ANNEX 8A

HFCC - The importance of terrestrial radio in international broadcasting

The HFCC is a non-governmental, non-profit association and is registered as a regional co‑ordination group with the Radiocommunication Sector of the International Telecommunications Union (ITU-R). It is also a Sector Member of the ITU-R. The HFCC manages and coordinates global databases of international shortwave broadcasting, by providing tools and services to its Members for the resolution or minimisation of instances of mutual interference among shortwave transmissions. Further information can be found at: <http://www.hfcc.org>.

Background

The media scene continues to develop hand in hand with the emergence of new delivery platforms and the changing patterns of media usage. International broadcasting has not been left out from the process of transformation. This has created an increasingly challenging multi-platform environment for international radio as well as new possibilities.

While a number of shortwave broadcasting services have recently been severely cut or completely phased out, this distinctive medium remains relevant for a large critical audience interested in programming that focuses on both regional and international affairs and is broadcast from the perspective of different communities around the world.

Due to the unique long-distance propagation property of shortwave radio, by means of multiple reflections from layers in the upper earth's atmosphere, a transmitter can reach easily relatively near or more distant world regions. This is important where other platforms such as satellite, FM or Internet are unavailable because of high cost, geographical location, and lack of infrastructure or due to restrictions or disasters. Receivers are inexpensive and there are no access fees. Shortwave radio is important for travellers and isolated people and it reaches across the Digital Divide to the most disadvantaged and marginalised societies. This is in keeping with the Declaration and Action Plan of the World Summit on the Information Society.

The HFCC - International Broadcasting Delivery has become a partner of the UN agency UNESCO for the preparation of World Radio Day celebrated earlier this year. UN Secretary General Ban Ki‑moon had this to say in his message to the World Radio Day celebrations: "From short-wave to FM to satellite transmission - radio connects people wherever they are. In conflict situations and times of crisis, radio is a lifeline for vulnerable communities".

These humanitarian aspects and the huge number of people around the globe emerging from poverty continue to represent an important potential target audience for direct content delivery from terrestrial transmitters. Fifty per cent of world population lives on less than $2.50 a day. In other words, a total of three billion people live below the poverty line.[[1]](#footnote-1) Their first choice of communication device will be either a mobile telephone, or a radio, or both, and listening to a local FM or community station or an international broadcast will be a more affordable media source than a computer, TV set or a video or CD player.

Unfortunately this future opportunity for international broadcasters and for millions of potential listeners might be lost for good due to the present changes in media delivery that are under way mainly in the developed world.

Dialogue among peoples

International radio broadcasting could help solve contemporary challenges brought about by the need to bridge the gap in knowledge about other civilizations, cultures and societies that have entered into frequent contact with one another due to globalisation. International broadcasting is capable of motivating dialogue among peoples, mutual understanding and respect, and the exchange of ideas.

An increasing penetration of community radio into many regions provides a tool and platform for (local) community debate and dialogue and supports democratic processes within societies. International broadcasting is capable of playing the same role for regional and global communities. Broadcasters are able to enter into partnerships with local media, supply and exchange media content and enhance the inter-cultural dialogue.

International radio is an invaluable tool in distance education. It reaches men, women and children in areas where traditional education systems cannot, due to lack of financial means, education infrastructure or accessibility. It can be used to promote literacy among youth and adults alike and to empower women in societies where the right to education is denied due to gender bias. Radio can also be used to provide health education and information to communities during epidemics or following a natural or man-made disaster.

Radio in emergencies

Important statistical conclusions have been drawn about the role of media and communication in the Great East Japan Earthquake of 2011, during a symposium between the Ministry of Information and Communication of Japan, and the ITU in March 2012: Radio was on top of the list of useful media and information sources. A call for a multi-channel flow of information was also made in the symposium: "The more diverse the media striving to relay information is, the higher the possibility that essential information will be communicated ", and further: "There is no singular media or network that represents the most appropriate means of relaying information in disaster-stricken areas; such media should be diverse in nature".[[2]](#footnote-2)

The HFCC - International Broadcasting Delivery association, in close co-operation with its sister co-ordination groups: the Asia-Pacific Broadcasting Union (ABU) and Arab States Broadcasting Union (ASBU) are now working on a comprehensive system that has been missing in the world community. A global frequency database of shortwave broadcasting and an online co-ordination procedure of frequencies, managed in accordance with the International Radio Regulations will be implemented by the International Radio for Disaster Relief (IRDR) project. The project is described in more detail in another HFCC contribution to WP 6A.

New technological developments for traditional delivery

The future of radio is digital and the digitisation of shortwave and other bands of AM broadcasting is already in progress. The globally standardised DRM (Digital Radio Mondiale) system is a high‑quality replacement for current radio broadcasting on all AM bands. There should be no obstacle to a speedy introduction of DRM to shortwave broadcasting; since there is a dramatic improvement between the quality of the present AM broadcasting and the future digital DRM standard.

Shortwave broadcasting and internet applications - Competition or synergy?

There are many ways that short wave broadcasting and internet applications can complement each other:

– The presence of broadcasters across all distribution platforms is important for effective worldwide delivery. Audiences are able to personalise their listening experience.

– There is evidence that radio is best for live listening - especially for news, current affairs and sport programmes. Authentic experience is enhanced by listening live to long‑distance shortwave radio stations and their programmes.

– Radio has a strong emotional appeal. People listen regularly to one or two radio stations only. This appeal of radio has been even more typical in shortwave broadcasting. Enduring bonds and contacts between listeners to shortwave stations and broadcasters have existed long before the advent of social media.

– New delivery platforms and technologies are ideal for improving the service of shortwave radio to the audience. The spoken word and music can be enriched by images and video clips. Audio on demand services have enabled listeners to download programmes archived by radio stations.

– Social media platforms can be used to strengthen communication and dialogue between the programme makers and their audience. This in turn can help develop communities of listeners that can promote the station and its content.

– New technologies are ideal for the collection of user-generated content, irrespective of the distance between the source and the core broadcasting station.

– Programmes and frequency schedules of shortwave stations change quite often. The internet is an ideal medium for keeping track of these changes and promoting direct listening to shortwave stations.

– Shortwave transmitters around the world complement internet based services and are a vital communication tool during major emergencies caused by natural or man-made disasters. The effective flow of information to affected populations is most needed after the disaster strikes. The need for communication comes later.

Present developments

From 2012, the HFCC became a partner of UNESCO for the preparation of its World Radio Day. The UN-lead agency has acknowledged, for the first time ever not only the potential of international radio broadcasting for building bridges of understanding between peoples, but also its humanitarian role in disaster risk reduction. This is especially important in the disaster relief phase of an immediate response after a disaster event has happened.

In 2012 the HFCC informed the ITU Multi-stakeholder Forum on Emergency Telecommunications in Bogota, Columbia about its IRDR project. The forum was held in keeping with an important ITU-D [Emergency Telecoms](http://www.itu.int/ITU-D/emergencytelecoms/) programme with the aim to ensure the timely flow of vital information to audiences in disaster and post-disaster situations.

There have already been contributions and actions in the ITU recently that indicate that there are other initiatives in the effort to highlight terrestrial broadcasting in this field, including the contribution of the National Association of Broadcasters and other ITU members.

Proposals

The multi-platform distribution of broadcasting has become a reality. The irreplaceable role of terrestrial - and especially of radio - broadcasting is very important in disaster risk reduction. Since some present adjustments implemented in terrestrial facilities in international broadcasting might be irreversible, there is a synergistic approach needed urgently among the ITU sectors that should help include terrestrial broadcasting within a system of global emergency telecommunications.

During the May 2013 Phuket Meeting of the ITU-T Focus Group on Disaster Relief Systems, Network Resilience and Recovery (FG-DR&NRR), the HFCC suggested that a chapter dedicated to broadcasting, which was present in the January version of the Handbook on Telecommunications and Disaster Mitigation should be re-introduced into the version submitted to the Phuket FG‑DR&NRR meeting, with content reporting on the possibilities of broadcasting and on new developments in this sphere.

Although a series of ITU-R documents has been included in the draft text of the Handbook, the substantive Recommendation [ITU-R BT.1774-1](http://www.itu.int/rec/R-REC-BT.1774/en) "Use of satellite and terrestrial broadcast infrastructures for public warning, disaster mitigation and relief", relating to Question [ITU-R 118/6](http://www.itu.int/pub/R-QUE-SG06.118) has not been mentioned, although this Recommendation contains a series of typical characteristics of satellite and terrestrial broadcasting.

Another ITU-R document, Resolution **647 (WRC-07),** was also not included in the Handbook. This Resolution is vital for wireless services, including broadcasting on available frequencies/frequency bands for use in Emergency and Disaster Relief situations and/or standard operating procedures and both international and national spectrum management practices.

Question [ITU-R 209-4/5](http://www.itu.int/pub/R-QUE-SG05.209) is being studied on the use of amateur radio services in support of disaster radiocommunications. Another question should be studied, recognising that the terrestrial broadcasting service might be an important (and at times the only) channel for the flow of information to disaster affected populations. The question should relate to the technical, regulatory and procedural aspects of implementing this service for disaster relief purposes. The results of these studies should be brought to the attention of relevant study groups of ITU-T and ITU-D sectors.

These proposals, along with other details for implementing terrestrial broadcasting within a system of global emergency telecommunications should be also included in the revised and amended edition of the Handbook on Emergency Telecommunications and other related ITU documents and publications.

The concept of Worldwide Broadcasting Roaming for consumer receivers was first proposed in ITU-[R Question 136/6](http://www.itu.int/pub/R-QUE-SG06.136). There is a growing selection of "emergency" receivers on the market in a number of countries. The concept should be adjusted specifically from the point of view of their functionality, frequency coverage etc. in disaster relief situations and placed on the agenda of the relevant groups of all ITU sectors.

1. <http://www.statisticbrain.com/world-poverty-statistics/> Research Date: 23.07.12. [↑](#footnote-ref-1)
2. *"Earthquakes and Media" by M.Sugaya (MIC-ITU symposium on disaster communications, Sendai,March 2012).* [↑](#footnote-ref-2)