

World Meteorological Organization

Weather • Climate • Water

AGENDA ITEM 2.1(1)

PUBLIC WEATHER SERVICES

Gerald Fleming Chair, OPAG/PWS

(Paraguay 8-12 September 2014)

Summary

CBS requested to make decisions on:

- Adopt Draft Resolution 2.1/1: WMO Guidelines on Impact-Based Forecast and Warning Services
- Adopt Draft Recommendation 2.1/1: Competency Framework for PWS Forecasters and Advisors;
- Approve Commission decisions relating to the OPAG/PWS (paragraphs 1-13);
- Consider the information provided on the deliverables of the OPAG/PWS;
- Review the information on a variety of PWS projects and activities and provide guidance for future development;



The presentation will cover

- The WMO Strategy for Service Delivery
- Impact Forecast and Warning Services
- PWS Competency Framework
- Decisions of the Commission relating to the OPAG/PWS
- Review of the OPAG/PWS activities
 - ET/SPII
 - ET/COPE
 - ET/DPM
 - ICT/PWS
- World Weather Information Service (WWIS), Severe Weather Information Centre (SWIC)
- Single Official Voice
- Social and Economic Applications of PWS



Impact Forecast and Warning Services

Draft "WMO Guidelines on Impact Forecast and Warning Services" is presented at Annex to Draft Resolution 2.1/1 (CBS-Ext. (2014))

A separate presentation on this topic to be given under Item 4.3



Why Impact-based Forecasting?

- Arises naturally from a focus on users needs
- Weather information normally just one "input" into decision-making by users
- Increasing the relevance of weather information to users
- Increasing the awareness of forecasters and others within meteorology on users needs and concerns.





World Meteorological Organization

Weather • Climate • Water

Multi-hazard Impact-Based Forecasting and Warning Services Agenda item 4.3

Moving Towards Forecasting Impacts

- Why impact forecasting?
 - NMHSs' primary responsibility: timely and accurate forecasts and warnings of hydrometeorological hazards and events
 - Governments and public: need to know impact of hazard on lives, livelihood, property and economy
 - Demands for more than just statements on hazards
 - Understanding disaster risk and forecasting impact beyond remit of NMHSs
 - Challenge to developed and developing economies
 - Example: Typhoon Haiyan very good forecast, 6000 deaths: could be reduced if impact better known and measures taken to reduce impact



Issues to Address

- Forecasting impact is more important than pure met forecasts: they are more readily understood by:
 - Those at risk and;
 - Those responsible for mitigating those risks
- Meteorologists often are reluctant to forecast impact
 - Extensive knowledge of vulnerability and exposure are needed
 - Example Flood forecasting: additional data required
 - Ground cover, run off, topography, roads and infrastructures, time of day and traffic conditions, crowd sourced information
 - The data allows risks of impact to be forecast and warnings issued targeting those exposed to hazard
 - Authorities can take specific actions: safe routes, closing schools and offices etc.



Partnerships and Collaboration

- Main key and also challenge: NMHSs need to work in partnership with other government agencies and stakeholders (emergency response, mapping agencies, transport, public, etc)
- Data sharing among different agencies and departments vital (demographic, GIS and mapping, economic etc)



Looking Forward

- Issues for providing information on the impacts of forecasts and warning are varied and complex: require planning on many levels
- OPAG/PWS: WMO Guidelines on Multi-hazard Impact-based Forecast and warning services (approval by CBS Ext.(14)) highlight challenges and contain examples and good practices
- Due to complexity of issues, training of NMHSs and partners (especially emergency response) staff essential
- Developing pilots for practical demonstration of the concepts: first pilot in Mozambique
- As a key issue identified EC for the Strategic and Operating Plan (2016-2019), needs to be discussed at Congress.



Progress of Guidelines

- Guidelines approved by CBS Session in Paraguay
- Subsequently, some reservations expressed within the Secretariat about aspects of the Guidelines
- Many countries nervous about the implications of "Impact Forecasting" which is another step on from "Impact-Based Forecasting"
- Guideline text modified to clarify the focus, and to emphasise that nothing here was mandatory.



ToR for TT-IMPACT

- Design and develop a plan to assist Members in implementing the WMO Guidelines on Multi-Hazard, Impact-based forecast and warnings services(MHIFWS) using a multi-disciplinary approach within the framework of a Multi-Hazard Early Warning System.
- Identify means to promote the concept of Multi-Hazard Impact-based forecasts and warnings among Members.
- Identify competencies and relevant training needs associated with the wider implementation of MHIFWS.

Deliverables under each of these ToRs to be defined by the TT at its first meeting and reported to CBS-MG by the Chair of OPAG/PWS and the Chair of the TT-IMPACT.