

**REPORT OF CHAIRMAN OF THE WORKING GROUP FOR PLANNING AND
IMPLEMENTATION OF WORLD WEATHER WATCH IN REGIONAL ASSOCIATION
V (SOUTH WEST PACIFIC) TO THE THIRD SESSION OF THE WORKING GROUP**

Introduction

In just under four years since the last meeting of the Working Group, held in Wellington, we have seen considerable change in our areas of responsibility. The specifics of much of our work will be contained in reports presented by the rapporteurs and the coordinator of the GTS sub-group later in the meeting.

Our last meeting was held seven months prior to the twelfth session of our Regional Association (XII-RA V). This gave us the opportunity to report progress to the Association, which, in turn allowed them to provide us with guidance for our work during the inter-sessional period.

XII-RA V, at Res.4.1/1 (XII-RA V) decided to re-establish the working group with revised terms of reference. It decided that the working group should consist of:

- (1) a coordinator of a Sub-group on Regional Aspects of the Global Telecommunications System and designated Mike Hassett (Australia) to this position;
- (2) a rapporteur on Regional Aspects of the Global Observing System and designated Terry Hart (Australia);
- (3) a rapporteur on Regional Aspects of the Global Data-processing System and designated Tan Hiu Sian (Singapore);
- (4) a rapporteur on Regional Aspects of Data Management and codes and designated Ed Young (USA); and
- (5) rapporteurs on Regional Aspects of Public Weather Services and designated Kevin O'Loughlin (Australia) and Emelda Valerosa (Philippines).

Ms Tan left the Meteorological Service of Singapore early in 2001, after playing a very helpful role in the working group. The PR for Singapore has recently nominated Mr Choo Huat Aik to replace her.

Chairman's Activities

The Association requested the chairman to provide annual reports to the President. These have been

prepared with the assistance of the members of the working group and passed to the President prior to sessions of the Executive Council or Congress. The reports provide much of the detail of the work of the group over the past four years and they will stand as the main record of the group. I will not go into their detail here, and in any case the individual reports of the other members of the working group will cover that ground.

The Chairman of the Regional Working Groups have been invited to attend sessions of the Commission for Basic Systems since 1996. In the period since the working group's last meeting your chairman has attended the Extraordinary Session in Karlsruhe, Germany (30 September to 9 October 1998) and the twelfth session held in Geneva from 29 November to 8 December.

Restructuring of CBS

At CBS-XI in Cairo (1996) a task team was set up to examine and advise on options for restructuring the CBS. The task team's work was considered at the CBS 1998 Extraordinary Session in Karlsruhe.

The Commission resolved to change the working structure replacing the Working Groups (eg. on GOS, GTS, GDPS and Data Management) with Open Program Areas (OPAGs) which do not hold sessions and their members are consulted and informed through correspondence. The Chairs of OPAGs are to be members of the CBS Advisory Working Group (which became the CBS Management Group after CBS XII). The four OPAGs were: (a) Integrated Observing Systems; (b) Information Systems and Services (c) Data - processing and Forecasting Systems; and (d) Public Weather Services. These OPAGs were to be supported by Expert and Implementation/Coordination Teams (ET and ICT). These teams are formed to address specific areas and problems and have a defined life. The membership of the ICT are to include regional rapporteurs on the specific program areas.

There were also provisions for Regional Associations to nominate members to ICTs as a capacity building measure.

Thus although XII-RA V had been held prior to Extraordinary Session in Karlsruhe and had nominated Regional Rapporteurs based on the previous structure, the new arrangements allowed for specific RA V Working Group input into all OPAGs not dissimilar to the previous working arrangements. The new arrangements were re-endorsed at CBS-XII and the role of regional representation through rapporteurs on Regional nominations for capacity building on ICTs reaffirmed. Members of the working group have attended relevant meetings of OPAGs.

Following the Karlsruhe session RA-V nominated Mr Commins Vaike of the Solomon Islands Meteorological Service to the ITC on Information Exchange Management and Mr M Rafangi of the Indonesian Meteorological and Geophysical Agency to the ITC on Global Observing Systems. Following CBS-XII Mr Zabani Zubi of the Malaysian Meteorological Service was nominated as the RA-V representative on the ITC on Integrated Observing Systems and Mr Ceasar Hadley of the Federated States of Micronesia on the ITC on Public Weather Services.

Despite some reservations prior to the Karlsruhe Session, your chairman now believes the new arrangements are working very well and the RA V interests are fully and effectively catered for.

Tasks and Follow-up from XII-RA V

The XII-RA V felt that the following issues required particular attention:

- S full implementation of quality control procedures and improved monitoring of data availability;
- S reducing the deficiencies in the GOS and the GDPS;

- S improvement in the operation of the GTS in the Region by taking into account new telecommunications techniques and means available, such as the Internet, as well as evolving information exchange requirement;
- S wider usage of BUFR and CRIB codes for exchange of information over the GTS as soon as feasible;
- S the gradual implementation of WWW/DM concept and assistance in its evolution in RA V;
- S improved coordination and integration of functions and activities of the basic WWW components (GDPS, GOS, GTS and DM) on the basis of the Fourth WMO Long-term Plan;
- S current status of implementation of the WWW in the RA-V Annual Global Monitoring; and
- S facilitate, if required, issues related to the year 2000 problem.

This then formed the basis of priorities the session set for the work of the group. The progress in these areas will be presented in the reports of the relevant Rapporteurs and the coordinator of the GTS sub-group.

Congress

The thirteenth session of Congress was held eight months after XII-RAV. It therefore provided an opportunity to validate actions addressed at XII-RAV and assist in the direction of the working group. Amongst the relevant matters raised at Cg X III were, briefly:

- Global Observing System
 - S the need to address the loss of Omega - which indeed became a significant focus in the region with GPS sondes being introduced as widely as possible, although this has been a more expensive option and has caused problems in maintaining the upper air system;
 - S use of new systems (AMDAR, radar and wind profiler, buoys) all of which have seen significant progress in the region;
 - S integration of space-based and surface based observing components into a single program area within CBS - which has been ongoing and will ultimately see value to the region.
- Global Telecommunications System
 - S the need to pursue new data communications technology;
 - S introduction of and development of TCP/IP on the GTS;
 - S encourage use of DCPs;
- Global Data Processing System
 - S long range forecasting and seasonal to inter-annual forecasting developments;
 - S standard verification techniques;
- Data Management
 - S monitoring of the operation of WWW;

- S code matters (GRIB, BUFR, CREX);
- S delivery and reception systems and use of the Internet for international programs.
- Public Weather Services Programme
 - S improve NMSs capacity to deliver high quality meteorological services which in turn will lead to higher visibility and better recognition,
 - S reinforced Regional Associations involvement in the Working Group on PWS established at CBS-XI (the working group was subsequently replaced by OPAG on PWS).
- Other Matters
 - S Radio frequency protection.

Progress on XII-RA V Activities

The recommendations of XII-RA V have formed the basis for much of the activities of the working group and will be reported on during the session by appropriate rapporteurs.

It will be recalled that at the time of XII-RA V, Y2K concerns were a matter of particular focus and the group gave special attention to them. As a result of the coordinated international action and the careful work by Members Y2K had only minimal impact on RA V systems.

The intersessional period has seen significant development of WWW systems. In particular activities amongst the Pacific Members of RA V has resulted in the preparation of a "Strategic Action Plan for the Development of Meteorology in the Pacific Region "2000-2009". From this a major "needs analysis" was undertaken. This will be dealt with in more detail later in the Session. However it can be said, with confidence, that we have seen a period of strengthening of the WWW systems in the region even during a period where there have been extreme pressures of national resources.

There has been considerable strengthening of observing telecommunication systems during the period. The region, however still is having problems with restoring upper air programs following the demise of the Omega system. The temporary loss of geostationary satellite capacity with the problems in both GMS and FY-2 and the failure of the launch of MTSAT have caused significant short term problems with the GOS in the region. The development of telecommunications, particularly the internet in the Pacific has seen a major improvement in the capabilities of NMSs in the area.

The new Public Weather Service Program has had to invent itself and get to work in a relatively short period. I believe that it has done this very well in the Region. We face particular problems in that there are many small and developing services in our part of the world. They are facing special problems in virtually all aspects of the service to the public. Examples are:

- \$ the difficulty of NMSs being recognised as the source for forecast and warning information, particularly in the Pacific Island countries, where international, commercial media are providing a service (often of a relatively poor quality) through TV and the internet;
- \$ the problem of raising NMSs profile high enough in national government to receive the resources needed to carry out their roles;
- \$ staffing levels and skills are too limited to adequately cover all the important areas in support of national development that is within the national meteorological service role; and
- \$ lack of resources needed to take advantage of the rapidly developing technologies that

are available in supporting public weather services.

These are issues that are being pursued on a number of fronts in the Region and the working group rapporteurs are taking an active role in them.

There is no doubt that the NMSs, and consequently the WWW program in the region, will always be under resourced relative to our perceived needs. Possibly over the next few years this will be more sharply defined as the world economic situation deteriorates and the pressure on the NMSs to implement new systems increases. It will be important to take advantage of developments in technology as well as opportunities for resource support to continue the progress of WWW. In the Pacific there is still a major concern about the influence of climate change. The needs of NMSs to monitor climate and the interconnect with WWW through GCOS has been useful in obtaining resources to support the program.

Clearly one of the most important needs for the development of the WWW Program in the Region is for Members to present a united front and to cooperate to as great an extent possible. There is no area more important for this than in the field of developmental assistance. Over recent years there has been a determined effort in many of the developing services to ensure that developmental assistance to meteorological services is coordinated. Meteorological Services in the few developed countries in the Region have put effort into both defining need and coordinating assistance programs. As a result a more focussed and relevant program of assistance has been forthcoming in recent times. The Strategic Action Plan for the Development of Meteorology in the Pacific Region and the follow up needs analysis (which will be presented later in the meeting) are examples of this.

Future Arrangements for the Working Group

The working group has carried out its work within the limits of the resources available. However it must be recognised that most of the work by its members is on top of their day-to-day responsibilities within their meteorological services. As a result it has not been possible to be particularly innovative in what we have been able to do. The change in structure of the CBS may have had some impact on our program. At the next session of the Association, to be held next year, it may be appropriate to discuss if the working group arrangements are still appropriate.

The period since our last meeting saw the inclusion of the Weather Services Program activities in the working group. There is no doubt that this is a very important area, particularly in Region V as there are many small and developing National Meteorological Services. The Region has been particularly involved in the development of the Program, and the two Rapporteurs have been very active. Nevertheless vis a vis the other components of the working group, the Weather Services Program is quite different. There is therefore a need to review the appropriateness of this arrangement to the needs of the Region and to at least consider options for the support of the Program in the Region other than as part of the working group.

Acknowledgements

As chairman of the working group I would like to acknowledge the support I have received from all the members. They have responded willingly to my requests for accounts of their work for my annual report to the President, they have undertaken their individual tasks conscientiously and have contributed to the Regional performance of the WWW. I am particularly grateful to the willing support and help that the working group and I have received from the WMO Secretariat especially from Dieter Schiessl and David McQuirk.