 votes

For ordinary members of the Executive Committee:

Hans Blondeel Timmerman, PB2T	43 votes
Panayot Danev, LZ1US	40 votes
Hans-H Ehlers, DF5UG	28 votes
Nicola Percin, 9A5W	25 votes
DR (Max) Raicha, 5Z4MR	23 votes
Faisal Nahar Al Ajmi, 9K2RR	22 votes
Hamed Nassar, SU1HN	22 votes
Graham Hartlett, ZS6GJH	19 votes

The Executive Committee for the next three years will therefore comprise:

Ole Garpetsdad, LA2RR, President  
Tafa Diop, 6W1KI, Vice-President  
Don Beattie, G3BJ, Secretary  
Andreas Thiemann, HB9JOE, Treasurer

Hans Blondeel Timmerman, PB2T  
Panayot Danev, LZ1US  
Hans-H Ehlers, DF5UG  
Nicola Percin, 9A5W  
DR (Max) Raicha, 5Z4MR

The President congratulated those who had been successful in the ballot, and thanked the other candidates for standing for election.

A question was asked about the availability of Conference documents. The Secretary explained that all Conference documents and outputs would be on the Conference server for the next three months. These would be available in the next few days. In addition to this, a data CD-ROM will be distributed to all member societies a few weeks after the Conference, as a permanent record.

The President then reminded the meeting that Arie Dogterom, PA0EZ, was standing down from Chairman of the VHF/UHF/Microwave committee. Arie Dogterom was awarded the Region 1 Medal, and presented with this and a commemorative Certificate by the Region 1 President.

The Chairman of EBC then announced that as a result of the ballot on the venue of the Regional Conference in 2008, 39 vote had been cast in favour of Cavtat, Croatia, and 15 votes in favour of Beirut, Lebanon. The Conference would therefore take place at Cavtat. The final date would be confirmed shortly, but would be in October 2008.

OeVSV asked that it be noted that TRAC had given their proxy to RAAG for duration of the Conference, and cited this as an example to true ham spirit. There was general agreement to this sentiment.

There being no further business, the President closed the meeting, wishing all present a safe journey home.

**Annex to Recommendation DV05\_C2\_Rec\_01**

**List of societies and their heads of delegation at the 2005 Davos Conference**

<b>Society</b>	<b>Country</b>	<b>Surname</b>	<b>Title</b>	<b>Other names</b>	<b>Callsign</b>
ARA	Algeria	Benlagha	Mr	Affif	7X2RO
ARABIH	Bosnia & Herzegovina	Abadzic	Mr	Nusret	T93N
ARAI	Cote d'Ivoire	Niava	Mr	Jean-Jacques	TU2OP
ARAS	Senegal	Mbengue	Mr	Papa Malick	6W1FJ
ARI	Italy	Ortona	Mr	Alessio	I1BYH
ARM	Monaco	Scarlot	Mr	Robert	3A2CR
ARRSM	San Marino	Montico	Mr	Giancarlo	T77WI
ARTJ	Cameroun	Ntsiyep	Mrs	Florence	TJ1NT
ASTRA	Tunisia	Landoulsi	Mr	Mustapha	DL1BDF
BFRA	Bulgaria	Milanov	Mr	Milcho	LZ1RF
BFRR	Belarus	Bindasov	Mr	Andrei	EU7KI
CARS	Cyprus	Stavrinides	Mr	Spyros	5B4MF
CRAM	Mali	Yattara	Mr	Hamadoun	TZ6HY
CRC	Czech Republic	Prostecky	Mr	Milos	OK1MP
DARC	Germany	Bottcher	Mr	Heinz-Gunter	DK2NH
EARA	Egypt	Nassar	Dr	Hamed	SU1HN
EDR	Denmark	Lundbech	Mr	Sven	OZ7S
ERAU	Estonia	Vahk	Mr	Tonno	ES5TV
HRS	Croatia	Milicic	Mr	Petar	9A6A
IRA	Iceland	Benediktsson	Mr	Kristjan	TF3KB
IRTS	Ireland	Buckley	Mr	Finbarr	EI1CS
KARS	Kuwait	Mubarek Belal	Mr	Ali	9K2SS
LRMD	Lithuania	Zdramys	Mr	Antanas	LY1DL
MARL	Malta	Privitera	Mr	Ivan	9H1PI
MRASZ	Hungary	Berzsenyi	Mr	Laszlo	HA5EA
NRRL	Norway	Torp	Mr	Anders	LA9NT
OeVSV	Austria	Zwingl	Mr	Michael	OE3MZC
PZK	Poland	Wysocki	Mr	Wieslaw	SP2DX
RAAG	Greece	Darkadakis	Mr	Manos	SV1IW
RAL	Lebanon	Azrak	Mr	Rizkallah	OD5RI
REF	France	Magnin	Mrs	Betty	F6IOC
REP	Portugal	Stein	Mr	Hermann	CT3FN
ROARS	Oman	Al Ajmi	Dr	Fahed Saleh	A41LK
RSGB	UK	Smith	Mr	Jeff D	MI0AEX
SARA	Slovakia	Mraz	Mr	Anton	OM3EI
SARL	South Africa	Hartlett	Mr	Graham	ZS6GJH
SRAL	Finland	Bergman	Mr	Pasi	OH3WS
SRR	Russia	Tomas	Mr	Roman	RZ3AA**
SRSCG	Serbia & Montenegro	Milosevic	Mr	Hranislav	YT1AD
SSA	Sweden	Eriksson	Mr	Goran	SM5XW
TIR	Syria	Shabsigh	Dr	Omar	YK1AO
UBA	Belgium	Devoldere	Mr	John	ON4UN

URA	Andorra	Sauri Araus	Mr	Joan	C31US
URE	Spain	Baques	Mr	Antonio	EA3BRA
USKA	Switzerland	Kuhne	Mr	Pirmin	HB9AAQ
VERON	Netherlands	Harms	Mr	Dick	PA2DW
ZRS	Slovenia	Krajcar	Mr	Goran	S52P

**Proxies**

AFVL	Liechtenstein
AGRA	Gabon
ARAB	Bahrain
ARSK	Kenya
FRA	Faroes
QARS	Qatar
RJARS	Jordan
RSM	Macedonia
TRAC	Turkey

**Held by**

USKA
ARAI
KARS
CRAM
EDR
TIR
ROARS
BFRA
RAAG

## Annex to Recommendations DV05\_C4\_Rec\_14 and 17

### IARU REGION 1 HF BAND PLAN – Effective 1<sup>st</sup> January 2006

FREQUENCY (kHz)	MAX BANDWIDTH (Hz)	PREFERRED MODE
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No rigid bandplan is proposed for 135 -137 kHz

137 kHz Band:	135.7 - 136.0	200	CW, station tests, QRSS
	136.0 - 137.4	200	CW
	137.4 - 137.6	200	digimode, except CW
	137.6 - 137.8	200	CW, QRSS Centre of Activity 137.7 kHz

1.8 MHz Band:	1810 - 1838	200	CW
	1838 - 1840	500	All narrow band modes, CW QRP Centre of Activity 1836 kHz
	1840 - 1843	2700	All modes, (1), digimode,
	1843 - 2000	2700	All modes, (1)

3.5 MHz Band:	3500 - 3510	200	CW, priority for intercontinental operation
	3510 - 3560	200	CW, CW contest preferred, QRS Centre of Activity 3555 kHz
	3560 - 3580	200	CW, CW QRP Centre of Activity 3560 kHz
	3580 - 3590	500	All narrow band modes, digimode
	3590 - 3600	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	3600 - 3620	2700	All modes, (1), digimode, automatically controlled data station (unattended)
	3600 - 3650	2700	All modes, (1), ssb contest preferred, digital voice (DV) Centre of Activity 3630 kHz
	3650 - 3700	2700	All modes, SSB QRP Centre of Activity 3690 kHz
	3700 - 3775	2700	All modes, SSB contest preferred, Image Centre of Activity 3735 kHz, <b>Region 1 Emergency Centre of Activity 3760 kHz</b>
3775 - 3800	2700	All modes, priority for intercontinental operation	

7 MHz Band:	7000 - 7035	200	CW, CW QRP Centre of Activity 7030 kHz
	7035 - 7038	500	All narrow band modes, digimode
	7038 - 7040	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	7040 - 7043	2700	All modes (1), digimode, automatically controlled data stations (unattended)
	7043 - 7100	2700	All modes (1), Image Centre of Activity 7043 kHz, <b>Region 1 Emergency Centre of Activity 7060 kHz</b> , digital voice (DV) Centre of Activity 7070 kHz, SSB QRP Centre of Activity 7090 kHz
	7100 - 7200	2700	All modes (2009: 200 Hz + 500 Hz segments below 7.1 Mhz will be extended)

10 MHz:	10100 - 10140	200	CW, QRP Centre of Activity 10116 kHz
	10140 - 10150	500	All narrow band modes, digimode,

14 MHz Band:			
	14000 - 14060	200	CW, CW contest preferred, QRS Centre of Activity 14055 kHz
	14060 - 14070	200	CW, QRP Centre of Activity 14060 kHz
	14070 - 14089	500	All narrow band modes, digimode
	14089 - 14099	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	14099 - 14101		IBP, exclusively for beacons
	14101 - 14112	2700	All modes, digimode, automatically controlled data stations (unattended)
	14112 - 14125	2700	All modes
	14125 - 14300	2700	All modes, ssb contest preferred, digital voice (DV) Centre of Activity 14130 kHz, Image Centre of Activity 14230 kHz, SSB QRP Centre of Activity 14285 kHz.
14300 - 14350	2700	All modes, <b>Global Emergency Centre of Activity 14300 kHz.</b>	

18 MHz Band:	18068 - 18095	200	CW, CW QRP Centre of Activity 18086 kHz
	18095 - 18105	500	All narrow band modes, digimode
	18105 - 18109	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	18109 - 18111		IBP, exclusively for beacons
	18111 - 18120	2700	All modes, digimode, automatically controlled data stations (unattended)
	18120 - 18168	2700	All modes, digital voice (DV) centre of activity 18130 kHz, <b>Global Emergency Centre of Activity 18160 kHz</b>

21 MHz Band:	21000 - 21070	200	CW, QRS Centre of Activity 21055 kHz, CW QRP Centre of Activity 21060 kHz
	21070 - 21090	500	All narrow band modes, digimode
	21090 - 21110	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	21110 - 21120	2700	All modes (excluding SSB), digimode, automatically controlled data stations (unattended)
	21120 - 21149	500	All narrow band modes
	21149 - 21151		IBP, exclusively for beacons
	21151 - 21450	2700	All modes, digital voice (DV) Centre of Activity 21180 kHz, SSB QRP Centre of Activity, 21285 kHz, Image Centre of Activity 21340 kHz, <b>Global Emergency centre of activity 21360 kHz,</b>

24 MHz Band:	24890 - 24915	200	CW, CW QRP Centre of Activity 24906 kHz
	24915 - 24925	500	All narrow band modes, digimode
	24925 - 24929	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	24929 - 24931		IBP, exclusively for beacons
	24931 - 24940	2700	All modes, digimode, automatically controlled data stations (unattended)
	24940 - 24990	2700	All modes, digital voice (DV) Centre of Activity 24960 kHz

28 MHz Band:	28000 - 28070	200	CW, QRS Centre of Activity 28055 kHz, CW QRP Centre of Activity 28060 kHz
	28070 - 28120	500	All narrow band modes, digimode
	28120 - 28150	500	All narrow band modes, digimode, automatically controlled data stations (unattended)
	28150 - 28190	500	All narrow band modes
	28190 - 28199		IBP, regional time shared beacons
	28199 - 28201		IBP, worldwide time shared beacons
	28201 - 28225		IBP, continuous duty beacons
	28225 - 28300	2700	All modes, beacons
	28300 - 28320	2700	All modes, digimode, automatically controlled data stations (unattended)
	28320 - 29200	2700	All modes, digital voice (DV) Centre of Activity 28330 kHz,
			SSB QRP Centre of Activity 28360 kHz, Image Centre of Activity 28680 kHz
	29200 - 29300	6000	All modes, digimode, automatically controlled data stations (unattended)
	29300 - 29510	6000	Satellite-downlink
	29510 - 29520		Guard channel
	29520 - 29550	6000	All modes, FM simplex – 10 kHz channels
	29560 - 29590	6000	All modes, FM repeater input (RH1 – RH4)
	29600	6000	All modes, FM calling channel
	29610 - 29650	6000	All modes, FM simplex – 10 kHz channels
29660 - 29700	6000	All modes, FM repeater outputs (RH1 – RH4)	

## Explanations

### Bandwidths

Max. 200 Hz	Emission bandwidths of less than 200 Hz
Max. 500 Hz	Emission bandwidths of less than 500 Hz
Max. 2700 Hz	Emission bandwidths of less than 2700 Hz
Max. 6000 Hz	Emission bandwidths of less than 6000 Hz

### Preferred Modes

All modes                      SSB, CW and those other modes listed around a given centre of activity, plus Amplitude Modulation (consideration should be given to adjacent channel users).

Image                              The Image mode includes FAX and SSTV

Narrow band modes          All modes up to 500 Hz bandwidth including CW, RTTY, PSK etc

Digimodes                       Includes, but not limited to PSK31, PSK63, RTTY, MT63 (within bandwidth limits)

**Sideband usage:**              Below 10MHz use lower sideband (LSB), above 10MHz use upper Sideband (USB)

1)                                      Lowest dial setting for LSB: 1843, 3603, 7043 kHz

## Notes

CW QSOs are accepted across all bands, except within beacon segments. (Recommendation DV05\_C4\_11)

Contest activity shall not take place on the 10, 18 and 24 MHz 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\_25)

The term “automatically controlled data stations” includes Store and Forward stations.

### Transmitting frequencies:

The announced frequencies in the bandplan are understood as “transmitted frequencies” (not those of the suppressed carrier!)

### 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.

### 1.8 MHz band:

Those societies, which have a SSB allocation below 1840 kHz only, may continue to use it, but they are requested to take all necessary steps with their licence administrations to adjust the phone allocations in accordance with the Region 1 Bandplan.

### 3.5 MHz band:

Intercontinental operations should be given priority in the segments 3500-3510 kHz and 3775-3800 kHz.

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

3510-3600 kHz may be used for unmanned ARDF beacons (CW A1A) (Recommendation DV05\_C4\_15)

Member societies should approach their national telecommunication authorities and ask them not to allocate frequencies to other than amateur stations in the band segment that IARU has assigned to intercontinental long distance traffic.

### 7 MHz band:

The band segment 7035-7045 kHz may be used for automatically controlled data stations (unattended) traffic in the area of Africa south from the equator during local daylight hours.

### 10 MHz band:

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 10120 kHz to 10140 kHz 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 10 MHz band.

### 14 MHz band:

DXpedition traffic should be given priority on 14195 kHz. (Davos 2005)

### 28 MHz band:

Member societies should advise operators not to transmit on frequencies between 29.3 and 29.51 MHz to avoid interference to amateur satellite downlinks.

Experimentation with NBFM Packet Radio on 29 MHz band:

Preferred operating frequencies on each 10 kHz from 29.210 to 29.290 MHz included should be used. A deviation of  $\pm 2.5$  kHz being used with 2.5 kHz as maximum modulation frequency.

## **Annex to Recommendation DV05\_C5\_Rec\_01**

(A) To move the Repeater input segment ("Region 1 system")

From: 432.994 – 433.381 MHz  
To: 432.594 – 432.981 MHz

Keeping the Output segment at:

434.594 – 434.981 MHz

The result will be a 2 MHz spaced repeater system with all the repeater input frequencies and some of the output frequencies free from SRD/LPD interference.

The first step to make this move possible was taken at the San Marino conference in 2002 where it was agreed to move the beacon segment from 432.800 – 432.990 MHz to 432.400 – 432.490 MHz. That transition was finished per January the 1<sup>st</sup> 2004.

(B) To move the digital segment (Footnote i -1)

From: 432.700 – 432.725 – 432.750 – 432.775 MHz  
To: 432.500 – 432.525 – 432.550 – 432.575 MHz

Keeping the "corresponding" digital segment at:

434.475 – 434.500 – 434.525 – 434.550 – 435.575 MHz

The result will be a 2 MHz spaced digipeater system (in continuation of the FM repeater system) with all the lower frequencies free from SRD/LPD interference

## Annex to Recommendation DV05\_C5\_Rec\_03

### UK Amateur Radio Microwave Allocations and Status

Band (MHz)	Allocation Status	Threat/Comment
1240-1325	Secondary	Galileo
2310-2450	Secondary Users must accept interference from ISM users	WLANs
3400-3475	Secondary	Various Digital Radio, UWB
5650-5680 5755-5765 5820-5850	Secondary Users must accept interference from ISM users	Fragmented into 3 subbands. EU17 & EU23 Largely ignored Wimax WLANs, UWB 5725+ Fixed Wireless Access
10000-10125 10225-10475	Secondary	Various Fixed Digital Radio UWB
24000-24050	<b>Primary</b> Users must accept interference from ISM users	Automotive SRR
24050-24150	Secondary (2) May only be used with written consent. Users must accept interference from ISM users	Automotive SRR
24150-24250	Secondary	Automotive SRR
47000-47200	<b>Primary</b>	
75500-76000	<b>Primary (1)</b>	EU35 2006+ extension not yet implemented in the UK
76000-77500	Secondary	Automotive LRR
77500-78000	<b>Primary</b>	Automotive SRR
78000-81000	Secondary	Automotive SRR
122250-123000	<b>Primary</b>	
134000-136000	<b>Primary</b>	
136000-141000	Secondary	
142000-144000	<b>Primary (1)</b>	
241000-248000	Secondary	
248000 –250000	<b>Primary</b>	

**ISM = Industrial, Scientific and Medical.**

**LRR = Long Range Radar, SRR= Short Range Radar, for Automotive applications**

**UWB = Ultra Wide Band**

**(1) Until 31st December 2006.**

**(2) No permits have been issued for this band**

**NOTE: UK Intermediate Licence Users lost access to bands between 47.2GHz and 248GHz, following Notice of Variations (NoVs) issued on 26-Jul-2003**

## Annex to Recommendation DV05\_C5\_Rec\_04

### 70.0 - 70.5 MHz BANDPLAN

Frequency (MHz)	Maximum Bandwidth	MODE	Usage
70.000 70.050	500 Hz	TELEGRAPHY, MGM	Beacons 70.030 Personal beacons
70.050 70.250	2700 Hz	TELEGRAPHY, SSB, MGM	70.150 MS calling 70.185 Crossband center of activity 70.200 Telegraphy/SSB calling
70.250 70.294	12 kHz	AM/FM a)	70.260 AM/FM calling
70.294 70.500	12 kHz	FM CHANNELS, 12.5 kHz spacing	70.3000 RTTY/FAX 70.3125 Packet radio 70.3250 Packet radio     70.4500 FM calling 70.4625 70.4750 70.4875 Packet radio

a) No MGM traffic between 70.250 and 70.294 MHz.

### 430 - 440 MHz BANDPLAN

Frequency (MHz)	Maximum Bandwidth	MODE	Usage
430.000  SUB-REGIONAL (national bandplanning) (d)	20 kHz	ALL MODES	430.025 - 430.375 FM repeater output-channel freqs (F/PA/ON), 12,5 kHz spacing, 1.6 MHz shift (f)  430.400 - 430.575 Digital communication link channels (g) (j)  430.600 - 430.925 Digital communications repeater channels (g) (j) (l)  430.925 - 431.025 Multi mode channels (j) (k) (l)  431.050 - 431.825 Repeater input channel freqs (HB/DL/OE), 25 kHz spacing, 7.6 MHz shift (f)  431.625 - 431.975 Repeater input channel freqs (F/PA/ON), 12.5 kHz spacing, 1.6 MHz shift
431.981 432.000	500 Hz	Telegraphy (a)	432.000 - 432.025 EME  432.050 Telegraphy centre of activity

<b>432.100</b>			432.088	PSK31 centre of activity
<b>432.100</b>	2700 Hz	TELEGRAPHY, SSB, MGM	432.200 432.350	SSB centre of activity Microwave talkback centre of activity
<b>432.399</b>			432.370	FSK441 random calling
<b>432.400</b>	500 Hz	TELEGRAPHY, MGM	Beacons Exclusive (b)	
<b>432.500</b>	12 kHz	ALL MODES	432.500	Narrow-band SSTV
<b>432.994</b>			432.500-432.575	Digital communications channels (by exception !!) (i)
			432.500-432.600	LINEAR TRANSPONDER IN(e)
			432.600	RTTY (ASK/PSK)
			432.700	FAX (ASK)
			432.600-432.800	LINEAR TRANSPONDER OUT(e)
			432.594-432.981	REPEATER INPUT REGION 1 STANDARD, 25 kHz spacing, 2 MHz shift (Channel freq 432.600--432.975 MHz) In the UK repeater OUTPUT channels.
<b>432.994</b>	12 kHz	FM REPEATER	REPEATER INPUT REGION 1 STANDARD, 25 kHz spacing, 1.6 MHz shift (Channel freq 433.000--433.375 MHz) In the UK repeater OUTPUT channels.	
<b>433.381</b>				
<b>433.394</b>	12 kHz	FM	433.400	SSTV(FM/AFSK)
<b>433.581</b>			433.500	(Mobile) FM calling SIMPLEX CHANNELS, 25 kHz spacing, ( Channel freq 433.400 - 433.575 MHz)
<b>433.600</b>	20 kHz	ALL MODES	433.600	RTTY (AFSK/FM)
			433.625 - 433.775	Digital communications channels (g) (h) (i)
			433.700	FAX channel (FM/AFSK)
			433.800	APRS (only when 144.800 can not be used)
<b>434.000</b>			434.000	Centre frequency of digital experiments as defined on note (m)
<b>434.000</b>	20 kHz (c)	ALL MODES & ATV (c)	434.450 - 434.575	Digital communications channels (by exception !!) (i)
<b>434.594</b>				
<b>434.594</b>	12 kHz (c)	FM & ATV(c)	REPEATER OUTPUT (region 1 system), 25 kHz spacing, 1.6 MHz shift, (Channel freq 434.600 -- 434.975 MHz) In the UK repeater INPUT channels	
<b>434.981</b>				
<b>435.000</b>	20 kHz (c)	ALL MODES	Satellite service & ATV (c)	
<b>438.000</b>				
<b>438.000</b>	20 kHz (c)	ALL MODES	438.025 - 438.175	Digital communications channel freqs (g)
ATV (c) & SUB-REGIONAL (national bandplanning) (d)			438.200 - 438.525	Digital communications repeater channels (g) (j) (l)
			438.550 - 438.625	Multi-mode (j) (k) (l)
			438.650 - 439.425	Repeater output channels (HB/DL/OE), 25 kHz spacing, 7.6 MHz shift, (f)
			439.800 -- 439.975	Digital communications link channels (g) (j)
<b>440.000</b>			439,9875	POCSAG centre

## NOTES ON THE 430 - 440 MHz BANDPLAN

### **1. IARU REGION 1 BANDPLAN**

The following notes are part of the officially adopted IARU Region 1 bandplan, and all member societies should strongly promote adherence to the recommendations made in these notes.

#### 1.1. General

- i. In Europe no input or output channels of telephony repeaters shall be allowed to operate between 432 and 433 MHz. (From 1-1-2004 those frequencies are ....between 432.000 and 432.600 MHz .....
- ii. Beacons, irrespective of their ERP, will have to be located in the exclusive beacon part of the band.
- iii. FM telephony channels and Repeaters are specified in section VIb

#### 1.2. Footnotes

- a. Telegraphy is permitted over the whole narrow\_band DX part of the band; Telegraphy exclusive between 432.000 \_ 432.100 MH. PSK31, however, can be used as well in this segment
- b. Within IARU Region 1 the frequencies for beacons with an ERP of more than 50 Watts are coordinated by the IARU Region 1 Beacon Coordinator (see section IX).
- c.
  - i. ATV operators should be encouraged to use the microwave allocations where available, but may continue to use the 430 MHz band where permitted by the licensing authority. In case of interference between ATV and the Amateur Satellite Service ,the Satellite Service should have priority.
  - ii. ATV transmissions in the 435 MHz band should take place in the segment 434.000 \_ 440.000 MHz. The video carrier should be below 434.500 MHz or above 438.500 MHz. National societies should provide guidance to their members on the exact frequencies to be used, with due consideration of the interests of other users. In the segment 434.000 – 440.000 MHz, ATV operation is allowed to exceed the maximum bandwidth specified for different subsegments, into which the segment 434.000 – 440.000 MHz is divided.  
(Noordwijkerhout 1987)
- d. The words "Sub\_regional (national) bandplanning" appearing in IARU Region 1 VHF/UHF/Microwave bandplans mean the following:  
  
In bands and sub\_bands not available throughout Region 1, band\_planning should be coordinated on a sub\_regional basis between the countries where those bands and sub\_bands are allocated to the Amateur Service. The words "national bandplanning" refer to bands/segments which are available only in a single country (such as the 70 MHz band allocation), or only in a few widely separated countries.(Torremolinos 1990)
- e. At the IARU Region 1 Conference in Torremolinos (1990) the output band for linear transponders was extended from 432.700 to 432.800 MHz under the following condition:  
  
The established use of 432.600 MHz for RTTY (ASK/PSK) and 432.700 MHz for FAX should be respected when installing linear transponders which use this allocation.

### **2. USAGE**

The following notes are referring to the Usage column in the bandplan. As already set out in the introduction to section IIc, in the right amateur spirit operators should take notice of these agreements which are made for operating convenience, but no right to reserved frequencies can be derived from a mention in the Usage column or from the following notes ( except where "exclusive" is mentioned").

#### 2.1. General

deleted

#### 2.2. Footnotes

- f. The HB/DL/OE wide\_shift repeater system, already in use for a long time, is valuable with a view to a better utilisation of the whole band. Hence IARU Region 1 endorses the system.  
This also applies for the French repeater channel system, also adopted by the Netherlands and Belgium, which IARU Region 1 supports as a useful measure to fill a hitherto unused part of the band.  
For the numbering of FM telephony channels see appendix 2 to this section

- g. In the Usage section of the 435 MHz bandplan the following frequency segments have been designated for digital communications:
- i) 430.544 -430.931 MHz    Extension of the 7.6 MHz repeater system input for digital comm.  
438.194 -438.531 MHz    Output channels for the above
  - ii) 433.619 -433.781 MHz  
438.019 -438.181 MHz
  - iii) 430.394 -430.581 MHz    For digital communication links  
439.794 -439.981 MHz    For digital communication links

With due regard to the band allocated to the Amateur Service by the national Administration, the interests of other users, possible interference from e.g. ISM, the specific digital technique or system to be accommodated etc., a sub\_regional, or national choice may be made within the above segments.

- h. In those countries where 433.619 \_ 433.781 MHz is the only segment of the 435 MHz band available for digital communications, modulation techniques requiring a channel separation exceeding 25 kHz should not be used. If different or incompatible use of this part of the frequency spectrum is contemplated in neighbouring countries, this use should be coordinated between the countries concerned with the aim of avoiding harmful interference.
- i. On a temporary basis, in those countries where 433.619 \_ 433.781 MHz is the only segment of the 435 MHz band available for Digital Communications:
1. Channels with centre frequencies 432.500, 432.525, 432.550, 432.575, 434.450, 434.475, 434.500, 434.525, 434.550 and 434.575 may be used for digital communications.
  2. Use of these channels must not interfere with linear transponders.
  2. Modulation techniques requiring a channel separation exceeding 25 kHz must not be used on these channels.

(De Haan, 1993)

- j. At the IARU Region 1 Conference in Torremolinos (1990) the following recommendation was adopted regarding the segments for repeaters and links, shown in footnote g:

For a repeater/link to be installed within 150 km of a national border, the member society should co\_ordinate the frequency allocation and the technical (system) data with the member societies in neighbouring countries. Special attention should be paid to the common good practice of using directional antennas and the minimum power necessary.

As a matter of course this agreement is also valid for any link experiments carried out on the multi\_mode channels in the segment 438.544--438.631 MHz. ( De Haan, 1993 ).

- k. These multi\_mode channels are to be used for experimenting with new transmission technologies (De Haan, 1993)
- l. In the United Kingdom the use of low\_power speech repeaters on repeater channels in the segment 438.419--438.581 is allowed. Where necessary, frequencies will be coordinated with neighbouring countries (De Haan, 1993).
- m. Experiments using wide band digital modes may take place in the 435 MHz band in those countries that have the full 10 MHz allocation. These experiments should be in the all modes section around a frequency of 434 MHz, use horizontal polarisation and the minimum power required. These experiments are allowed to exceed the maximum bandwidths indicated in the bandplan. (Tel Aviv 1996)

## 1240 - 1300 MHz BANDPLAN

Frequency (MHz)	Maximum Bandwidth	MODE	Usage
1240.000    1243.250	20 kHz	ALL MODES	1240.000-1241.000 Digital communications d) 1242.025-1242.250 Repeater output, ch. RS1 - RS10 1242.275-1242.700 Repeater output, ch. RS11- RS28 1242.725-1243.250 Packet radio duplex, ch. RS29 – RS50
1243.250 1260.000	d)	ATV	1258.150-1259.350 Repeater output, ch. R20 – R68
1260.000 1270.000	d)	SATELLITE SERVICE	
1270.000 1272.000	20 kHz	ALL MODES	1270.025-1270.700 Repeater input, ch. RS1 -- RS28 1270.725-1271.250 Packet Radio duplex, ch.RS29 -- RS50
1272.00 1290.994	d)	ATV	Including DATV
1290.994 1291.481	12 kHz	FM REPEATER INPUT,	RM0 (1291.000) 25 kHz spacing RM19 (1291.475)
1291.494 1296.000	d)	ALL MODES	Repeater INPUT, ch. R20 – R68 Ch. R20 (1293.150) Ch. R68 (1294.350)
1296.000 1296.150	500 Hz	TELEGRAPHY , MGM	1296.00-1296.025 Moonbounce 1296.138 PSK31 centre of activity
1296.150    1296.800	2700Hz	TELEGRAPHY, SSB;MGM	1296.200 Narrow-band centre of Activity 1296.370 FKS441 MS calling 1296.400-1296.600 Linear transponder input 1296.500 SSTV 1296.600 RTTY 1296.700 FAX 1296.600-1296.800 Linear transponder output
1296.800 1296.994	500 Hz	TELEGRAPHY, MGM	BEACONS EXCLUSIVE (b)
1296.994 1297.481	12 kHz	FM REPEATER OUTPUT	RM0 (1297.000) 25 KHz spacing RM19 (1297.475)
1297.494   1297.981	12 kHz	FM c)	SM20 (1297.500) (25 KHz spacing - SIMPLEX) 1297.500 FM centre of activity (25 KHz spacing - SIMPLEX) SM39 (1297.975)
1298.000   1300.000	20 kHz	ALL MODES	1298.025-1298.500 Repeater output channel freqs, ch. RS1 -- RS28  1298.500-1300.000 Digital communications (within RS channels) d)  1298.725-1299.000 Packet-Radio duplex channel freqs, ch. RS29 -- RS40

## NOTES ON THE 1240 - 1300 MHz BANDPLAN

### 1. IARU REGION 1 BANDPLAN

The following notes are part of the IARU Region 1 bandplan for this band, originally adopted during the IARU Region 1 Conference at Noordwijkerhout (1987), and all member societies should strongly promote adherence to the recommendations made in these notes.

For the specification of FM see section VIb

#### 1.1. Footnotes

- a. Deleted
- b. Within IARU Region 1 the frequencies for beacons with an ERP of more than 50 Watts are coordinated by the IARU Region 1 Beacon Coordinator (see section IX).
- c. In countries where 1298 - 1300 MHz is not allocated to the Amateur Service (e.g. Italy) the FM simplex segment may also be used for digital communications.
- d. Bandwidth limits according to national regulations.

### 2. USAGE

The following note refers to the Usage column in the bandplan. As already set out in the introduction to section IIc, in the right amateur spirit operators should take notice of these agreements which are made for operating convenience, but no right to reserved frequencies can be derived from a mention in the Usage column.

#### 2.1. General

During contests and bandopenings local traffic using narrow-band modes should operate between 1296.500 - 1296.800 MHz.

## Annex to recommendation DV05\_C5\_Rec 06

### OPERATING PROCEDURE FOR METEOR SCATTER QSOS

#### 1. INTRODUCTION

The goal of the procedures described is to enable valid contacts to be made by meteor scatter (MS) reflection as quickly and easily as possible. Meteor scatter is unlike most other propagation modes, in that neither station can hear the other until an ionised meteor trail exists to scatter or reflect the signals. As the reflections are often of very short duration the normal QSO procedure is not readily applicable and specialised operating techniques must be taken to ensure that a maximum of correct and unmistakable information is received. The two stations have to take turns to transmit and receive information in a defined format, following the procedures as detailed below. Some meteor showers are strong enough to make some of these measures unnecessary but to encourage use of all generally listed showers there is no reason why the suggested procedures should not always be used. As with operating procedures in general, the virtues of the MS operating procedures are mainly that they are standard and are widely understood throughout IARU Region 1.

#### 2. SCHEDULED AND RANDOM CONTACTS

Two types of MS contacts, arranged in different ways, may be distinguished:

a. A scheduled contact, where two interested stations arrange in advance the frequency, timing, transmission mode, e.g. Telegraphy, SSB or MGM and call signs to be used. Scheduling may be carried out by exchange of letters or e-mail, by radio via the European VHF Net on 14,345 MHz, by Internet chat-rooms, packet-radio etc.

b. A non-scheduled contact, where a station calls CQ or responds to a CQ call, are called "random contacts". Random contacts are far more difficult and because you are starting entirely from scratch, it is particularly important for both stations to follow the standard meteor scatter QSO procedures described in this document.

#### 3. TIMING

Prior to any MS activity it is absolutely vital that clocks need to be set to better than 1 second of standard time. Any clock inaccuracy will result in wasted time. Accurate timing of transmit and receive periods is important for two reasons: 1) to maximise the chances of hearing the other station, and 2) to avoid interference between local stations. Accurate timing can be accomplished for example by checking against the time-ticks on standard frequency transmissions, TV Teletext, telephone 'speaking-clock', GPS time signals or the Internet.

The recommended time periods for the different modes are:

- Telegraphy: 2.5 minutes periods.
- SSB: 1 minute periods.
- MGM: 30 seconds periods.

This practice gives quite satisfactory results. However developing technology make it possible to use much different periods and amateurs may wish to arrange 1 minute periods for Telegraphy and shorter periods for SSB and MGM especially during major showers. If non-recommended time periods are used the first priority is to avoid causing interference to local stations that are using the recommended periods.

Even though the recommended period for SSB contacts is 1 minute periods a quick-break procedure making a break every 10-15 seconds, in case the QSO can be completed within one long burst, are encouraged during major meteor showers.

#### 4. TRANSMIT PERIODS

In order to minimise the overall interference with other stations standard transmit periods are recommended. Station in central and western Europe should use second period.

All MS operators living in the same area should, as far as possible, agree to transmit simultaneously in order to avoid mutual interference.

## 5. QSO DURATION

Every uninterrupted QSO period must be considered as a separate trial. This means that it is not permissible to break off and then continue the contact at a later time.

## 6. FREQUENCIES

### a. Scheduled contacts

These contacts may be arranged on any frequency, taking into consideration the mode and band plan. Scheduled contacts must not use known popular frequencies and the random MS frequencies. Special care should be applied on the frequency selection to avoid interference when using reverse transmit periods according to your location.

### b. Random contacts

The frequency used for CQ calls for random contacts should be according to the IARU Region 1 bandplans.

## 7. QSY FREQUENCIES FOR MGM

To avoid -interference, which results from a large number of stations attempting to complete contacts on the various MS calling frequencies, a QSY method is recommended. During the CQ the caller indicates on which frequency he/she will listen for a reply and carry out any subsequent QSO. The procedure for moving a beginning QSO off the calling frequency without losing contact is as follows.

If an operator wants to call CQ the following QSY procedure should be used:

- 1) Select the frequency to be used for a QSO by checking whether it is clear of traffic and QRM.
- 2) In the CQ call, immediately following the letters "CQ", kHz is inserted to indicate the frequency that will be used for reception when the CQ call finishes.
- 3) During the receiving period the receiver should be tuned to the frequency indicated by the letter used in the CQ call.
- 4) When the caller receives a signal on the receiving frequency indicated during the call and identifies the reply as an answer on his CQ, the transmitter is moved to the same receiving frequency and the whole QSO procedure takes place there.

If an operator instead of calling CQ wishes to listen for a CQ call the following QSY-procedure should be used:

- 1) Listen on a random contact frequency.
- 2) When a CQ call is received, note the kHz-frequency, which follows the letters "CQ" in the call. From this find the correct receiving frequency which the calling station will use for receiving replies.
- 3) QSY the transmitter to the receiving frequency, and transmit a reply during the appropriate period. The format for the reply can be found in section 8.
- 4) As the QSO will take place on this frequency, continue to transmit and to listen, during the appropriate periods, on this frequency. It may be that the station calling CQ will not hear your first reply, but may do so during one or more subsequent periods. Hence there is no need to return to the calling frequency.

The QSY frequencies should take place in the segment according to the IARU Region 1 bandplans.

### a. MGM, kHz-frequency

Users of MGM indicate the frequency they intend to carry out the QSO by adding the three digits of the absolute frequency, i.e. the kHz-frequency. For example CQ383 indicates that the station will listen on 144.83 MHz for a subsequent contact.

Example: G4ASR wishes to try a random MS experiment on MGM and wants to start with calling CQ. He first checks his receiver in the MGM range of 144.360 MHz to 144.397 MHz and finds a clear frequency on 144.394 MHz. He calls CQ on 144.370 MHz, and he must now add the kHz-frequency to his CQ call to indicate on which frequency he intends to listen. In this example he will therefore call "CQ394" in his CQ call.

Example: Your receive PA2DW who is calling "CQ274" on the 50 MHz random frequency. This tells you that PA2DW will listen on exactly 50.274 MHz.

b. CW/SSB

This proposal does not describe any procedures for QSY operation on CW/SSB anymore.

8. QSO PROCEDURE

All modes use the same MS-QSO procedure.

When attempting random SSB contacts, speak the letters clearly, using phonetics where appropriate.

a. Calling

The contact starts with one station calling the other by sending both call signs.

b. Reporting system

The report consists of two numbers:

First number (burst duration)	Second number (signal strength)	
	S-units	S/N
2 : up to 0,5 s	6 : below S2	or below 5 dB
3 : 0,5 - 1 s	7 : from S2 to S3	or from 5 dB to 10 dB
4 : 1 - 5 s	8 : from S4 to S5	or from 10 dB to 15 dB
5 : longer than 5 s	9 : above S5	or above 15 dB

Note that the number "1" is not used as the first number/burst duration.

Maximum duration of a ping (Underdense Reflection):

Band	Duration
50 MHz	1000 ms
70 MHz	500 ms
144 MHz	100 ms
432 MHz	13 ms

This means that the duration of bursts (Overdense Reflections) are longer than the above ping durations.

c. Reporting procedure

A report is sent when the operator has positive evidence of having received the correspondent's or his own callsign or parts of one of them.

The report should be sent twice between each set of call signs.

The report must not be changed during a contact even though signal strength or duration might well justify it.

d. Confirmation procedure

1) As soon as either operator copies both call signs and a report he may start sending a confirmation. This means that all letters and figures have been correctly received.

The message can be pieced together from fragments received over several bursts and pings, but it is up to the operator to ensure that it is done correctly and unambiguously.

Confirmation is given by inserting an R before the report.

2) When one operator receives a confirmation message, such as "R27", and all required information is complete he must confirm with a string of R's, inserting his own call sign after at least 3 R's. When the other operator has received the R's, the contact is complete and he may respond in the same manner.

e. Requirements for a complete QSO

Both operators must have copied both callsigns, the report and a confirmation that the other operator has done the same. This confirmation can either be an "R" preceding the report or a string of minimum three consecutive "RRR".

#### 9. VALID CONTACTS

A valid contact is one where both operators have copied both callsigns, the report and an unambiguous confirmation. However no recourse should be made during the contact to obtain the required information, change of frequency, antenna direction, etc. via other methods such as the DX Cluster, talk-back on another band, etc. Such secondary methods invalidate the meteor scatter contact.

In essence: if anything concerning the ongoing QSO attempt is agreed through other means than the QSO attempt frequency a new start is required.

#### 10. DOCUMENT HISTORY:

This procedure was adopted at the IARU Region 1 Conference in Miskolc-Tapolca (1978), later slightly amended at the IARU Region 1 Conference in Noordwijkerhout (1987), Torremolinos (1990), de Haan (1993), San Marino (2002) and Vienna (2004).

## Annex to recommendation DV05\_C5\_Rec\_07

Frequency (MHz)	Maximum BW	Mode	Usage
<b>144.000</b> <b>144.110</b>	500 Hz	Telegraphy (a)	144.000 – 144.035 EME 144.050 Telegraphy calling 144.100 Random MS (m)
<b>144.110</b> <b>144.150</b>	500 Hz	Telegraphy, MGM	144.138 PSK31 activity centre 144.120 – 144.150 EME MGM (JT65)
<b>144.150</b> <b>144.180</b>	2700 Hz	Telegraphy, SSB, MGM	144.150 – 144.160 FAI & EME activity 144.160 – 144.180 Alternative MGM allocation (m) 144.170 Alternative MGM calling frequency
<b>144.180</b> <b>144.360</b>	2700 Hz	Telegraphy, SSB	144.195 – 144.205 MS SSB 144.200 Random MS SSB calling frequency 144.300 SSB calling frequency
<b>144.360</b> <b>144.399</b>	2700 Hz	Telegraphy, SSB, MGM	144.370 MGM calling frequency (m)

a) Telegraphy is permitted over the whole band, but preferably not in the beacon band;  
Telegraphy exclusive between 144.000 - 144.110MHz.

## Annex to Recommendation DV05\_C5\_Rec 08

### 76 GHz bandplan

75.50-81.50 GHz BANDPLAN ( San Marino 2002 )

IARU Region 1 bandplan		Usage
76.000	<p style="text-align: center;"><b>75.500</b>            AMATEUR SATELLITE SERVICE            &amp;            ALL MODES            (Preferred [1])</p>	75976.200 MHz : Preferred Narrow band centre of activity
76.000 77.500	<p style="text-align: center;">ALL MODES            (not preferred) [2]</p>	76032.200 MHz :Narrow Band Centre of activity in some countries
77.500 77.501	<p style="text-align: center;">AMATEUR SATELLITE SERVICE            &amp;            NARROW BAND MODES            (non-preferred / preferred)[3]</p>	77500.200 MHz: Preferred NB centre of activity in countries outside the CEPT area
77.501 78.000	<p style="text-align: center;">ALL MODES            (Preferred segment)</p>	
78.000 81.500	<p style="text-align: center;">ALL MODES            (not preferred)</p>	

#### Footnotes

1. Preferred in those CEPT countries having implemented EU35.

2. Between 77.5 and 78 GHz the amateur and amateur satellite service have a primary/exclusive status and a primary status through ECA footnote EU35 in CEPT countries, while the status is secondary in the remainder of the allocation. The all mode section in the secondary segment should only be used in case the preferred segment cannot be used

3. Preferred in those countries not having implemented EU35

## **Annex to Recommendation DV05\_C5\_Rec\_09**

### **IARU Region 1 VHF, UHF/Microwaves and 50 MHz contest rules amendments**

IARU Region 1 has organised official international contests on the VHF/UHF/Microwaves bands since 1956, when an all-band contest during the first weekend of September was established.

In 1962 a separate UHF/Microwaves contest was added, which was initially held during the last weekend of May (decision Turin, 1961). From 1970 onwards this date was set at the first weekend of October (Brussels, 1969).

As of 1970 an SWL contest was established, to be run concurrently with the official Region 1 VHF and UHF/Microwaves contests.

During the IARU Region 1 Conference in Scheveningen (1972) it was decided that as of 1973 the September contest would only be held on 145 MHz.

At the IARU Region 1 Conference in Noordwijkerhout (1987) an IARU Region 1 ATV contest was added, to be held during the second weekend of September.

Finally, at the IARU Region 1 Conference in De Haan (1993) an official 50 MHz contest was established, to be held as from 1994 during the first weekend of June. In San Marino 2002 the date was changed into the third weekend of June.

Hence, currently four official IARU Region 1 contests are organised annually :

1. The VHF contest during the first weekend of September - only on 145 MHz;
2. The UHF/Microwaves contest during the first weekend of October on 435 MHz and higher bands;
3. The ATV contest during the second weekend of September;
4. The 50 MHz contest during the third weekend of June.

Member societies of IARU Region 1 organise and judge the results of the above contests.

The procedures for the organisation of the VHF and UHF/Microwaves contests are set out in Appendix 1. A list of IARU Region 1 member societies, which have organised these contests or will do so in the near future can be found in Appendix 2.

The September IARU Region 1 ATV contest is organized and judged by a member society in a country where ATV transmissions are authorized.

The rules for the official Region 1 contests are set out in sections IIIb (145 MHz), IIIc (UHF/Microwaves), IIIe (ATV) and IIIf (50 MHz).

N.B. Attention is drawn to the fact that since 1974 during the first weekend of November the Italian member society ARI organises the Marconi-Memorial Telegraphy contest as an international contest for the whole of Region 1. This contest, run according to the rules of the official Region 1 contests, is judged by the ARI VHF Committee, and the results are distributed to all participating countries via the VHF Managers of the member societies. *This ARI contest replaces the former IARU Region 1 Telegraphy contest.*

#### **IIIa - Appendix 1**

##### **PROCEDURE FOR ORGANISING IARU REGION 1 VHF/UHF/MICROWAVES CONTESTS**

A. In January of each year the Chairman of the VHF/UHF/Microwaves Committee shall send a letter to the societies organising the IARU Region 1 VHF, UHF/Microwaves, 50 MHz and ATV contests in that year, containing an up-to-date copy of the rules for these contests.

B. After receipt the organising societies shall distribute these rules (e.g. in the form of a printed booklet) together with an invitation to participate in the contests to all IARU Region 1 member societies. The invitation shall contain details on where to send the logs etc. This shall be done before the end of March of that year.

C. Not later than the seventh Sunday after the contest the national VHF Manager or properly nominated Contest Committee shall forward to the society organising the contest one copy of each entry, after having examined the logs and after having certified those to be acceptable to the best of their knowledge. Stations operating temporarily outside their "home-country" are for the purpose of the contest participating as stations in the country where they operate and their logs must to be submitted to the VHF-Manager/Contest Committee of that country. Logs sent to the contest committee of their home country shall not be submitted to the adjudicating society!

D. In order to obtain the most important results as quickly as possible the following checking procedure shall be followed:

The VHF Manager or properly nominated Contest Committee in each country shall verify the details of each participating station (callsign, locator, band, section, having obeyed the rules ...)

Upon completion, the logs shall be sent to the organising society, separated in sections (bands, where applicable).

E. Two weeks shall be allowed for transit to the organising society and thus all national contributions should be in by the ninth Sunday after the contest weekend.

F. The organising society shall allow a margin of three weeks for possible postal delays and shall declare the entry closed on the twelfth Sunday after the contest weekend. Entries received after this date shall be returned to sender or -if agreed by the sender by mail or fax- be destroyed.

G. The organising society shall publish the results based on the claimed scores not later than thirteenth Sunday after the contest on their web site. The organising society will perform full computer/automatic cross check on all the received logs and will publish the final results not later than fourteenth Sunday after the contest on their web site. The list of results should include at least the following data: call sign, Locator, score, number of QSOs, number of deleted QSOs, percentage of deleted points, ODX call sign, ODX Locator and ODX QRB. The organising society shall judge the contest and publish the official results on their web site and send the results to the Webmaster of the IARU Region I web site for publication. These results shall also be sent in electronic format to all VHF Managers and/or Contest Committees of Societies who sent logs and also to the Chairman of Region 1 VHF/UHF/Microwave Committee, not later than two months after the date mentioned in F. above (e.g. not later five months after the contest took place). Optionally certificates for all participants may be provided for distribution by national societies. See also section III m.

H: All QSOs including unique QSOs shall count for points even if they only appear in the log of one contest entrant.

### **III b**

#### **RULES IARU REGION 1 145 MHz SEPTEMBER CONTEST**

##### **1. Eligible entrants**

All licensed radio amateurs in Region 1 may participate in the contest. Multiple operator entries will be accepted, provided only one callsign is used during the contest. The contestants must operate within the letter and spirit of the contest and at no greater power than permitted in the ordinary licenses of their country. Stations operating under special high power licenses do so "hors concours" and cannot be placed in the contest proper.

Stations operating temporarily outside their "home-country" are for the purpose of the contest participating as stations in the country where they operate and their logs must be submitted to the VHF-Manager/Contest Committee of that country. Logs sent to the Contest Committee of their home country shall not be submitted to the adjudicating society.

##### **2. Contest sections**

The contest shall comprise the following sections :

i) Stations operated by a single operator, with no assistance during the contest.

ii) All other entrants

No more than one transmitter may be in use at any one time. All the equipment of the station (transmitters, receivers and antennas, etc) must be located within a single circle of no greater than 500 metres diameter. " A participating station must operate from the same location throughout the event.

##### **3. Date of contest**

The contest shall start on the first Saturday of September.

##### **4. Duration of contest**

The contest shall commence at 1400 hours UTC on the Saturday and end at 1400 hours UTC on the Sunday.

##### **5. Contacts**

Each station may only be worked once, whether it is fixed, portable or mobile. If a station is worked again during the same contest, only one contact may count for points, but any duplicate contacts shall be logged without claim for points and clearly marked as duplicates. Contacts made via active repeaters do not count for points.

## 6. Type of emission

Contacts may be made in A1A J3E or F3E(G3E).

## 7. Contest exchanges

Code numbers exchanged during each contact shall consist of the RS or RST report, followed by a serial number commencing with 001 for the first contact and increasing by one for each successive contact. This exchange must immediately be followed by the complete Locator of the sending station (examples : 59003 JO20DB or 579123 IN55CC).

Note: for the "T" part of the report, see section VIb

## 8. Scoring

Points shall be scored on the basis of one point per kilometre, i.e. the calculated distance in kms will be truncated to an integer value and 1 km will be added. The centre of each locator square is used for distance calculations. In order to make contest scores comparable, for the conversion from degrees to kilometres a factor of 111.2 should be used when calculating distances with the aid of the spherical geometry equation (Noordwijkerhout, 1987).

## 9. Entries

The entries must be set out in digital/electronic form fulfilling the requirements under rule 12. Logs must be sent to the national VHF Manager or the national Contest Committee not later than the second Monday following the contest weekend. Late entries will not be accepted. The submission of the logs implies that the entrant accepts the contest rules.

## 10. Judging of entries

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 or flagrantly disregarding the IARU Region 1 bandplans shall be disqualified.

Each VHF Manager and/or national Contest Committee shall be responsible for monitoring during contests. Additional monitoring stations may be appointed but these stations may not take part in the contest. The national VHF Manager/Contest Committee is responsible for disqualification based upon the results of monitoring.

The claimed contact shall be disqualified for any error in the information logged by the station.

Claiming points for a duplicate contact shall be penalised by deducting ten times the number of points claimed for that duplicate contact from the score.

Any error in the information logged by a station shall result in the loss by the receiving station of all points for that contact.

## 11. Awards

The winner in each section shall receive a certificate.

## 12. Logs

The logs shall be in the format defined in Section IIIh.

See also section IIIaa1, item D

## IIIc

### **RULES IARU REGION 1 UHF/MICROWAVES OCTOBER CONTEST**

#### 1. Eligible entrants

All licensed radio amateurs in Region 1 may participate in the contest. Multiple operator entries shall be accepted, provided only one callsign is used during the contest see footnote 1). The contestants must operate within the letter and spirit of the contest and at no greater power than permitted in the ordinary licenses of their country. Stations operating under special high power licenses do so "hors concours" and cannot be placed in the contest proper.

Stations operating temporarily outside their "home-country" are for the purpose of the contest participating as stations in the country where they operate and their logs will have to be submitted to the VHF-Manager/Contest Committee of that country. Logs sent to the contest committee of their home country shall not be submitted to the adjudicating society!

#### 2. Contest sections

- i) Stations operated by a single operator, with no assistance during the contest.
- ii) All other entrants

For 432 MHz and for the higher frequency amateur bands up to 10 GHz inclusive there will be two sections, as defined above. Furthermore, there will be two sections, as defined above, for the combined group of amateur bands above 10 GHz, the so-called millimetre group (see footnote 2).

No more than one transmitter per band may be in use at any one time. All the equipment of the station (transmitters, receivers and antennas, etc) must be located within a single circle of no greater than 500 metres diameter. “

A participating station must operate from the same location throughout the event.

### 3. Date of contest

The contest will start on the first Saturday of October.

### 4. Duration of contest

The contest will commence at 1400 hours UTC on the Saturday and will end at 1400 hours UTC on the Sunday.

### 5. Contacts

Each station can be worked only once per band, whether it is fixed, portable or mobile. If a station is worked again during the same contest and on the same band, only one contact will count for points, but any duplicate contacts should be logged without claim for points and clearly marked as duplicates. Contacts made via active repeaters do not count for points.

### 6. Type of emission

Contacts may be made in A1A J3E or F3E (G3E).

### 7. Contest exchanges

Code numbers exchanged during each contact shall consist of the RS or RST report, followed by a serial number commencing with 001 for the first contact on each band and increasing by one for each successive contact on that band. This exchange must immediately be followed by the complete Locator of the sending station (examples : 59003 JO20DB or 579123 IN55CC).

Note: for the “T” part of the report, see section Vib.

### 8. Scoring

For the amateur bands up to 10 GHz inclusive, points will be scored on the basis of one point per kilometre, i.e. the calculated distance in kms will be truncated to an integer value and 1 km will be added. The centre of each locator square is used for distance calculations. In order to make contest scores comparable, for the conversion from degrees to kilometres a factor of 111.2 should be used when calculating distances with the aid of the spherical geometry equation (Noordwijkerhout, 1987).

For the combined higher bands the score will be the sum of the points scored on each of the bands, using the following multiplication factors for the number of kilometres scored on each band :

24 Ghz 1 x	120 GHz 5 x
47 GHz 2 x	145 GHz 6 x
75/80 GHz 3 x	245 GHz 10 x

### 9. Entries

The entries must be set out in digital/electronic form fulfilling the requirements under rule 12. Logs must be sent to the national VHF Manager or the national Contest Committee not later than the second Monday following the contest weekend. Late entries will not be accepted. The submission of the logs implies that the entrant accepts the contest rules.

### 10. Judging of entries

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 or flagrantly disregarding the IARU Region 1 bandplans shall be disqualified .

Each VHF Manager and/or national Contest Committee shall be responsible for monitoring during contests. Additional monitoring stations may be appointed but these stations may not take part in the contest. The national VHF Manager/Contest Committee is responsible for disqualification based upon the results of monitoring.

The claimed contact will be disqualified for any error in the information logged by the station.

Claiming points for a duplicate contact will be penalized by deducting ten times the number of points claimed for that duplicate contact from the score.

Any error in the information logged by a station will result in the loss by the receiving station of all points for that contact.

## 11. Awards

### **Section winners**

Certificates will be issued by the organising society to the winners in the two sections on each band.

### **Overall winners**

For each section an overall winner of the IARU Region 1 UHF/Microwaves contest will be declared. For this competition the scores of the entrants on the following bands 3) will be combined, using an adaptive multiplier system:

435 MHz  
1.3 GHz  
2.4 GHz  
5.7 GHz  
10 GHz  
millimetre group

The multipliers to be used for the determination of the overall scores in each section are found as follows: The multiplier is equal to the ratio between the highest number of points scored by **any** participating station on the 435 MHz band for that section and the highest number of points scored by **any** participating station on the band for that section for which the multiplier is being determined.

For the millimetre group the scores as determined according to rule 8 are used for the determination of this group's multiplier.

The entrants scoring highest in each section will be awarded the IARU REGION 1 CERTIFICATE. The organising society will receive the certificates from the chairman of the VHF/UHF/Microwaves committee (signed by the R1 secretary ) and will send those after having filled in the relevant data and after signature to the winners in each of the two sections.

## 12. Logs

The logs shall be in the format defined in Section IIIh. See also section IIIaa1, item D

### Footnotes:

- 1) Multi-operator entries are accepted for participation. When such stations use a different call sign on each band, the logs of that Multioperator entry shall for each band clearly bear an indication of the group. This will preferably be one of the call signs used, but a group name may be used instead. All stations belonging to such a group shall operate from the same location, i.e. All the equipment of the stations (transmitters, receivers and antennas, etc) must be located within a single circle of no greater than 500 metres diameter. “
2. The millimetre group was introduced during the meeting of the VHF Working Group in Vienna, March 1986, with the aim of promoting the use of these Amateur Service bands. In October 1987 this extended rule was applied for the first time.
- 3 As the 3.4 GHz band is not yet available in all countries within Region 1, the 3.4 GHz results will not be taken into account when determining the overall winners of the sections in the October IARU Region 1 UHF/Microwaves contest (Noordwijkerhout 1987 )

## **1f**

### **RULES IARU REGION 1 50 MHz JUNE CONTEST**

#### 1. Eligible entrants

All licensed radio amateurs in Region 1 who are authorized to use 50 MHz can participate in the contest. Multiple operator entries will be accepted, provided only one callsign is used during the contest. The contestants must operate within the letter and spirit of the contest and at no greater power than permitted in the ordinary licenses of their country. Stations operating under special high power licenses do so "hors concours" and cannot be placed in the contest proper. Stations operating temporarily outside their "home-country" are for the purpose of the contest participating as stations in the country where they operate and their logs will have to be submitted to the VHF-Manager/Contest Committee of that country. Logs sent to the contest committee of their home country shall not be submitted to the adjudicating society!

#### 2. Contest sections

The contest will comprise the following sections :

- i) Stations operated by a single operator, with no assistance during the contest.
- ii) All other entrants

No more than one transmitter may be in use at any one time. All the equipment of the station (transmitters, receivers and antennas, etc) must be located within a single circle of no greater than 500 metres diameter.

#### 3. Date of contest

The contest will begin on the third Saturday of June.

#### 4. Duration of contest

The contest will commence at 1400 hours UTC on the Saturday and will end at 1400 hours UTC on the Sunday.

#### 5. Contacts

Each station can be worked only once, whether it is fixed, portable or mobile. If a station is worked again during the same contest, only one contact will count for points, but any duplicate contacts should be logged without claim for points and clearly marked as duplicates.

Contacts made via active repeaters do not count for points. Any telephony contacts made with stations transmitting in the telegraphy sub band shall not count for points.

#### 6. Type of emission

Contacts may be made in A1A, J3E or F3E (G3E).

#### 7. Contest exchanges

Code numbers exchanged during each contact shall consist of the RS or RST report followed by a serial number commencing with 001 for the first contact and increasing by one for each successive contact. This exchange must immediately be followed by the complete Locator of the sending station (examples : 59003 JO20DB or 579123 IN55).

Note: for the "T" part of the report, see section Vib

#### 8. Scoring

Points will be scored on the basis of one point per kilometre, i.e. the calculated distance in kms will be truncated to an integer value and 1 km will be added. The centre of each locator square is used for distance calculations. In case only a 4-character locator has been received, the distance calculated should be the shortest distance between the claiming station and the given Locator square.

In order to make contest scores comparable, for the conversion from degrees to kilometres a factor of 111.2 should be used when calculating distances with the aid of the spherical geometry equation (Noordwijkerhout, 1987).

#### 9. Entries

The entries must be set out in digital/electronic form fulfilling the requirements under rule 12. Logs must be sent to the national VHF Manager or the national Contest Committee not later than the second Monday following the contest weekend. Late entries will not be accepted. The submission of the logs implies that the entrant accepts the contest rules.

#### 10. Judging of entries

The judging of the entries shall be the responsibility of the organising society, whose decision shall be final. Entrants deliberately contravening any of these rules or flagrantly disregarding the IARU Region 1 bandplans shall be disqualified (see footnote 1) on monitoring.

The claimed contact will be disqualified for any error in the information logged by the station.

Claiming points for a duplicate contact will be penalized by deducting ten times the number of points claimed for that duplicate contact from the score.

Any errors in the logged information will result in the loss of all points for that contact by the receiving station.

#### 11. Awards

The winner in each section will receive a certificate.

#### 12. Logs

The logs shall be in the format defined in Section IIIh. See also section IIIa1, item D. (See footnote 2)

#### Footnotes :

1At the IARU Region 1 Conference in Scheveningen (1972) it was decided that to effect this:

a) each VHF Manager and/or national Contest Committee shall be responsible for monitoring during contests. Additional monitoring stations may be appointed but these stations may not take part in the contest.

b) telephony contacts made with stations operating in the telegraphy sub band shall not count for points.

c) the national VHF Manager/Contest Committee is responsible for disqualification based upon the results obtained from a) and b) above.

2 Contest entries for the year 2006 may still be submitted on paper logsheets.

## IIIh

### ELECTRONIC LOG EXCHANGE

At its meeting in Vienna 1998 the VHF/UHF/Microwaves Committee has recommended the use of the Electronic Contest Log distribution format for the exchange of log information concerning IARU Region 1 Contests. This recommendation has been endorsed by the IARU R1 EC at its 1998 meeting.

The aim of the common file format is to make contest log programmers able to deliver a standard output file from their programs, to enable contest managers to receive logs via data transfer system (e.g. diskettes, Internet) introduce electronic log processing and ease submission for participants.

What media to use is not specified, and is up to the contest manager. If Internet is a reliable medium it is a good choice, however, that does not solve yet the legal issue with the responsible operators signature yet required for IARU Region 1 contests.

When a contest manager invites to a contest she/he should state if electronic log submission is possible, in what way (e.g. diskette, INTERNET) and where (managers E-mail address), just like own mailing address. Contest managers must have a validation program to make a complete validation including cross checking etc.

Contest participants can use the electronic data file format to submit their logs to the contest manager in time. To be able to do this, participants must use a contest program capable of generating a REG1TEST file.

The details are given in annex IIIh-a1

*Note : Many logging programmes do not yet accept a non-numeric character for the T part of the report. Users shall check this according to the recommendation in section VI*