

# International Amateur Radio Union Region 1 VHF - UHF - MW Newsletter

Edition 48 28 February 2008 Michael Kastelic, OE1MCU

# **Propagation Manager**

The subject of the opening for a Propagation Manager was discussed at the Vienna meeting in 2007, and we were not sure if we still need such a position. At that time, I. too, was not sure how to proceed in this question. For new amateur bands, however, the argument for a Propagation Manager is a valid one, because he is needed for our propagation research.

Following a hint by e-mail from David Butler, G4ASR, I just called a possible candidate, Volker Grassmann, DF5AI, who has been mentioned in the minutes of the Vienna meeting. This telephone conversation lasted for an hour and turned out to be very interesting and informative. Here is a brief summary:

Both the Internet and the DX-Cluster hold a wealth of data reaching back for more than 15 years. Unfortunately, these data do not always permit automated processing. In addition to scientific work, this could be the basis for further research to develop a standardised system for the recording of QSO data. Once this is available, further analyses could be performed, the results of which should be made available to other specialists for further studies.

The PROPAGATION STUDIES COMMITTEE (PSC) of the Radio Society of Great Britain (www.keele.ac.uk/depts/por/psc.htm) is a very reputable body and maintains contact with top-level scientists. Their homepage is full of interesting contributions and links.

# Is there activity in the field of Propagation Studies?

Yes, there are active groups, and there is interest to perform research in this intriguing field. The relevant homepages are full of highly interesting topics and attract much traffic. This is another example to show that the Internet is not a danger to amateur radio, but an excellent medium to utilise hitherto unimaginable opportunities.

# **Beacon Projects**

Beacons are another important source of information about propagation conditions. Even new beacons are being built and operated. Automated combinations of beacons and receivers permit long-term studies which can serve as important sources of information for use in future models.

#### **Data Bases**

Scientific experiments can be supplied with propagation data provided by radio amateurs. It may, however, be necessary to standardise the collected data, so that further processing and evaluation is possible on an international level. On the other hand, the results must be made available and presented to the individual radio amateurs in a simple and attractive manner to help them understand the propagation mechanisms, which in turn supports activities on the ham bands.

Right now, we are at the beginning of Solar Cycle No. 24. The coming peak of sunspot activity lends itself to various experiments. Therefore, we must be prepared for the new Solar Cycle and initiate and steer relevant research activities.

Such activities may well serve as vehicles to promote amateur radio. Research and amateur radio ought to form an attractive symbiosis, in which theoretical research results could be verified or disproved, as the case may be, by practical amateur radio activities. For many engineers, amateur radio has been the testing ground where theoretical knowledge meets practical experience.

## **Research Still Poses Interesting Questions:**

- Currently, and justifiably so, environmental questions are very topical, indeed. The media concentrate on environmental pollution and on our changing environment. Amateur radio depends on the F layer, and thus must contribute to research if and how environmental pollution might affect the F layer.
- In tropical areas, thunderstorms affect the behaviour of sporadic E propagation. For Africa, this is an interesting matter that calls for further research.
- Under certain conditions, forward scatter (Spradic E) turns into backscatter (FAI). This very interesting effect will certainly generate much interest in DX circles.

In this way, propagation research covers the fields of natural science, antenna technology and environmental studies. All of these are much too topical and valuable to be ignored by amateur radio. But the post of a Propagation Coordinator is still vacant. The ideas outlined above may serve as an abridged, yet unrefined, job description, which goes well beyond the mere collection of data.

Relevant Websites:

http://www.df5ai.net http://www.vhfdx.de/ http://www.vhfdx.net/

## 2008 IARU Conference, to be held at Cavtat (Croatia), 14 - 22 November

Deadlines for all papers: 15 March 2008

## **Allocation Manager**

Another important function is that of an Allocation Manager. A current overview of all amateur radio allocations in Region 1 is very helpful, if not indispensable, for argumentation vis-à-vis the regulatory authorities. Iain Philipps, G0RDI, has agreed to assume this post. Iain has already received the relevant documents. I am looking forward to an update. Iain will distribute the listing via the C5 Reflector. I request your support and input with the latest information.

#### ISSUES REGARDING THE 70MHz BAND WITHIN IARU REGION-1

David Butler G4ASR,RSGB VHF MANAGER

## **BACKGROUND**

As of March 2008 the 70MHz amateur radio band (70.000-70.500MHz in the UK) is allocated to 23 DXCC countries within IARU Region-1.

These countries include Crete (SV9), Croatia (9A), Cyprus (5B), Denmark (OZ), Dodecanese (SV5), Estonia (ES), Faroe Islands (OY), Gibraltar (ZB), Greece (SV), Greenland (OX), Ireland (EI), Luxembourg (LX), Monaco (3A), Slovenia (S5), South Africa (ZS), UK Sovereign Base areas on Cyprus (ZC4), England (G), Isle of Man (GD), Northern Ireland (GI), Jersey (GJ), Scotland (GM), Guernsey (GU) and Wales (GW).

In addition several other countries have offered temporary permits to facilitate experimentation that include Azores (CU), Czech Republic (OK), Germany (DI2AL & DI2PM on 69.995MHz), Hungary (HA), Italy (I), Madeira Is (CT3), Norway (LC0VHF), Portugal (CT), Sardinia (IS) and SMOM (1A).

A Regional allocation is sought throughout IARU Region-1 but there is a major problem because no mention of any 70MHz amateur radio service allocations is made in the CEPT European Common Allocation (ECA) table. It is this ECA table that national administrations look at when proposals are made for access to the 70MHz spectrum.

Although a number of administrations are sympathetic to amateur experimentation in this part of the spectrum they are reluctant to release frequencies on a temporary or permanent basis in the absence of a relevant entry in Article 5 of the Radio Regulations or in the ECA table.

## **DECEMBER 2007: IRISH 70MHz PROPOSAL to CEPT FMWG**

In late December 2007 the Irish Regulator COMGEN presented a proposal to the CEPT Frequency Management Working Group (FMWG) entitled "Possible Revision of ECA concerning the band 69.9 - 70.5 MHz"

It was based on the Detailed Spectrum Investigation (DSI) Phase II that was presented to CEPT administrations over 10-years ago in March 1995.

In the report a specific recommendation was made as follows:

"The DSI Management Team recommend in the context of the European Table of Allocations and in accordance with the foregoing, that a minimum of 100 kHz in the band 70-70.45 MHz be allocated to the amateur service on a secondary basis according to national considerations, if feasible, centred on 70.2 MHz."

The COMGEN paper contained a proposal requesting that a Footnote be written into the ECA which read e.g. EU36 In [Croatia, Denmark, Estonia, Greece,] Ireland, [Luxembourg, Monaco, Slovenia and the United Kingdom] all or parts of the band 69.90 – 70.50 MHz is additionally allocated to the amateur service on a secondary basis.

# **JANUARY 2008: INVOLVEMENT BY IARU**

January 26: The IARU Region-1 Secretary sent an e-mail to the Presidents of National Amateur Radio Societies in Croatia, Denmark, Estonia, Greece, Luxembourg, Monaco, Portugal, Slovenia, United Kingdom and also to a number of VHF Managers within Region-1.

This is the text of that message sent by the IARU Region-1 Secretary: "I am writing to the Presidents of Member Societies in IARU Region 1 who already have some sort of access to the 70MHz band, to ask for your help.

The regulator for amateur radio licensing in the Republic of Ireland has agreed with the Irish Amateur Radio Society (IRTS) that the Irish administration will submit a paper to the WGFM meeting in mid-February proposing that CEPT (ECC) adds an allocation to the amateur radio service in the 70MHz band to the ECA (European Common Allocation Table).

As your country already has the benefit of a 70 MHz allocation, it would be helpful in due course if your administration could support this proposal. It is likely that support will be most helpful at the following meeting (May) of WGFM, when the matter will probably be discussed in more detail. So please consider alerting your administration to the Irish initiative, and ask for their support.

If the Irish proposal is accepted, it could open the door to more 70MHz allocations to the Amateur Service around Europe".

## January 30:

Briefing Notes written by Dave Court EI3IO were sent by myself (G4ASR) to the Chairman of the VHF Committee C5 (OE1MCU). The notes below were forwarded to the IARU Region-1 Delegate (LZ1US) attending the CEPT FMWG meeting in February.

## BRIEFING NOTES SUPPLIED TO THE IARU REGION-1 CONFERENCE DELEGATE

(These notes were inserted in appropriate places within a copy of the COMREG proposal.)

The IARU welcomes this proposal however it does not recognise the difficulties across Europe in allocating a common 500 kHz to the amateur service. If this cannot be achieved the IARU should try and engineer a compromise position.

It is useful to recall that in 1997 CEPT's European Radiocommunications Committee came to the following conclusion with respect to this recommendation:

"The ERC accepts this recommendation in principle pending a possible harmonised secondary allocation to the amateur service for F2-layer ionospheric propagation experiments."

Several administrations have authorized their amateurs to use the 70 MHz band. These include Croatia, Denmark, Estonia (from 1 January 2008), Greece, Luxembourg, Monaco and Slovenia. However there is a another group of countries including Germany, Hungary, Italy and Portugal which have or are in the process of agreeing very short term access to the band for experiments but are reluctant to agree permanent access until the situation is more certain at the international level.

With the exception of Portugal (70.60-70.65 MHz) all amateur activities to date have occurred in the band 69.9-70.5 MHz. Importantly, when developing a proposal for general access to this band it is necessary to recognise that for many countries only small segments within the overall band can be authorised. Further, Germany and other countries may not be in a position to authorise spectrum above 70 MHz but may be able to agree a sub-band if the overall lower band limit can be extended below 70 MHz.

The IARU position should be to support this proposal as long as there is an overall positive reaction in WGFM to the proposal. It is after all recognising the de-facto situation and the views of both the DSI Management Team and the ERC. However because of the diverse nature of the 70 MHz sub-bands offered to the amateur service across Europe, the Irish proposal may not be supported and may run into problems.

If this happens the IARU should attempt a compromise proposal as follows:

Accept the Irish proposal for a secondary allocation in the body of the table but with a lower limit below 70 MHz e.g. 69.8 or 69.9 MHz.

However this could be supported by a footnote which provides information on the band limits in individual CEPT Member States

e.g. EU36 - In Ireland the band 70.125 - 70.450 MHz and in the United Kingdom the band 70.000 - 70.500 MHz is allocated to the amateur service on a secondary basis

OR

An alternative approach might be not to have an entry in the body of the table but to include a footnote to the ECA which reads e.g. EU36 - In [Croatia, Denmark, Estonia, Greece, Ireland,

Luxembourg, Monaco, Slovenia and the United Kingdom] all or parts of the band [69.90] – 70.50 MHz is additionally allocated to the amateur service on a secondary basis.

FEBRUARY 2008: MEETING of the CEPT FMWG

A total of 10 supporting Administrations were needed to automatically write a new allocation into the ECA table.

Unfortunately the proposal was supported by only 6 Administrations: Czech Republic (OK), Estonia (ES), Hungary (HA), Portugal (CT), Switzerland (HB9) and the UK.

It will be obvious to all that some countries whose amateurs have permanent authorisation to use the 70MHz band did not support the Irish proposal for one reason or another. These included Croatia (9A), Denmark (OZ), Greece (SV), Luxembourg (LX) and Slovenia (S5).

This was despite strenuous efforts by the IRTS, the RSGB VHF Manager G4ASR and IARU to contact all member societies, in order that they would be in a position to discuss the Irish proposal with their national delegates prior to the CEPT meeting.

A toal of 6 countries actively opposed the proposal, two of those opposing have already provided some access to the 70MHz band, either during one weekend from a specific location or on an assigned frequency just below the lower band limit proposed by Ireland. These countries included Belgium (ON), France (F), Germany (DL), Netherlands (PA), Norway (LA) and Russia (UA).

There is some good news though! As there was some limited support, Ireland can propose a 'note' to be included in the ECA which reports that a number of CEPT countries are now allocating this band on a national basis to the amateur service. It is understood that the Irish administration will shortly be submitting an appropriate note for inclusion in the ECA.

It is therefore hoped that this will be sufficient for those amateur radio Societies that need additional help in obtaining a 70MHz allocation. Furthermore, the 'note' may also provide an opening for another proposal or request from the IARU to CEPT for a 70 MHz allocation at some point in the future, hopefully at that time, with considerably more support from countries that already have a 70MHz allocation.

More good news is that Switzerland supported the proposal so we might also see HB9, HB0 and 4U1ITU on the band before too long. So USKA, please approach your administration now!

# **LESSONS TO BE LEARNT!**

Obviously some lessons need to be learnt for the future. And it doesn't necessarily mean the 70MHz band. It could be 500kHz or 5MHz or 3.4GHz or anywhere in the radio spectrum.

We need to have good communication links amongst ourselves, making more use of the C5 mailing list. I'm not at all certain that key VHF Managers (I, LX, OZ, SV, S5, 9A etc) found out about this proposal in a timely way. Indeed they may only have found out by reading this newsletter!

All members of IARU Region-1 Committee C5 need to establish good communications links with your national Society and your Society needs to establish regular communication or meetings with your national PTT administration so that effective and timely lobbying can be carried out.

I'm sure everyone would like to give recognition and appreciation to Samuel Ritchie of COMREG, the Irish regulator, for his excellent efforts in respect of amateur access to the 70 MHz band.

DAVID BUTLER G4ASR