

## Task Team on Meteorological Services for Improved Humanitarian Planning and Response

### Hazard trends and impacts

Between 1980 and 2007, nearly 90% of disasters related to natural hazards, 70% of casualties and 75% of economic losses were caused by meteorological, hydrological and climate-related hazards such as tropical cyclones and storm surges, floods, droughts and extreme temperature (source: EM-DAT, the OFDA/CRED International Disaster Database). However, over the last 50 years, while economic losses linked to extreme hydro-meteorological events have increased by nearly 50 times, loss of life caused by these hazards has decreased significantly, as shown in Figures 1 (a, b). This has been partly attributed to linking information from monitoring and forecasting of meteorological hazards to effective emergency preparedness, planning and response, particularly in the most vulnerable countries.

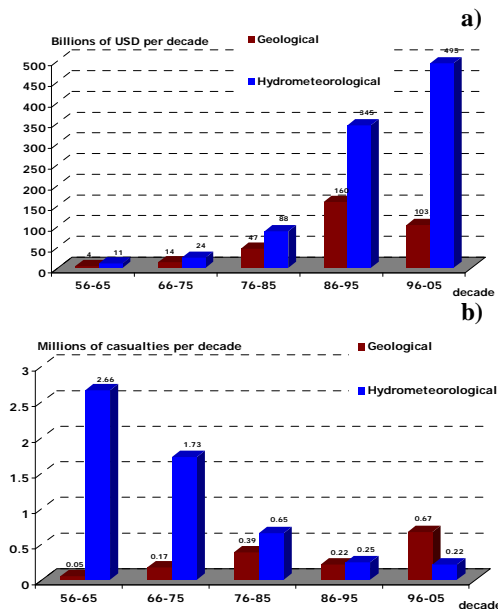


Figure 1: Decadal loss of life and economic losses related to geological versus hydrometeorological hazards (source: EM-DAT)

Despite these achievements, much remains to be done to ensure operational access to and utilization of relevant meteorological-, hydrological-, and climate-related warnings and other information products and services for emergency planning, preparedness and response.

### Task Team on Meteorological Services for Improved Humanitarian Planning and Response

In early 2000s a wave of humanitarian reforms was initiated by the Inter-Agency Standing Committee (IASC) using the cluster approach for enhanced coordination among the humanitarian agencies to improve contingency planning to anticipate and better respond to disasters. This has resulted in new opportunities for utilization of meteorological, hydrological and climate information products and services by humanitarian and disaster risk management agencies, based on understanding of their institutional structures, planning and operational mechanisms, needs and requirements.

To realize these opportunities, the Commission of Basic Systems (CBS) of the World Meteorological Organization (WMO) at its 14<sup>th</sup> Session (Croatia, April 2009) established a Task Team on “Meteorological Services for Improved Humanitarian Planning and Response” (hereafter referred to as Task Team). The objective of the Task Team is to work towards the development of operational capacities to provide meteorological, hydrological and climate information-products and services to humanitarian agencies at international, regional and national levels to support their emergency contingency planning, preparedness and response.

#### Membership

The Task Team is comprised of operational experts from international and UN agencies involved in coordination of humanitarian contingency planning and response, experts in operational meteorology, hydrology and climate forecasting and WMO Secretariat staff.

#### Goal

The overall goal of the Task Team is to develop meteorological, hydrological and climate information products and services from the WMO operational network of National Meteorological and Hydrological Services (NMHSs), WMO Regional Specialized Meteorological Centres (RSMCs) and Regional Climate Centres (RCCs) to the humanitarian agencies to support national and regional contingency planning and response.

### Expected Outcomes

#### Short term

Through two meetings, the Task Team will make recommendations for concrete pilot projects to develop prototype products and services targeted at the needs and requirements of the humanitarian agencies that could be delivered by NMHSs, RSMCs and RCCs. It is expected that such prototypes will be developed and demonstrated as part of WMO disaster risk reduction projects undergoing in a number of regions such as Central America and the Caribbean, Southeast Asia and Africa.

#### Long term

Develop a systematic mechanism for identifying and responding to the needs and requirements of the humanitarian agencies with respect to meteorological, hydrological and climate information and services, through the WMO operational network.

### Brainstorming Session on “Meteorological Services for Improved Humanitarian Contingency Planning and Response”

As a follow up to the establishment of the Task Team, on 17 April 2009, a brainstorming session was held at the WMO headquarters to explore how to proceed with the development of information products and services to support humanitarian contingency planning and response. The meeting was attended by experts from international and UN humanitarian agencies involved in humanitarian contingency planning and response, including International Federation of Red Cross and Red Crescent Societies (IFRC), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), United Nations Children's Fund (UNICEF), United Nations Institute for Training and Research (UNITAR), United Nations High Commissioner for Refugees (UNHCR), United Nations World Food Programme (WFP) and staff from the WMO Secretariat (for details see the report of the session at <http://www.wmo.int/pages/prog/drr/events/humanitarian/Documents/HumanitarianReport.pdf>).

The brainstorming session took stock of the mechanisms used by humanitarian agencies to access and exchange information, the type of information products they use, their level of meteorological expertise and the needs and requirements for meteorological, hydrological and climate information products and services. Specifically, it recommended the need to:

- i) Better understand of the decision processes and timing of emergency contingency planning and response of humanitarian agencies, including current sources of meteorological, hydrological and climate information;
- ii) Better understanding of the needs and requirements of humanitarian agencies for meteorological, hydrological and climate information-products and services (contents, timing, format, distribution mechanisms);
- iii) Engage experts from humanitarian agencies, WMO operational network and leading experts from meteorology, hydrology and climate;
- iv) Include of hydrological and climate aspects in the work of the Task Team.

**Next steps: What do we want to achieve?**

The Task Team will meet twice to achieve the goals and expected outcomes for which it was established. The first meeting will be held at the WMO headquarters in Geneva, Switzerland, from 31 August to 2 September 2010 and the second meeting will be held in the first quarter of 2011.

## Questionnaire

### Part A: Humanitarian and Development Agencies Needs

<b>1</b>	<p><b><i>Institutional Structure and decision making processes of the humanitarian agencies</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the institutional structure of your organization at national, regional and global levels?</li> <li>• What are the decision processes within short, medium and long-term at national, regional and global levels (including headquarters)?</li> </ul>
<b>2</b>	<p><b><i>Decision processes that require the use of meteorological, hydrological and climate information products and services</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the way meteorological, hydrological and climate information products and services are used in decision making for humanitarian planning and response at national, regional and global levels;</li> <li>• Please describe the type of information products and services used in each case.</li> </ul>
<b>3</b>	<p><b><i>Needs and requirements for meteorological, hydrological and climate information ranging from data, analysis and forecasts (short to medium-range weather forecasts to forecasts and information from the next month, season to longer time frames)</i></b></p> <ul style="list-style-type: none"> <li>• Please describe your needs and requirements for meteorological, hydrological and climate information products</li> </ul>

	<p>and services with respect to:</p> <ul style="list-style-type: none"> <li>○ Content;</li> <li>○ Time-frames (lead-time and frequency);</li> <li>○ Dissemination mechanisms;</li> <li>○ Source of information.</li> </ul>
<b>4</b>	<p><b><i>Current sources of information</i></b></p> <ul style="list-style-type: none"> <li>• Please describe your current sources of meteorological, hydrological and climate information products and services (data, analysis, and forecasts);</li> <li>• Please describe to what extent you receive meteorological, hydrological and climate information products and services directly from National Meteorological and Hydrological Services (NMHSs) or Regional Specialized Meteorological Centres (RSMCs);</li> <li>• Please describe to what extent you organization outsourcers meteorological, hydrological and climate information products and services from specialized institutions other than the NMHSs;</li> <li>• Please indicate the sources from which your organization outsourcers meteorological, hydrological and climate information products and services.</li> </ul>
<b>5</b>	<p><b><i>Dissemination channels used to access and share information</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the channels used to access meteorological, hydrological and climate information products and services in your organization;</li> <li>• Please describe the channels used to disseminate or share meteorological, hydrological and climate information products and services from your source and to your network from headquarters, regional and national levels.</li> </ul>
<b>6</b>	<p><b><i>Sources of expertise to analyze and interpret meteorological, hydrological and information products and services</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the extent of meteorological, hydrological and climate expertise within your institution for analysis and interpretation of meteorological, hydrological and climate information products and services;</li> <li>• Please describe the source of expertise used by your organization to analyze, interpret and apply meteorological, hydrological and climate information products and services;</li> <li>• Please describe to what extent your institution requests external expert support for interpretation of information.</li> </ul>
<b>7</b>	<p><b><i>Where are the major gaps</i></b></p> <ul style="list-style-type: none"> <li>• Please describe where are the major gaps with respect to: <ul style="list-style-type: none"> <li>○ Access to meteorological, hydrological and climate information products and services;</li> <li>○ Utilization of meteorological, hydrological and climate information products and services.</li> </ul> </li> </ul>

### Part B: Technical Agencies and Regional Centres

<b>1</b>	<p><b><i>Institutional relationships with humanitarian and</i></b></p>
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	<p><b><i>emergency preparedness and response agencies</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the institutional relationship of your organization with humanitarian and emergency preparedness and response agencies at national, regional and global levels.</li> <li>• Please describe how the relationship was developed.</li> </ul>
<b>2</b>	<p><b><i>Needs and requirements for meteorological, hydrological and climate information ranging from data, analysis and forecasts (short to medium-range weather forecasts to forecasts and information from the next month, season to longer time frames)</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the needs and requirements for meteorological, hydrological and climate information products and services required by the humanitarian and emergency response agencies at national, regional and global levels, with respect to: <ul style="list-style-type: none"> <li>○ Content;</li> <li>○ Format;</li> <li>○ Time Frames (lead-time and frequency).</li> </ul> </li> <li>• Please describe how these needs and requirements were identified.</li> </ul>
<b>3</b>	<p><b><i>Information-products and services provided</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the information products and services provided by your organization (ranging from data, analysis and forecasts from short to seasonal or longer time frames) to humanitarian and emergency preparedness and response agencies at national, regional and global level;</li> <li>• Please describe any information products and services required by the humanitarian and emergency preparedness and response agencies that your organization is currently not able to provide.</li> </ul>
<b>4</b>	<p><b><i>Interpretation of meteorological, hydrological and climate information products and services</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the extent to which humanitarian and emergency preparedness and response agencies can interpret and apply meteorological, hydrological and climate information products and services from your organization..</li> </ul>
<b>5</b>	<p><b><i>Dissemination channels</i></b></p> <ul style="list-style-type: none"> <li>• Please describe the channels used to disseminate meteorological, hydrological and climate information products and services from your organization to the humanitarian and emergency preparedness and response agencies.</li> </ul>
<b>6</b>	<p><b><i>Where are the major gaps</i></b></p> <ul style="list-style-type: none"> <li>• Please describe where are the major gaps with respect to: <ul style="list-style-type: none"> <li>○ Production of tailored meteorological, hydrological and climate information products and services;</li> <li>○ Access to meteorological, hydrological and climate information products and services;</li> <li>○ Utilization of meteorological, hydrological and climate information products and services.</li> </ul> </li> </ul>