

WORLD METEOROLOGICAL ORGANIZATION



Subgroup on Regional Aspects of PWS in RAVI

Pilsen, Czech Republic, 3-6 April 2005

FINAL REPORT



Report of the meeting of the Subgroup on Regional Aspects of PWS in RA VI

Pilsen, Czech Republic 3-6 April 2005

Opening

At the kind invitation of the National Meteorological Service of the Czech Republic (CHMI), the fourth meeting of the Subgroup on Regional Aspects of PWS in RA VI was held at the regional office of the CHMI in Pilsen from 3-6 April 2005.

The Director of the office, Mr Zdenek Roubal welcomed the participants to Pilsen. The meeting of the Subgroup was opened at 9.00 am by the Subgroup Coordinator, Mr Wolfgang Kusch (DWD) who chaired the meeting. The list of participants is attached as Appendix A. Terms of Reference of the Subgroup can be found in Appendix B.

Adoption of the agenda

Mr Herbert Gmoser asked for the following items to be added to the meeting agenda:

- (a) Discussion of cross border exchange of warnings questionnaire.
- (b) Addition of verification discussion.

Report of the representative of the WMO Secretariat

Ms Haleh Kootval, Chief, Public Weather Services Programme of WMO presented the report of the representative of the WMO secretariat. Her report touched on PWS issues that were of relevance to the work of the Subgroup, including the work of the various Expert Teams that under the guidance of CBS coordinate and carry out the work of the PWS Programme as well as other teams and activities. These are:

- Expert Team on Communication Aspects of PWS dealing principally with;
 - Managing the media
 - Training in media studies
 - Guidelines on Media Issues
 - Links with IABM
- Expert Team on Service and Product Improvement whose work has in the recent past concentrated on;
 - New technology as applied to PWS
 - Air Quality and biometeorology
 - Standardised forecasts and warnings
 - Guidelines on quality management in PWS
- Expert Team on Disaster Prevention and Mitigation, with focus on;
 - Further development of WWIS and SWIC Web sites
 - Internet training events
 - Guidelines on risk management
- Implementation Co-ordination Team with responsibility for;
 - Feedback on capacity building
 - PWS in support of disaster mitigation
 - PWS & economic value of met services
 - Olympic Games requirements for weather and climate information

- Expert Meeting on Presentation skills to consider;
 - Training needs for broadcast presenters
 - Guidelines on Presentation Skills
 - Broadcaster accreditation
- Support for capacity building through;
 - Training workshops with about 400 Trainees up to now
- PWS & Disaster mitigation with links between PWS & NDMP (Natural Disaster Prevention and Mitigation)

The Meeting agreed that it was necessary to direct individual NMSs in the Region to particular areas of work – it is clear that one NMS cannot cover everything. The Meeting also agreed that for the work of NMSs to be successful, it is important to change public behaviour, particularly its response to public warnings.

Report of the Chairman

Mr Wolfgang Kusch presented his report on the work of the Subgroup. He stated that all work packages identified at the last Subgroup meeting (Helsinki 2003) have been completed successfully. The final report of the current Subgroup would be presented to the next session of RA VI (Heidelberg, September 2005). It is expected that the Subgroup would be re-established under new terms of reference to continue the work areas identified by the current Subgroup.

Following discussion about the Subgroup's future terms of reference, Ms Kootval said any further changes would have to be given as soon as possible to WMO secretariat for inclusion in the RA VI documentation.

Session 1: Cross Border Exchange of warnings

Mr Herbert Gmoser presented his evaluation of the pilot project for cross border exchange of warnings. He recalled that this project had been approved by the Subgroup at its meeting in Helsinki. Mr Gmoser outlined the various actions which had been completed in order to start the process of warning exchange between the participating nations.

The project is not looking to duplicate any other work, but set up practical procedures for such exchange. In order to overcome lingual difficulties, it is preferable to use pictograms for exchange. Use of colour levels have been taken from the EMMA project.

The pilot project was started by the Austrian Meteorological Service (ZAMG) on 5 July 2004 with Slovenia, Germany and Italy joining in later in the same year.

Between July 2004 & March 2005, there were 2893 warnings issued as part of the cross border pilot project on exchange.

It was proposed that the evaluation phase should continue until September 2005, to ensure all appropriate nations e.g. Czech Republic, Hungary, Slovakia, can be involved in the trial.

Mr Herbert Gmoser stated that the pilot project had been presented to the Informal Conference of Central European Directors (ICCED) on 14-16 March 2005 and that there was positive feedback and interest.

It was reiterated that the main difference between the pilot project & the EMMA project is that the pilot project is an actual exchange of warnings as opposed to EMMA's display functionality.

Mr Herbert Gmoser highlighted a number of issues. Namely:

- The need to make a distinction between extreme weather *warnings* and weather *information* systems.
- Presentation to the public should be clear and understandable.
- There should be recognition of different warning thresholds in different countries.

Mr Gmoser concluded:

- The exchange process is ongoing;
- There is progress in establishing national Web sites for exchange purposes;
- There are no difficulties in understanding automated messages;
- Thresholds are not imposed on the participating countries;
- Linguistic problems are resolved with the use of pictograms.

Recommendations:

- Most participating Members' NMSs have Websites and should use them for exchange purposes. However, if a Member does not have a Website, they should use e-mail or fax for this purpose.
- Units for wind should be in metres per second or Km per hour – most of the population use Km per hour (apart from the UK which would use miles per hour).
- NMSs should consider how to include information on assessment of the impact of significant weather on infrastructure, property and lives as part of their exchange.

The overall objective of the project should be to improve the collective warning systems in Europe through improved infrastructure and increased co-operation.

Mr Axel Thomalla presented the DWD's warning information system and a perspective of the cross border exchange of warnings project. He explained that in Germany there is a statutory requirement for delivering warnings but that no law existed concerning single authority for warnings. His main experiences of the pilot project were:

- Forecasters appreciate continuing and routine exchange of warnings;
- The exchange can help to better clarify warning situations;
- The exchange process is mainly helpful for countries 'downstream' of the weather event;
- Exchange should be automated.

Ms Marja-Leena Komulainen presented the Finnish Meteorological Institute (FMI) experience of exchanging warnings. She explained that in Finland in addition to EMMA, co-operation existed in the case of NAVTEX, EMHI, BALTMET and NORDMET.

Ms Liisa Fredrikson presented the FMI response to increasing workloads during severe weather events. This included calling in an extra (volunteer) forecaster when severe weather was expected.

EUMETNET Project EMMA – future development

Mr Chris Jones presented background information on EMMA and an overview of the proposal that was to be presented to EUMETNET council in Basel (April 2005).

Information about METEORISK

Mr Herbert Gmoser presented information about other warning programmes, namely EURORISK & METEORISK.

ACTION: Mr Dave Robinson agreed to circulate information about EURORISK to the participants.

Questionnaire regarding Pilot Project

Mr Herbert Gmoser presented the responses to the questionnaire regarding participating nations' experiences of the pilot project. Suggested improvements emerging as a result of the questionnaire included:

- More direct dissemination (eg ftp, Messenger etc).
- A pop up appearing on the forecasters desktop when warnings were issued.

RECOMMENDATIONS:

- In order to involve more countries in the project, it is needed to convince potential participants of the benefits of their participation towards helping them to provide better services.
- Positive experience shows that this project should continue to develop and become operational with the involvement of as many Members in the Region as possible.

The Meeting agreed that dissemination should be by e-mail or fax for now, but with a view to changing to a more up to date method such as ftp in the future.

Road Weather Warnings

Mr Jan Sulan presented the CHMI experiences regarding road weather data exchange with neighbouring countries, currently in SH70 format. He proposed a pilot project for exchanging road weather data in BUFR format, for which a template and required local descriptors have been developed by CHMI & DWD. Mr Axel Thomalla presented road weather services from a DWD perspective.

ACTION: Mr Wolfgang Kusch agreed to inform the coordinators of CBS OPAG on ISS of current developments.

Session 2: Evaluation of the first RA VI training course in Langen, October 2004.

The Meeting was informed on the outcome of the training event and noted that funding was provided by: Austria, UK, France, EUMETSAT & WMO. DWD provided host facilities including lecturers and accommodation.

According to the student course appraisal, the most useful topics were:

- Improved and new PWS products
- Improving the visibility of NMSs
- Media
- Press releases & interviews

RECOMMENDATION : Based on the positive feedback it is proposed to:

- Hold the course every 2 years;
- Have a broader base of lecturers. Met Office, UK agreed to provide the services of a lecturer.
- Consider Langen as the venue for future courses

Overview of the Romanian Meteorological Service

Ms Aurora Stan-Sion presented an overview of the Romanian Met Service (National Administration of Meteorology) to the Subgroup. This included a look at systems, communications and remote sensing. **Ms Aurora Stan-Sion concluded with an invitation to hold the next meeting of the Subgroup in Romania.**

Session 3: Report of Working Group 3, Visibility of NMS

Ms Haleh Kootval presented the Report of Working Group 3, written by Ms Elena Cordoneanu. The paper was received very positively and additions were proposed by the Subgroup (see Appendix C). It was proposed that a summarised version should appear on the PWS Web page.

ACTION: Ms Haleh Kootval to arrange for summarised version on the website.

WMO-PWS Webpage discussion

Ms Haleh Kootval informed the subgroup that the PWS Web page was undergoing significant change aimed at its improvement.

Session 4: Cooperation with Disaster Management and 'Single Voice' principal

Mr Chris Jones presented some of the challenges facing NMSs in support of disaster management. As an aside, it was felt strongly that WMO should have a more prominent role in the mitigation and prevention process, as well as supporting disaster management authorities. It was proposed to summarize the presentation and include it with a letter to RA VI Members about improving the way NMSs support disaster management. A questionnaire should also be included to find out the current status of each Member with regard to disaster management.

ACTION: UK Representatives to draft questionnaire and summarised disaster management presentation. These should then be passed to Mr Wolfgang Kusch for sending to RA VI Members. This will help to develop an appropriate work package for the new Subgroup following the forthcoming RA VI session.

Ms Liisa Fredrikson presented the FMI proposal for warning authorities and Finnish citizens.

Extra session: WMO response to Tsunamis

The Meeting discussed how to involve WMO in response to the recent Tsunami disaster. It agreed on the important role of the meteorological community in these responses.

Verification: A simple example of verification of the WMO City Forecasts

Mr Axel Thomalla presented verification results that DWD had compiled for the 120 stations provided by RA VI Members to the WWIS Web site. He concluded that:

- In general, the quality of forecasts is good;
- There are some differences in forecast performance from station to station.

Mr Herbert Gmoser presented verification results of the three Austrian sites that are sent to the WWIS website.

RECOMMENDATIONS:

- RA VI Members should be encouraged to use the verification statistics to help improve the quality of forecasts, and help improve the efficiency of the forecast process;
- The Subgroup Chair should send the results from the preliminary verification work to the Subgroup members - only revealing individual results to the relevant nation;
- The verification work should be continued by DWD for a complete year;
- The chair of the RA VI Planning and Implementation of WWW (PIW) will be informed by the Subgroup Chair of the preliminary verification work and will be provided with a final report at the end of the first complete year. The final results will be circulated by the Chair of PIW to those RA VI Members that are involved in the WWIS project.

Development of the Subgroup work plan

At the conclusion of the debate of its agenda, the Meeting agreed on the following work plan:

1. Complete the meeting report by 8 April 2005.
ACTION: Chris Jones
2. Cross-Border warning exchange recommendations: –
 - Most participating Members' NMSs have Websites and should use them. However, if a Member does not have a Website, they should use e-mail or fax.
 - Units for wind should be in metres per second or Km per hour – most of the population use Km per hour (apart from the UK which would use miles per hour)
 - NMSs should consider how to include information on assessment of the impact of weather on infrastructure, property and lives as part of their exchange.
 - In order to involve more countries in the project, it is needed to convince potential participants of the benefits of their participation towards helping them to provide better services.
 - Positive experience shows that this project should continue to develop and become operational with the involvement of as many Members in the Region as possible.**ACTION: All participating Members**
3. Capacity Building recommendations:
 - Based on the positive feedback from the first training course, the Meeting agreed to:
 - Hold the course every 2 years
 - Have a broader base of lecturers. Met Office, UK agreed to provide the services of a lecturer.
 - Consider Langen as the venue for future training courses**ACTION: Chair of Subgroup**

4. Visibility & Credibility of NMSs recommendation:
 - Review the text of the Working Group 3 report and place on the PWS Web page.**ACTION: Secretariat**

5. Disaster Management recommendations:
 - UK Met Office will draft a questionnaire and presentation summary for RA VI by 1 June 2005.
 - The two documents will be sent to RA VI Members by September 2005.**ACTION: UK Met Office**

6. Verification recommendations:
 - RA VI Members should be encouraged to use the verification statistics to help improve the quality of forecasts, and help improve the efficiency of the forecast process.
 - The Subgroup Chair should send the results from the preliminary verification work to the Subgroup members - only revealing individual results to the relevant nation.
 - The verification work should be continued by DWD for a complete year.
 - The Chair of PIW will be informed by the Subgroup Chair of the preliminary verification work and will be provided with a final report at the end of the first complete year. The final results will be circulated by the Chair of PIW to RA VI Members that are involved in the WWIS project.**ACTION: DWD, Subgroup Chair, PIW Chair**

Next meeting

The Subgroup expressed appreciation to the Romanian Meteorological Service for the invitation to hold the next meeting in Bucharest in May 2006.

Closure

The meeting closed at 12.15 pm on 6 April 2005.

List of Participants

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**Terms of Reference of the
Subgroup on Regional Aspects of Public Weather Services (PWS)**

1. Develop documentation and advise on the regional aspects of the PWS Programme and its Implementation, containing information:
 - (a) on liaison between NMHSs and the media and others involved in the dissemination of public weather forecasts and warnings, and
 - (b) on Collaboration between NMHSs and disaster authorities
2. Keep abreast of and evaluate technical and scientific developments related to the formulation, presentation and dissemination techniques and make recommendations on a regional scale
3. Review the status of the implementation of the pilot project of cross-border exchange and consider future developments in this area
4. Continue activities in education and training to the PWS Programme
5. Develop guidance material on, and prepare common procedures for, verification of public forecasts and warning
6. Elaborate proposals for demonstrating the benefits of PWS and heightening the visibility of NMHSs
7. Advise and report to the chairman of the working group and the association on all matters concerning the public weather service in the Region
8. Represent the Region at sessions of the relevant CBS Implementation Coordination Teams on PWS through participation of its coordinator

Web Home Page

Information on the actual weather, observations and predicted values

Satellite images

Radar images

Nowcasting tools

Warnings for the public

Warnings for special clients via password

Forecasts of special events e.g. social events

Documentation of the past weather

Documentation of extreme national weather events

Documentation of global extreme weather events

Access for feedback by the public e.g. voluntary information, spotters, damages