

## **REGIONAL TRAINING SEMINAR ON USE OF GDPS PRODUCTS AND PRESENTATION OF FORECASTS TO THE PUBLIC**

The Regional Training Seminar on Use of GDPS Products And Presentation of Forecasts To The Public was hosted in Seoul from 22-29 October 1996 for participants from RAIL, at the kind invitation of the Government of the Republic of Korea. The seminar was in two parts, the first part dealt with interpretation of NWP products (see p...) and the second part concerned the preparation of forecasts and warnings and their presentation to the public. This part got underway with an introductory lecture by Ms H. Kootval, the Chief of Public Weather and Operational Information Unit of WMO on the Public Weather Services (PWS) Programme of WMO. It was explained that WMO Congress had decided in 1991 to establish a scientific and technical programme which specifically addressed the provision of services to the public as the end product of the activities of the NMSs in collecting, processing and transmitting data and products. Public weather services provided by Members represent the most visible return for investments in national meteorological infrastructures. It is one of the primary roles of all NMSs and one on which the general public often judges the performance of the Service.

In his lecture on applications of forecasts to weather-sensitive economic sectors, Dr R. Petersen (USA) spoke of the requirement for a more integrated approach to products and services delivery which focused on total needs of particular categories of users. Agriculture, tourism, insurance industry, marine operations, offshore oil drilling, mountain meteorology applications including ski industry, forestry, electrical utility industry, and aviation industry are amongst these sectors. In the case of agriculture, crop damage due to freezing and the availability of moisture for water sensitive crops require accurate information on temperature and humidity levels. The insurance industry has been affected by natural disasters in many parts of the world, particularly in tourist resorts. Evacuation of fishing fleets and recreational mariners represent one end of the scale of the influence of weather on marine activities, whereas the very costly evacuation of drilling crews and shutting down the operation of offshore oil drilling are at the other end of this scale. Provision of warnings of avalanches and the adverse impact of severe weather in the mountains on tourism and ski industry are increasingly becoming part of services provided by NMSs.

The key components contributing to the excellence of public weather services are timely and accurate predictions and effective product presentation. The necessity for both components was elaborated in a lecture by Ms H. Kootval. It was explained that successful presentation of public weather products required awareness and understanding on the part of the recipients. It was therefore necessary to ensure that the public was aware of weather phenomena, hazards and NMS products and services, and equally important that it understood the product content and knew how to react to that information. Some factors contributing to successful presentations were discussed. It was pointed out that there was a substantial gap to be bridged in

taking the raw scientific outputs from numerical prediction and other forecasting approaches and providing the public with understandable and useful information.

Dr R. Petersen spoke on the important role of public weather services in support of disaster preparedness. He provided detailed description of the arrangements in the USA between the Federal Emergency Management Agency (FEMA) and the National Weather Service and introduced the draft of the Instructor Guide on Hazardous Weather and Flooding Preparedness. Although specifically prepared for the US agencies, the publication contains many useful guidelines and much information which can be equally beneficial for similar agencies in other countries.

One of the specific objectives of the workshop was to consider bridging the gap between scientists, technicians, and the public through proper interface with the public. Three presentations concentrated on how this objective is achieved in USA, India and Japan. Mr Takemura explained that in Japan warnings from local meteorological offices are relayed to the relevant organizations such as the Maritime Safety Agency, disaster prevention-related organizations, police and fire services via dedicated lines, high-speed cable communication lines, or subscriber telecommunication lines which are determined by agreed arrangements in advance. Examples of criteria for issuing watches and warnings, specially for wind and rainfall were given.

In India as explained by Mr Rao, in order to ensure that the public understands and therefore can act on forecasts and warnings, the scientific meteorological terms are replaced with those which are more easily understandable by the public. Special weather bulletins are issued for farmers, containing information on rainfall intensity, frost, hail and temperature. Another sector of the country especially catered for is the fishing community. Bulletins are issued for fishermen four times a day for radio broadcasts in local languages.

A number of examples of presentation and dissemination of public forecasts and warnings were presented to the participants.

A briefing on the preparation and dissemination of public forecasts in the Republic of Korea, was provided by Dr Chung, and was accompanied by a video explaining how the output from NWP products were translated into forecasts and warnings for public consumption.

A short visit to the studios of the KBS-TV provided the participants with the opportunity to tour the facilities where the daily weather programmes were produced and broadcast.

An important achievement of the portion of the workshop dealing with preparation of public weather products, although short and as a result very concentrated, was to drive home the importance of taking into consideration the user requirements when preparing products for the public.