WORLD METEOROLOGICAL ORGANIZATION

CBS ERA/COG/Doc. 3

COMMISSION FOR BASIC SYSTEMS EMERGENCY RESPONSE ACTIVITIES CO-ORDINATION GROUP (3.IX.2001)

ITEM: 3

ENGLISH ONLY

WASHINGTON, D.C, USA, 10-14 SEPTEMBER 2001

IMPROVEMENT OF ABILITY OF RSMCs IN EER TO FULFIL THE OPERATIONAL REQUIREMENTS

(Submitted by D. Smith, Bracknell, UK)

Summary and purpose of document

To improve the collective ability of all RSMCs in EER to fulfil the operational requirements specified in the Global and Regional arrangements, according to adopted standards and procedures.

Action proposed

The meeting is invited to consider the issues and recommendations raised in the following document.

1. Documentation

The Joint Radiation Emergency Management Plan (EPR-JPLAN 2000) published by IAEA December 2000 provides an excellent overview of the complete response system. Current level of documentation within WMO TD778 is good to get an overview of the WMO EER response.

There is little on IAEA communication and RSMC actions arising from the categories of messages received as specified in 3.7 EPR-JPLAN 2000. Perhaps JINEX could be worked up as a example of the process from the RSMC Toulouse perspective so it should be easier for new staff to relate the likely process.

<u>Recommendation 1</u>. Update WMO TD778 to include the interaction with IAEA and consider including a worked example.

2. Incident management

Lack of complete logging details was evident in the Met Office response during JINEX1. This made it difficult to complete the questionnaire or have a complete audit trail of the process.

<u>Recommendation 2</u>. Consideration be given to the introduction of guidance on the form of logging to be kept. At the simplistic end it would be useful to have a similar sheet similar to that given in the questionnaire relating to the various messages received and actions taken to comply with procedures. The use of incident management packages with automated logging where possible should also considered.

3. Products

When comparing outputs form differing RSMCs it is not easy because of the differing scales, areas and map styles produced by the various mapping packages. The issues of concern are: Map projection, country borders, major features and spacing of lat/long lines.

Should the exchange of raw data from the model run in GRIB (BUFR?) format be considered. This would reduce the problems of comparisons of two products generated on separate display packages and would allow the direct overlay of the various plumes. This would primarily help the RSMCs but it would be possible to generate a GRIB message as a standard product along with the T4 charts for the NMSs.

Move towards the use of generic zoomable map display. Such as web standard browser accessible format XML – SVG (Scalable Vector Graphics). This would replace the use of GIF images. The Met Office are currently investigating this as a standard product generation tool.



<u>Recommendation 3</u>. Proposals should be produced to suggest short term improvements required for the standard map products. Detailed guidance should be developed.

<u>Recommendation 4</u>. A comparison of the differences in the standard products should be considered and any serious failings should be brought to the attention of the RSMC concerned.

<u>Recommendation 5</u>. A plan be considered for longer term development work for improved map displays as a browser solution.

The timely notification that model data is available and information on how to view that data via web sites should be encouraged. This is perhaps best done as part of the automated script after the successful completion of the product generation phase.

<u>Recommendation 6</u>. Encourage automation of notification that products have been generated and will shortly be available for viewing on web sites.

4. Training

The major JINEX type exercises are quite rare and it is not possible to involve all staff in this process. More frequent and smaller exercises are excellent as a learning aid in addition to the major exercises. Enabling the RSMCs to make local arrangements or even regional arrangements in a simple manner with simple objectives and without significant paperwork and would encourage RSMCs to test their procedures more frequently by reducing the overheads of the service.

<u>Recommendation 7</u>. Procedures for local monthly or quarterly exercises should be developed and encouraged. between partner RSMCs which may or may not include IAEA. It would be useful for those RSMCs with experience of this to share the lessons learned. The costs involved in the distribution of the five charts by fax on a regular basis to the full distribution list would be prohibitive. It would be best to restrict the regular exercises to the relevant RSMCs and include the generation of a relatively short joint statement as well as the exchange of model data.

Exchange of personnel between RSMCs when undertaking exercises would be beneficial and should be encouraged when the opportunity arrives such as the 'Concorde' agreement between UK and Toulouse for improved collaboration. The proposal for development of a common display platform may help bring the centres closer together and allow for easier change of data.

<u>Recommendation 8</u>. Exchange of personnel between RSMCs should be encouraged.

Development of a training course or package (web based?) for specialists involved in RSMC EER would be of benefit to all involved in the service and interpretation of the products.

<u>Recommendation 9</u>. Develop recommendations for improved EER training.