

Convention of the Protection and Use of Transboundary Watercourses and International Lakes Task Force on Water and Climate Second meeting Geneva, Switzerland, 24 April 2009

Cooperation with the Task Force on Extreme Weather Events under the Protocol on Water and Health and draft guidelines on water supply and sanitation

Note by the Chairperson of the Task Force on Extreme Weather Events

I. BACKGROUND

- 1. The first meeting of the Parties to the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Geneva, 17–19 January 2007) established a Task Force on Extreme Weather Events, led by Ministry of Environment, Land and Sea of Italy.
- 2. According to the work programme the mandate of the Task Force on Extreme Weather Events (TFEWE) includes the following:
- (a) Share experience on, and identify, relevant local/national good practices regarding the safe operation of water supply and sanitation facilities in urban and rural areas which are subject to the impact of short-term critical situations; and prepare guidelines to respond to short-term critical situations; and
- (b) Draft a strategy paper on how to cope with the potential impact of climate change, and on adaptation and mitigation programmes for water supply and sanitation.
- 3. Further to this, the joint meeting of the Bureaux of the Water Convention and the Protocol on Water and Health held on 13 September 2007 called for close cooperation and integration of the results of the activities carried out by this Task Force and the Task Force on Water and Climate established under the auspices of the Water Convention. In the first meeting of the Task Force on Water and Climate (TFWC), (Bonn, Germany, 22- 23 November 2007), it was agreed that the input from the Protocol's Task Force would be crucial to integrate into the draft Guidance on Water and Climate Adaptation contributions on environmental determinants of health, water quality and safe water supply and sanitation issues in extreme weather events.
- 4. The first meeting of the Task Force on Extreme Weather Events held in Rome on 21 22 April 2008 endorsed the TF EWE work plan as follows:
- (a) Joint activities with the Task Force on Water and Climate for the development of the Guidance on Water and Climate Adaptation.
- (b) Review/sharing of good practices and adaptation measures at country level in the area of extreme events and climate change.
- (c) Development of guidelines on safe water supply and sanitation in extreme weather events (WSS GL) to support and assist countries in developing adaptation and mitigation programmes also through synergies with the other Task Forces (Surveillance and Reporting) established under the Protocol Work Programme.
- (d) Explore a possible contribution to the fifth Ministerial Conference on Environment and Health in Europe to be held in Parma, Italy in February 2010.

II. The contribution of the Task Force on Extreme Weather Events to the Guidance on Water and Climate Adaptation

5. The Task Force on Extreme Weather Events actively participated in the development of the draft Guidance on Water and Climate Adaptation, through substantive input by, among others, the Task Force Chair and WHO-EURO in the drafting and editorial group. The Task Force also contributed substantially to the International Workshop on Adaptation to climate change in the water sector, held in Amsterdam on 1-2 July 2009, for example by organizing the breakout session on Water quality and health as well as through participation and presentations from Task Force Partners e.g. from the United Kingdom, Hungary, Slovakia, Ukraine, Italy and the Republic of Moldova.

III. Development of Guidelines on Water Supply and Sanitation under Extreme Weather Events by the Task Force on Extreme Weather Events

- 6. The main current ongoing activity of the Task Force consists in the development of Guidelines on safe water supply and sanitation in extreme weather events (WSS GL) aimed to support utility managers for environment and health risk management in adaptation measures to adverse meteorological conditions.
- The Guidelines are developed as a reaction to the growing number of extreme weather events in the UNECE region, which often have significant health impacts such as an increase in premature deaths, diseases and forced displacement of communities. For example, heavy contaminations of water and biota may follow flooding events. Increasing water scarcity may further limit access to water for sanitation, and consequently exacerbate health impacts and limit the ability of natural ecosystems to assimilate wastes. In large cities, water scarcity is reducing the self-cleaning capacity of sewers and flooding is exacerbating stormwater overflows and resulting pollution. To avoid or to limit these undesirable effects adaptation policies also need to include environment and health risk management of natural hydro-meteorological disasters. Particularly water supply and sanitation utilities are key health determinants in these critical conditions and climate change is acting as an amplifier of all vulnerabilities of theses services in terms of existing networks, quality of performance in critical conditions, implementation of technology development and safe delivery of the services. In addition, water supply and treatment is likely to become increasingly energy intensive and expensive due to climate change which may cause conflicts between mitigation and adaptation policies. For this reason, utilities managers should be involved in the development of adaptation strategies including communication activities.
- 8. To launch the process the lead country Italy together with the WHO-EURO Rome Office and an ad hoc Italian expert working group, led and organized by Federutility (National Italian Federation of Water and Sanitation Utility Managers) develop an extended outline of the guidelines in order to:
- (a) Consult the Protocol's National Focal Points and the Working Group on Water and Health and invite them to provide comments to the proposed structure and content of the guidelines and on arrangements for their development.
- (b) Facilitate the nomination of experts who will participate in the work of the Task Force on Extreme Weather Events for the drafting of the guidelines.

- 9. The Guidelines, currently being developed by a multidisciplinary Drafting Group consisting of environment, health and water professionals and utilities managers, are aimed to provide knowledge on new risk elements and adaptation measures required by climate change and variability in the critical conditions of adverse meteorological events. The Drafting Group, which includes representatives of countries (such as Azerbaijan, Belgium, Czech Republic, Finland, Hungary, Italy, Republic of Moldova, the Netherlands, Portugal, Slovakia, the United Kingdom), international organization (WMO, WHO) and NGO (WECF) and Chairs of the Task Force on Water and Climate and the Task Force on Surveillance met twice so far, on 22 October 2008 in Madrid and 23-24 February 2009 in Rome. The members of the drafting group are currently working on drafting the chapters; an extended outline of the Guidance is available in the Annex.
- 10. The following next steps are envisaged to finalize the draft Guidelines:
- (a) July 2-3, 2009: presentation of the advanced draft to the second meeting of the Working Group on Water and Health in English and Russian for comments and suggestions
- (b) August Sept 2009: Circulation of the commented draft among partners and experts for review
- (c) October 27-28, 2009: presentation of a final draft to the 2nd meeting of the Task Force on Extreme Events
- (d) February 2010: presentation of the draft Guidance to the Environment and Health Ministerial Conference in Parma
- (e) Autumn 2010 (tbc): Adoption of the Guidance at the second Meeting of the Parties to the Protocol on Water and Health

IV. Proposal for future cooperation between the two Task Forces

11. Considering the challenging task and deadline of the future work of the Task Force on Extreme Weather Events, the Task Force on Water and Climate is invited to give inputs to the drafting process of the Guidelines on Water Supply and Sanitation, namely to comment and advice the Task Force on the work achieved – in particular on the guidance document – and on the planned future activities, including the expert review process of the guidance specially among Russian speaking countries partners. The Task Force is invited to suggest experts for the expert review as well as case studies for inclusion in the Guidelines.

Annex

Guidelines on water supply and sanitation in extreme weather events

Draft Outline

March 2009

Preface Introduction

- 1. Where we are in the region
 - 1.1 Climate change scenarios and environmental health impacts in extreme events
- 2. Climate change, extreme weather events and water services
 - 2.1. Risk resulting from water scarcity, droughts and Floods
 - 2.2 adaptation and water services
 - 2.3 adaptation and mitigation policies conflicts
- 3. Basic disaster preparedness and early warning
 - 3.1*Inter-sectoral cooperation*
 - 3.2 Tools for disaster preparedness planning
 - 3.3 Role of the health system in disaster preparedness and early warning
- 4. Communication in extreme weather events
 - 4.1 Importance of a communication strategy
 - 4.2 *Communicating at different levels household, industry, public*
 - 4.3 Communication tools
- 5. Impact on coastal areas in extreme weather Events
 - 5.1. Saline water intrusion in aquifers used for the production of drinking water
 - 5.2. Impact of extreme weather events on quality in recreational waters
 - 5.3. Impact of extreme weather events on quality in waters used for aquaculture and resulting food safety issues

6. Impacts of extreme weather events on health

- 6.1. Health impacts of extreme temperatures and extended droughts
- 6.2. *Impact of floods*
- 6.3. Vector borne diseases and extreme events
- 6.4 Coping with emerging risk

7. Integrating extreme weather events in risk assessment and management for water utilities

- 7.1. The water safety plan approach
- 7.2. Sanitation management

8. Adaptation measures for water supply utilities

- 8.1 Impact on the water supply sector
- 8.2 Adaptation measures during drought
- 8.3. Adaptation and mitigation during floods
- 8.4. Recovering drinking supply

9. Adaptation measures for drainage, sewerage and wastewater treatment

- 9.1 impact on drainage, sewerage and wastewater treatment systems
- 9.2 adaptation measures during drought
- 9.3 adaptation measures during floods
- 9.4. Recovering drainage, sewerage and wastewater treatment plans

10. Conclusions and recommendations