

Report on the Eighth Meeting of the Working Group on Cooperation between European Forecasters (WGCEF)

Lisbon, Portugal, 5 October 2002

1. Introduction

The eighth annual meeting of the WGCEF took place at the Instituto de Meteorologia in Lisbon, Portugal. The chairperson, Liisa Fredrikson opened the meeting, welcomed the participants and extended thanks to the Instituto and in particular, Teresa Abrantes for hosting the meeting at relatively short notice. Plans for the meeting to be held in Brussels in conjunction with the second meeting of the European Meteorological Society were shelved during the summer following an announcement of a change of date. In reply, Teresa Abrantes presented a short opening address and welcomed everyone to Lisbon. Unfortunately the President of the Instituto could not attend due to a late change of circumstance but his greetings were passed on. In total, there were 18 participants representing 14 Meteorological Services (see Appendix I). Apologies and best wishes for a successful meeting were received from Martha Sallai (last years host from Hungary), Otilia Diaconu (WGCEF secretary, Romania), Merike Merilain (Estonia), Branka Ivancan-Picek (Croatia), Vida Raliene (Lithuania), Dirk Heizenreder (Germany), Giuseppe Frustaci (Italy), Branko Gregorcic (Slovenia) and Manfred Kurz (founder of the WGCEF, now retired).

2. Report of the chairperson of the WGCEF

Liisa Fredrikson explained that her work relating to the group had been somewhat curtailed in the past year due to a change in job and location. This led to delays in updating of the website and she apologised for this. Thanks were passed on to Andre-Charles Letestu (Switzerland) for providing a soft-copy version of the 2002 newsletter on the website. Nick Grahame (Vice-chairperson) also mentioned that there had been some other difficulties with the publication of the 'hard-copy' 2002 newsletter. Dirk Heizenreder (Germany) had kindly offered to take over production of the newsletter following Manfred Kurz's retirement but he also changed job during the past year which limited available time. As a consequence, the member list had not been updated.

Action: Liisa Fredrikson and Nick Grahame to look at ways of improving the production process of the Newsletter.

3. Discussion of Newsletter No.7 (April 2002) and WGCEF website

Each participant reported that their service had received copies of Newsletter No. 7 apart from Frank Kroonenberg (Netherlands) – probably due to the fact that the member list had not been updated. The introduction of a colour photograph on

the front cover (courtesy of Claude Sales) was well received and there had been many positive comments about the articles contained which again covered a wide range of relevant and interesting topics. Nick Grahame thanked all those who had contributed. Herbert Gmoser (Austria) announced that the results of a WMO questionnaire on public weather services (see Newsletter No.7, pp 18-20) had been published in a technical document (WMO/TD No.1100, PWS-5). There was a 70% response and one of the main findings was that training is still continuously required on forecasting aspects such as nowcasting techniques and satellite interpretation.

There was some discussion about whether there would still be a need for hard copies of future newsletters given that access can now be gained via the WGCEF website. Nick Grahame mentioned that he had received a specific request for further paper copies of Newsletter No. 7 to be distributed at additional regional centres in the United Kingdom. The reason being that forecasters need to have a break from looking at a workstation screen – a valid point! It was agreed that the paper version would be continued unless financial aspects became prohibitive.

The website appeared to be popular amongst members but some of the participants asked whether the list of representatives from each country should still be password protected. It was felt that all forecasters should know who their representative is. Liisa Fredrikson explained that password protection was in place so that work and business e-mail addresses would not be open to misuse in the public domain. However, it was agreed that a change could be made to allow unlimited access to all other information. A suggestion to include a counter on the website to monitor usage was generally agreed to be a good idea.

4. Status and actions from the last meeting

One of the actions from the 2001 meeting was to investigate ways in which the forecaster can 'add value' to model products and also how this value can be measured and verified in a meaningful way. Herbert Gmoser gave a short presentation on a recent scheme set up at ZAMG to assess hit rate and false alarm rate for products modified by forecasters and raw model output. He encouraged others to develop similar schemes so that forecasters can see the verification scores and act upon them. Frank Kroonenberg (Holland) and Liisa Fredrikson added that it was important for personal scores to be available in such schemes. Frank also suggested that 'added value' should be investigated in extreme event cases where severe weather leads to disruption. Verification schemes should not only relate to fixed thresholds for any individual weather element but also take into account the amount of potential disruption that is caused. Andre-Charles Letestu explained that different threshold criteria are used for different parts of Switzerland for this reason whilst Norvald Bjergene (Norway) asked how the management of disruption should be handled. The

problem is whether it is possible to devise a scheme where disruption is described objectively?

Nick Grahame reminded participants about the On-Screen Field Modification (OSFM) technique used in the Met Office for medium range forecasting and showed some verification scores for 2001 which demonstrated the 'added value' provided by the forecaster in terms of synoptic-scale features. He then explained that OSFM had been developed further to modify mesoscale elements in the shorter term such as cloud cover, rain/shower rates and distribution, mist/fog and surface temperature. The aim is to produce a consistent set of products centrally which is then transmitted to customers and automated systems. The overhead is that any post processing of raw model data inevitably leads to a delay in receipt of the modified data stream. Michael Walsh (Ireland) noted that latest raw model data did not always provide the best guidance and the overhead of 'added value' should be accepted.

Another action from the 2001 meeting was to document interesting case studies for presentation and the group welcomed Paula Leitão (a forecaster from the Instituto) who has built up a database on tornadoes in Portugal. Apparently it was believed for many years that tornadoes did not actually occur in Portugal but Paula's research into the subject has uncovered first hand reports and evidence of damage. Favourable synoptic conditions for tornado development were shown, often typified by a cold front moving in from the Atlantic. Teresa Abrantes mentioned that she was pleased that forecasters such as Paula were involved in projects outside operational duties but did note that the work had been done whilst on shift and days off. Bernard Roulet (France) added that some forecasters in Toulouse are also compiling a database on tornadoes in France and he would send Paula some information – an excellent example of how the working group can enhance links between European forecasters.

Chryssoula Petrou (Greece) presented a short contribution entitled 'Severe Weather in Hellas during winter 2001-2002'. This highlighted the snow events which occurred across Greece and the extreme temperatures recorded particularly during January 2002.

5. Other contributions

The informal atmosphere of WGCEF meetings provides an ideal opportunity to present a range of relevant subjects and this year there were many who were prepared to contribute. Presentations were given by the following:

Norvald Bjergene – Air Quality Forecasting System in Norway

Andre-Charles Letestu – Meteo-Swiss Road Forecasting Tool

Bernard Roulet – PV Field Modification Studies

Frank Kroonenberg – Progress of the EUMETNET EMMA project

Herbert Gmoser – Overview and Feedback about Training Materials on the Interpretation of Satellite Imagery

Teresa Abrantes – Structure of the Instituto de Meteorologia and its Activities

Each presentation generated some questions and further informal discussions took place over a buffet lunch which provided a welcome break on a hot October day and also the opportunity to take the official photograph. Details of the above presentations and those mentioned in the previous section can be found within this newsletter and on the website.

6. Plan of action for 2003

Firstly, it was agreed that all contributions to the 2003 Newsletter should be sent to the Vice-chairperson by 30th November 2002. An invitation was also put out for any interesting photographs for the front cover. Meanwhile, Teresa Abrantes would investigate whether the abbreviated powerpoint presentations made at the meeting could be incorporated on to a CD-ROM for reference. A short questionnaire from Michael Walsh (Ireland) was circulated to members asking for details on the structure of their National Meteorological Services (NMS's) and regional centres. There was also a request from Dirk Heizenreder (personal communication) for information relating to the lengths of shifts worked in European NMS's. This was copied to members for future comment.

Frank Kroonenberg reminded members about the need to devise schemes which relate to the impact of severe weather and was interested to know how the Meteo-France 'vigilance' system has been perceived by the authorities. He added that such information would be of interest to the working group involved with the EMMA project (an extension of the Integrated European Graphical Severe Weather Warning Display System). Herbert Gmoser mentioned that this was also relevant to some of the work being done by the WMO RAVI sub-group for public weather warnings and participants should be aware of their findings when published. Norvald Bjergene suggested that case studies of severe weather events and actions taken by forecasters (warnings etc.) should be documented.

Action: All members to consider how warnings and objective verification schemes can be devised to measure the impact of severe weather and disruption. Case studies of severe weather events would be useful.

On a related topic, Herbert Gmoser suggested that it would be interesting to find out which methods are used in the prediction of severe weather elements. For example, numerical models can highlight the potential for severe weather but empirical techniques are also important as well as continuous monitoring in rapidly changing situations.

Action: Members are invited to document some of the techniques used in forecasting severe weather events and present them at the next meeting.

Herbert Gmoser also felt that verification of 'added value' products should be extended and results presented at subsequent meetings. **This was agreed as a continued action from the seventh meeting.**

Jean Nemeghaire (Belgium) reminded participants about reporting on exchanges and examples of forecaster cooperation between NMS's. This has been defined as an action in the past and all agreed that it should be re-instated. It was suggested that such information could be put on the website in future.

Action: Information about forecaster exchanges to be forwarded to the Webmaster for inclusion on the WGCEF website.

7. Date and place of the next meeting

Liisa Fredrikson proposed that the next WGCEF meeting should be held in conjunction with the next European Conference on Applications of Meteorology (ECAM 2003) which is scheduled to take place in Rome, Italy from 15th to 19th September. There was some discussion about whether the meeting should be held during that week or on the following Saturday (20th). It was generally agreed that a full day meeting on the Saturday was the preferable option. Confirmation and further details will be put on the website in due course.

8. Closing of the meeting and AOB (Any Other Business)

On behalf of all present, Liisa Fredrikson again thanked Teresa Abrantes and other members of the Instituto for arranging a successful meeting and making the group feel welcome. A short visit to the forecast room followed and members of the group chatted with some of the staff on duty. In the evening, a dinner had been arranged at a restaurant within the EXPO 98 complex where participants savoured the delights of a traditional Portuguese meal.

Nick Grahame
Vice-chairperson of WGCEF

Appendix I

List of participants: Teresa Abrantes (Portugal), Liisa Fredrikson (Finland), Nick Grahame (United Kingdom), Sverker Hellström (Sweden), Andre-Charles Letestu (Switzerland), Claude Sales (Luxembourg), Edmond Van Loock (Belgium), Norvald Bjergene (Norway), Chryssoula Petrou (Greece), Dimitris Ziakopoulos (Greece), Paula Leitão (Portugal), **Ane Macanc** (Portugal), Bernard Roulet (France), Frank Kroonenberg (Holland), Michael Walsh (Ireland), Herbert Gmoser (Austria), Jean Nemeghaire (Belgium), Nuno Moreira (Portugal)

Could be useful for the photo