



International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia

Founded 1950



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This report has been prepared by Gordon L Adams G3LEQ Emergency Communications Co-ordinator for the September 2005 IARU Region-1 Conference in Davos Switzerland .

I assumed my role in 2003 and I am using my **Terms of Reference and Objectives** in order to structure my Report.

1. To prepare and keep updated an inventory of emergency communications (EMERCOMMS) services provided by IARU Region-1 radio societies.

In July 2003 I prepared my first "Bulletin No.1" which was intended for display on the IARU-R1 web site. I stated clearly in it that I was seeking information from those responsible for Emergency Communications in Region-1 Countries. I requested recipients to pass the contents and my request on to the most appropriate person or organization, if they themselves were not involved with Emergency Communications. That Bulletin No.1 has been retained on the web site for more than two years, but I have not received a single response. I discussed this problem with the UK Radio Communications Voluntary Services (RCVS) National Co-ordinator Paul Gaskell G4MWO, and we decided to create an Emergency Communications section on the Radio Society of Great Britain's (RSGB) web site. Furthermore, a link has been provided on the RSGB web site directing readers to the IARU pages. We hope that this will, in time, increase the number of visitors to the IARU Region-1 web site.

With Paul's help we have established that the following Countries within Region-1 have amateur radio EMERCOMMS organizations of some kind: ALGERIA, AUSTRIA (ARENA), BELGIUM, CZECH REPUBLIC, FINLAND, FRANCE (FNRASEC), GERMANY, GREECE (OEA), IRISH REPUBLIC (AREN), ITALY, LEBANON, NETHERLANDS (DARES), NORWAY, ROMANIA, RUSSIAN FEDERATION (RARES), SOUTH AFRICA, SPAIN, SWEDEN, SWITZERLAND, TURKEY (TRAC), UNITED KINGDOM (RAYNET). Of these organizations I have only managed to obtain useful information from FINLAND, IRISH REPUBLIC, NETHERLANDS, SOUTH AFRICA. SWEDEN, TURKEY and UNITED KINGDOM.

On behalf of the RSGB, Paul has prepared and submitted an information paper (see Committee C5 Paper Number 21), based upon the above-mentioned research, for adoption by the VHF/UHF Committee C5 at DAVOS-05. This details the known VHF & UHF Emergency Communications Frequencies employed by certain Countries within IARU Region-1. This information was gathered by trawling the available Internet web sites, and will require updating from time-to-time.

2. To act as a focal point for Amateur Radio Emergency Services (ARES) within IARU-R1 to international bodies and user services - such as the International Red Cross and the Red Crescent.

At the time of the 2003 Bam (Iran) earthquake I established contact with the International Red Cross in Geneva. As Hans Zimmermann F/HB9AQS knows, there are two Red Cross organizations - one of which deals with international and political aspects and the other which operates within each national border. I also made contact with the Red Cross in Finland and the Red Crescent in Turkey. This was dealt with in my report to the Executive Committee entitled "Bulletin No.2" of February 2004).

3. To liaise on emergency matters with IARU Regions-2 and 3.

Until late last year (2004) there has been no co-ordinated IARU linkage; however, now that Hans Zimmermann F/HB9AQS has been appointed as our World-wide IARU Emergency Co-ordinator, I am hoping that contact will improve throughout the IARU. In Region-2 Rick Palm K1CE still appears to hold the title of Emergency Communications Co-ordinator (EMCOR) and I have obtained a copy of his Terms of Reference. I have also noted that Arnie Corro CO2KK in Cuba is involved in hurricane watches. At the time of writing no-one appears to hold an Emergency Communications title in Region-3. I have been informed that the Region-3 Secretary has circulated a list for nominations. It was clearly evident after the Indian Ocean Tsunami of December 2004 that some kind of IARU Region-3 co-ordination might have been helpful.

The outcome of the Indian Ocean Tsunami has been that an American based organization called ARICC (Amateur Radio International Communications Coalition) has been formed. This appears to have been set up in March/April 2005 as a result of the emergency communications effort that took place after the Tsunami disaster using ECHOLink Internet servers. They now claim to provide emergency communications internationally whenever the need may arise. ECHOLink is their primary platform and they are adopting WINLINK-2000 as their E-mailing system. Unfortunately, I understand that downloading the WINLINK-2000 software involves payment of a significant fee by each participant to an American organization. It seems to me that the ARICC Internet facility can only begin to operate once radio communications, interfaced with land-line links, have been established in a major disaster scenario comparable with a tsunami. This might take two or three days to set up, and in the interim only Amateur Service radio communications might be available.

4. To prepare common guidelines on amateur radio emergency procedures.

The major disaster that took place during the last year was undoubtedly the Indian Ocean Tsunami of 26th December 2004, which by some amazing co-incidence occurred exactly one year after the Bam Iran earthquake of 26th December 2003. Subsequently, there have been some follow-up Earthquakes including the one affecting the island of Nias off the coast of Sumatra on 28th March 2005. These have all been reported upon extensively by the international media and on the Internet, and I shall not repeat the details here.

However, it was noticeable that the humanitarian requirements issued immediately after both the Bam and Tsunami disasters were very similar. In both cases the immediate response with gifts included many inappropriate materials. Large quantities of clothes and a warehouse stacked full of Morphine turned up in Indonesia. Unfortunately the Morphine arrived several days after the event, when up to 260,000 bodies had to be recovered! It was also pointed out that the countries around the Indian Ocean perimeter manufacture most of the clothes now exported to the Western World. In both disasters the primary requirement was for gifts of money, which could be applied in a much more flexible manner. I issued promptly some urgent Internet guidelines to this effect entitled "INDIAN OCEAN TSUNAMI EMERGENCY" on 29th December 2004.

It has become clear to me that any contribution to be made by radio amateurs by way of EMERCOMMS is likely to be during the first two or three days of a natural disaster - whilst the damaged power and communications infrastructure is being re-established. It is only then that telephones including Internet ECHOLink and electrical power become available again. In the early phase after a disaster radio amateurs with HF transceivers and 12Volt batteries may be all that is on hand. If vehicles with enough fuel are also available, then the batteries can be kept charged and RF power outputs of say 50Watts may be employed; but if no charging facility is present then only a few Watts of RF output would be prudent. Once the Earth satellite telephones and other modern technology are re-installed the radio amateur role may well become one of trained helpers with the Internet communications.

Amateur Radio also has a valuable role to play as an interlocutor between various humanitarian organizations setting up at the scene of a disaster; and in this case VHF/UHF equipment and repeaters will be the obvious choice. I was pleased to see that Mrs D Bharathi Prasad VU2RBI, the Chief EMERCOMMS co-ordinator for the NIAR (based in New Delhi) made a significant contribution at the GAREC-2005 Conference.

In my submissions to the Executive Committee (EC) last year I put forward the concept of HF Band-Edge operating for **Emergency Communications ONLY during a declared National or International disaster (see Committee C4 Paper Number 08)**. I understand from the EC minutes that the way forward was not clear to the EC. I have therefore prepared, and submitted, a detailed paper on this subject for consideration by Committee C4 at DAVOS-05. A supporting proposal for **HF Emergency Training sub-bands (see Committee C4 Paper Number 09)** has been prepared by Paul Gaskell G4MWO and myself for consideration by Committee C4 at DAVOS-05. These two papers are perfectly compatible and may be adopted together or in isolation. In the case of the emergency channel proposed for 3600kHz, this could be incorporated within the proposed training sub-band 3650 to 3700kHz or vice-versa, if considered desirable.

Some delegates may find the concept of an operating "channel" on the HF bands difficult to understand. If the frequency 7000kHz is taken as an example, Paper No.08 envisages a 3kHz channel being made available between 7000 and 7003kHz ONLY DURING A DECLARED NATIONAL OR INTERNATIONAL DISASTER. At all other times this 3kHz segment would be employed for normal ICW Morse communications by all radio amateurs world-wide, as provided for in the HF Band Plan. An alternative approach via the International Telecommunications Union (ITU) might permit the RF output of stations engaged in such Emergency Communications to be centred on 7000kHz. Thus a licensed Amateur Service station delivering emergency voice LSB communications might employ a suppressed carrier frequency of 7001.5kHz, and a Fixed Service station might be permitted to employ USB on a suppressed carrier frequency of 6998.5kHz. A special derogation by the ITU might permit either the Amateur Service or the Fixed Service stations to operate on compatible sidebands.

Either way, such communications in a declared National or International Emergency should be assured of interference free communications by virtue of such band-edge working. Should this latter provision be made legal, then the channel assigned would become 6998.5 to 7001.5kHz. This form of assignment applies already in the UK under temporary provisions for Amateur Service operations on 5400kHz (5398.5 to 5401.5kHz) and 5405kHz (5403.5 to 5406.5kHz). Such 5MHz channels, if sought on a Country-by-Country basis within IARU-R1 would of course offer total freedom from Amateur Service DX and Contest activities at all times. It was noted that during both the Bam Iran earthquake and the Indian Ocean tsunami disasters, the Amateur Service Emercomms operators had to contend with interference from a considerable amount of non-emergency DX activity, and only a band-edge provision of the type proposed can eliminate this.

The RSGB has also submitted an "enabling" paper concerning HF Communications (**see Committee C4 Paper Number 07**) which seeks to suppress the now outdated Emergency arrangements envisaged at the IARU Region-1 Conference held in Brighton England in 1981.

This included the concept of Amateur Service stations using a Q-code such as QUF (meaning "*I have received or I am handling a distress signal*") during emergencies. The likelihood of this signal being understood by operators in other Services, or indeed by members of the Amateur Service, is now thought to be extremely small.

5. To circulate and publicise information on emergency events in which ARES has been involved.

I have referred earlier in this report to the Indian Ocean Tsunami. Within Region-1 I am not aware of any other major disasters that have occurred during the last 12-months. The Country at greatest risk, within Region-1, from earthquakes is probably Turkey; but serious flooding in Central Europe, particularly along the banks of the River Danube will always be a possibility. The man-made railway disaster in Italy did not apparently call for any Amateur Radio communications facilities, and it is unlikely that such events will involve the Amateur Service unless a major breakdown of communications systems occurs. A North Sea surge continues to be a statistical 40 to 50 years threat to the East coast of Great Britain and to Holland and Belgium, but no such disaster has taken place since 1953.

6. To arrange meetings, when deemed necessary, to discuss principle and actual matters involving ARES. Such meetings shall only be organized after approval by, and in consultation with, the Executive Committee (EC).

I was pleased to have been authorised to attend the GAREC-2005 Global Amateur Radio Emergency Communications Conference in Tampere Finland during 13th to 15th June 2005. At the time of compiling this report I am not aware of any other such events which I should be attending during 2005.

7. To report to the Regional Conference, or the EC of IARU Region-1 between conferences, in accordance with the articles in the Bylaws on specialised bodies, and also to proffer any Emergency Communications proposals in the form of papers for consideration by the Executive Committee,

This is my interim report for the DAVOS-05 Conference and I trust that the Emergency Communications papers submitted for consideration by Committees C4 and C5 will gain the approval of the Conference.

*Gordon L Adams G3LEQ, IARU-R1 Emergency Communications Co-ordinator
(v1) 30/5/2005.*