With Greater Speed and Accuracy: Disaster-Prevention Broadcasting by NHK

Mr. Tomio Kojima

Director, Disaster Reduction Center, NHK, Japan

It is a great pleasure for me to give a presentation at the workshop today. First of all, I would like to make a brief introduction on our company, Nippin Housou Kyokai (NHK). Our company has been run by listening fee, which is supported by the audience in Japan and mostly covers its financial resource. The contract ratio is estimated at approximately 78 %. In this context, I would like to express my appreciation to the participants who are here today and also live in Japan for becoming our sponsors.

When the disasters such as typhoons and big earthquakes happen, NHK replaces the regular program of the TV broadcasting with disaster related broadcasting. In the disaster-prone years, 10–14 days in a year are changed to such special programs. On the occasion of the Great Hanshin-Awaji Earthquake, only the related news was broadcast for 24 hours a day through a week. In such emergency moments, we always bear promptness and accuracy in our mind as crucial policies. Not only NHK, but also other five major TV stations in Japan also regard promptness as the most important among others.

Now, I would like to talk about the typhoon that happened in Japan forty three years ago. Nagoya, which is located just between Kobe and Tokyo, was hit by a massive typhoon in September 1959 and more than five hundred lives were sacrificed. It is called "Ise-wan Typhoon", because the Ise-Bay to which Nagoya-city faces, generated the storm surge that caused devastating damages to the city. At that time, I lived near Nagoya-city and was ten years old. I still remember that our house was nearly blown off and all the family members tried so hard to protect our house all through the night in the darkness because of a power cut. In the following morning, I was very shocked to see the immense damage. Based on the lessons learnt from this experience, Japan has been working hard for disaster prevention as a national commitment. Because of a period of high-growth of economy later on, this is also a reason why we could

manage to conduct disaster broadcasting utilizing the latest equipment I showed you before. I believe that our disaster broadcasting made significant progress during this period. Above all, it came to have far less damages brought by windstorms and floods. Of course, I can't say that there are no such disasters, but it is rare to see the events claiming hundreds of human lives that we used to have.

What we have to deal with now is major earthquakes, as we can see the occurrence of the Great Hanshin-Awaji Earthquake claiming more than 6000 people lives. Earthquakes don't give us any signs before they happen. On the other hand, in case of windstorms, floods and typhoons, we can predict if they are coming close or not a couple of days before, and then we will have much time to evacuate and prepare for the coming disasters. I assume that it is one of the elements that earthquakes cause serious damages that we cannot prepare for the coming earthquakes beforehand.

I heard that most of you here today have faced windstorms and floods such as typhoons rather than earthquakes, so now I am going to show you that a broadcasting sample of typhoons which is adopted by Japanese TV broadcasting system.



At first, this is a figure of track of a typhoon and you can see the center of the typhoon. It shows the direction where it is heading, and this dotted line indicates that the central position of the typhoon comes to the inside of the line in 12 hours. This big red circle shows that it is likely to become a storm zone. This one shows that it is coming to this area in 48hours. It is

possible to show the predicted position in 24 hours, 48 hours, and 72 hours.

Actually more than 10 years ago, special designers drew it by hands on the screen, but of course now it has been done by computer graphics and takes only 10 seconds to make these images.



This shows a storm zone of a typhoon and the bottom is a map of Japan. And then this shows a storm zone in this time. Storm zone is an area of the wind speed of over 25 meters a second. The next yellow circle indicates a strong wind zone which is expected to have wind speed of over 15 meters a second. Through the use of these

figures, we can easily learn that if we will be in a storm zone or strong wind zone when typhoons are coming close to us. We display the figures all the time somewhere on the screen, telling the audience where typhoons are at present. At the same time, we have focused our reports on current conditions of broadcasting from various places and what is happening in the areas.

There are two kinds of broadcasting: a television and a radio. I have been involved in this field for twenty years and realized that impacts given by TV is huge. In other words, information and image come from eyes – a picture from TV – provides a great deal of impacts on our perception and understanding.

What you have seen at the beginning of this presentation are the tools to catch images. With the power of these tools, we appeal to the audience through their eyes, and make them recognize early warning and understand where the dangers are. I believe that this has been the most effective way to reduce the damages of assets and human lives.

There is another tool which has contributed to reduce impacts by typhoons: meteorological satellite which has been used for 10 years or so. If the clouds caused by a typhoon were recognized through satellite, people could understand that danger was coming close. It is impossible with radios. Accordingly, looking from the point of broadcasting field, to give people information on what sorts of dangers are coming and make them feel realistically, lead people to evacuate and take an action of disaster prevention response. I am not telling that radio is not effective and I am sure that it has a different effect and role. But from the view of mass communication, it is much more effective for people to recognize the dangers from visual appeals with support from the hearing.

At last, disaster prevention broadcasting for the public has surely been developed and improved, but we don not have an optimistic feeling about the future. It is no doubt that we are able to reduce the number of victims caused by typhoons by the means of disaster prevention broadcasting, compared to the old days. But Japan is one of the famous disaster–prone country, and, therefore, we are committing ourselves to appeal to the audience or the public for delivering information on the dangers that lie before, thinking of how we can reduce the victims of great earthquakes which will happen without any signals, with speed and accuracy.

Thank you very much for your kind attention.