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North American Broadcasters Association (NABA)

THE IMPORTANCE OF RADIO AND TELEVISION BROADCASTING FOR EMERGENCY COMMUNICATIONS TO THE PUBLIC (COPY TO WORKING PARTY 6A FOR INFORMATION)

The North American Broadcasters Association (NABA, www.nabanet.com) is an association of broadcasters in Canada, Mexico and the United States, and the NABA Technical Committee is its standing technical body. NABA is thus in a position to present the technical viewpoints of the most authoritative association of professional North American Broadcasters in television and sound programme production, post-production, and distribution for terrestrial, satellite, and cable broadcasting.

NABA is a Sector Member of ITU-R and a long-time participant in ITU-R Study Groups, Working Parties, Task Groups, Rapporteur Groups, etc. NABA numbers among its members Chairmen, Vice-Chairmen and members of the above groups. NABA also participates widely in the ITU work on radio, television and multimedia services

Summary

NABA submits this contribution in belief that it is important for Working Party 6A to review and Report on the fundamental essential and historic role of radio and television broadcasting as the medium for rapid dissemination of emergency information to the public in the event of natural disasters, man-made catastrophes, terrorist attacks, and similar events which endanger the safety of the public.

It is vital to recognize this essential function of broadcasting as the preeminent source of emergency information to the general public. Broadcasting has for many decades saved lives in emergency situations throughout the World. It is of particular relevance now as JTG 4-5-6-7 seeks to identify additional spectrum for International Mobile Telecommunications (IMT). As important as terrestrial mobile broadband services are in public emergencies, they are not the primary source of critical information to the public in the event of disasters such as tornadoes, hurricanes, tropical storms, floods, snowstorms, earthquakes, tsunamis, terrorist violence, mass transportation accidents, and industrial or technological catastrophes. In fact, mobile broadband services suffer from some a number of architectural weaknesses that make them particularly vulnerable to failure in both local and wide-area public safety emergencies, namely, complex networks with many elements and related interconnections, many of which can and do cause service interruptions.

This NABA contribution proposes as a suggested starting point for a WP 6A Report by reviewing the vital role of North American broadcasting services as providers of critical, and often life-saving emergency information to the public. NABA proposes that Study Group 6 develop a more comprehensive Report based on contributions from broadcasters around the world, perhaps with involvement of the ITU-D Sector.

Advantages of Broadcasting in Public Emergencies

By their nature, natural and man-made disasters, whether impending or immediate, quickly capture the attention of a very large majority the entire population in an affected area, thus presenting a unique challenge to most non-broadcast communication infrastructures.

In disaster situations, members of the public seek at first, not to communicate, but to be informed, so that they may understand what is happening (or about to happen), and to assess whether and how they and family and friends may be affected. An earthquake is perhaps the purest example of instantaneous mass awareness. Everyone within the quake zone feels the motion more or less simultaneously. The normal individual reflex is to tune to radio and/or television broadcast stations that are known to have a strong record of serving viewers by reporting and interpreting emergency situations. These can include a mix of national network information and local information as well. The broadcast listening and viewing public is aware that in such circumstances, scheduled radio and television programming is quickly interrupted by broadcast station news personnel who report information they have collected from many sources throughout the emergency. As coverage continues, broadcasters include information from reporters at various scenes, police and fire departments, relevant federal, state and local government agencies, weather and geological bureaus, and the like.

Following the initial need for information, personal communication is then attempted as citizens seek rapid contact with family members and friends. At this point communication networks can suffer connectivity failures due to blocking or traffic congestion, and often loss of power at key network centers, cellular transmission towers, fiber links or other intermediate processing points. Failed elements can include wired and wireless telephone and mobile data networks, cable television networks, and in cases of severe weather, even direct-to-home satellite services. While these non-broadcast media often suffer infrastructure failure within a disaster area, broadcasting's architecture is uniquely simple and powerful. If the main transmitter and the radio or television studios that feed it remain on the air, reception is available wherever there are working receivers. Moreover, there has been rapid growth and availability of small handheld and automobile equipped television receivers plus large screen devices operating in most emergency shelters such as police stations, hospitals, sports arenas, public buildings, etc. Overall robustness of broadcast services are enhanced by the geographical diversity of multiple radio and television services within a given market. If one or a few radio and television broadcasters are not able to remain in service, or have an outage, other broadcast signals are ever incessantly available.

U.S. radio and television broadcast stations have long been participants in a highly-coordinated national and state-oriented Emergency Alert System (EAS) that allows the U.S. President to address the general public (nationwide as necessary) from government emergency management agencies. (For more information, see: <http://www.fema.gov/emergency-alert-system-eas>).

Radio receivers, of course, can be AC-powered, battery, or hand crank-operated, and are present in virtually all motor vehicles. These are nearly universally reliable despite almost any disorder or disruption taking place in the affected disaster area. Portable television receivers are much less common in U.S. homes and pockets, but even this is destined to change in the United States and elsewhere, as mobile DTV reception capability is beginning to be rolled out to portable devices such as cellular phones.

In addition, a mobile version of emergency alerting (M-EAS) is being developed. (for more information on M-EAS, see: <http://mobileeas.org>, and <http://atsc.org/newsletter/2012/10/m-eas-a-new-standard-in-alerting/>)

An additional advantage in the case of wide area catastrophes is that radio and television broadcasters have an expert ability to interpret information and impact for their viewers in the local broadcast coverage area. Viewers are offered comfort by hearing or seeing well-known, trusted local news reporters and anchors interpret the situation and provide advice and guidance for viewers' safety. In most of the U.S., only broadcasters have on-the-spot teams of management and on-air reporters who add significant value to assessing and communicating the nature of public emergencies.

All but the smallest radio and television stations have an important ability to gather and summarize information for the public by bringing to bear their electronic news, traffic and meteorological personnel with special knowledge of the local area, their field audio and video reporting capabilities, as well as sophisticated graphics, mapping and weather radar systems, not to mention well-honed utilization of Internet sources for collecting vital emergency information. Most broadcasters have disaster plans that include the presence of backup generator power at key studio and transmitter locations, associated long-term fuel storage, as well as backup facilities in secondary locations where information gathering and studio work can be moved if the primary location is disabled due to catastrophic conditions.

It is also common for radio and television receivers to be available in critical locations such as police and fire stations, hospitals, government buildings, auditoriums, indoor stadiums and public shelters, often with backup generator power. Both citizens and emergency responders thereby will often benefit from the distribution of key information by local broadcasters.

Recommendation

NABA recommends that WP 6A initiate work to develop a more complete Report along the lines contained above, but which will include information from broadcasters in many nations. This can be expected to provide a beneficial exchange of ideas for broadcast-based emergency communications, and may inspire ideas for increasing public awareness of how such resources may be accessed by the public. It can be expected to be of value to the work of the ITU-D sector as well.

About the Annexes

Following are two **Annexes** with examples highlighting the advantages of radio and television broadcasting in public disasters and emergencies.

ANNEX 1

Impact of Hurricane Sandy on a U.S. Cable Television Operator

Cablevision Systems Corporation, one of the United States leading media and telecommunications companies, suffered severe service impacts from Hurricane Sandy in late 2012.

Hurricane Sandy affected 24 states, including the entire eastern seaboard from Florida to Maine and with particularly severe damage in New Jersey and New York. Early on October 29, Hurricane Sandy moved ashore in the state of New Jersey, south of New York City, as a post-tropical cyclone with hurricane-force winds. The storm was nicknamed “Superstorm Sandy” by the media. Its storm surge hit New York City on October 29, flooding streets, tunnels and subway lines and cutting power in and around the city. One source cites damage estimates in the US at more than \$71 billion (2012 USD).

In a Cablevision Systems press release dated November 1, 2012, the company made the following statement: *“Following this unprecedented event, loss of electrical power continues to be the primary cause of widespread disruptions of Optimum service. Cablevision crews are in the field and working to restore service as quickly as possible after the return of power. We will continue to provide updates for our customers on Optimum.net”*.

The press release included a table reporting service outage statistics: 1.6 million customers of Cablevision’s “Optimum” brand services (cable television and/or Internet access) in the states of New York, New Jersey and Connecticut were without power three days after the storm hit, and of the 1.6 million other customers still with power, 7,265 homes had no Cablevision service due to cable system outages.

A full four months later, on February 28, 2013, Cablevision issued its corporate earnings press release with the sub-headline “Superstorm Sandy Impacts Fourth Quarter Results”. It included the following assessment of its Cable Television customer base during the fourth quarter of 2012, including the impact of Superstorm Sandy:

“Includes a net reduction of approximately 11 thousand customer relationships, 10 thousand video, 9 thousand high-speed data and 7 thousand voice customers that were located in the areas most severely impacted by Superstorm Sandy who we have been unable to contact and those whose billing we have decided to suspend temporarily during restoration of their homes...Our customer counts as of December 31, 2012 have been reduced accordingly (27 thousand customer relationships, 24 thousand video, 23 thousand high-speed data and 19 thousand voice)”.

Clearly, severe weather can take a serious toll on the public’s ability to receive wired television and Internet service (and telephone service) during and following a serious public emergency. It is known that those affected homeowners were able to utilize battery-powered radio and television receivers to continue to receive high-quality emergency information. CBS owns and operates two all-news radio stations in the city of New York that provided continuous coverage and advice to the public during Superstorm Sandy.

Just as the storm was making landfall, on October 29, Radio management and marketing magazine “Radio Ink” interviewed Federal Emergency Management Agency Director Craig Fugate, who urged people to turn to traditional radio in case other media fail. “One of the things you don't really think about anymore is having a battery-powered radio or hand-cranked radio to get news from local broadcasters, “ he said ”. The Internet may go out, cell phones will be congested, radio is oftentimes the way to get those important messages about what's going on in the local community”.

ANNEX 2

Information on Disaster Coverage and Public Service by U.S. Broadcasters

A NABA Member, the National Association of Broadcasters (NAB), is the primary national trade association and voice for the U.S. radio and television broadcasters. NAB advances the interests of its members in federal government, industry and public affairs; encourages content and technology innovation; and spotlights the important and unique ways stations serve their communities. Following are web links to NAB compilations of information on how broadcasters have served their public audiences in the face of various disasters in recent years.

NAB blog post on broadcasters as “first informers”:

<http://nabroadcasters.wordpress.com/2012/01/31/broadcasters-americas-first-informers/>

NAB *Licensed to Serve* Newsletter on 2012 Super Storm Sandy:

<http://www.nab.org/xert/2012Emails/publicservice/sandyLTS.html>

NAB *Licensed to Serve* Newsletter on St. Louis tornado coverage in April 2011:

<http://www.nab.org/xert/2011Emails/PublicService/aprilNewsletter.html>

NAB *Licensed to Serve* Newsletter on Alabama storms April 2011:

<http://www.nab.org/xert/2011Emails/PublicService/juneNewsletter.html>

NAB *Licensed to Serve* Newsletter on Hurricane Irene October 2011:

<http://www.nab.org/xert/2011Emails/PublicService/octoberNewsletter.html>
