



WMO OMM

World Meteorological Organization
 Organisation météorologique mondiale
 Organización Meteorológica Mundial
 Всемирная метеорологическая организация
 المنظمة العالمية للأرصاد الجوية
 世界气象组织

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18 July 2018

Annexes: 2 (available in English only)

Subject: Advanced Workshop on Meteorological Warnings and Emergency Response to hazardous weather events, RTC Bet Dagan, Israel, 10-20 December 2018

Action required: For information and appropriate action, as necessary

Dear Sir/Madam,

I am pleased to inform you that the Regional Training Centre (RTC) Bet-Dagan in cooperation with Israel's Agency for International Development Cooperation (MASHAV), The Finnish Meteorological Institute (FMI), the UK Met Office as well as Israel's National Emergency Management Authority (NEMA) will hold an advanced training workshop on Meteorological Warnings and Emergency Response at the RTC Bet-Dagan, Israel, between 10 and 20 December 2018.

The workshop is aimed towards two populations: meteorological/hydrological staff of National Meteorological and Hydrological services (NMHSs) and the professional staff of Emergency Management Authorities. The objectives of the workshop are to enhance the capabilities of the participants in the production of warnings of severe hydrometeorological events, explore recommended practices of monitoring, predicting and communicating severe weather events (including the severity and the uncertainties involved), advance the understanding of the potential impacts of severe weather, and the information needed for decision-making in such events - by the authorities responsible for civil protection/emergency management and by the population at large. The topics of this workshop are in accordance with competency framework for Public Weather Services (PWS) forecasters as endorsed by WMO Commission for Basic Systems (CBS). The workshop will be conducted in English and detailed workshop information, including the requirements and the procedures of application is given in Annex I.

The Government of Israel will provide scholarships for applicants from developing countries, covering the expenses of lodging at full board (two persons sharing a room) during the duration of the workshop, tuition fees and transportation. The scholarship, however, does not cover airfare expenses to and from Israel or daily personal expenses.

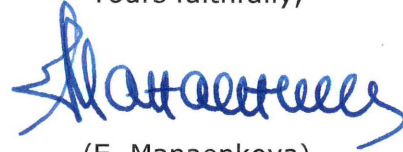
To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO

cc: Hydrological Advisers to Permanent Representatives

Interested candidates are requested to complete the attached Participant Application Form (Annex II) for the workshop and return it directly to RTC Bet-Dagan, Israel Meteorological Service, P.O. 25 Bet-Dagan 50250 Israel, to rmtc@ims.gov.il and gershteing@ims.gov.il not later than **15 September 2018**.

I would like to express my appreciation for your continued support in promoting the Programmes and activities of WMO.

Yours faithfully,



(E. Manaenkova)
for the Secretary-General



Israel's Agency for International
Development Cooperation
Ministry of Foreign Affairs



World Meteorological Organisation



Israel Meteorological Service
Ministry of Transport



FINNISH METEOROLOGICAL INSTITUTE



Advanced Workshop on Meteorological Warnings and Emergency Response to Hazardous Weather Events Shefayim, Israel 10 – 20 December 2018

1. Introduction

The IMS/WMO RTC Bet Dagan of the Israel Meteorological Service, in cooperation with Israel's Agency for International Development Cooperation (Mashav), has provided training at a post-graduate level since 1967. Several thousands of participants from all over the world, mainly from developing countries, have taken advantage of the opportunities provided by our RTC to study the application of meteorology to various national sectors.

The topics of this workshop are in accordance with the concept of public weather services (PWS), where disaster risk reduction practices (DRR) play a major role, and in line with the competency framework for PWS forecasters as endorsed by the Commission of Basic Systems (CBS).

Each year, the impacts of severe hydro-meteorological events around the world give rise to multiple casualties and significant damage to property and infrastructure, with adverse economic consequences for communities that can persist for many years. Many of these severe events can be well forecasted, and accurate warning information could be disseminated in a timely fashion by the responsible National Meteorological and Hydrological Service (NMHS). Unfortunately, even when there is an understanding of what the weather might be, there is often a lack of understanding of what the weather might do. Thus, for significant impact on the safety of the population, the NMHS should not only master the production of warnings of severe hydro-meteorological events, but also pursue the understanding of their potential impacts and the uncertainties involved. Furthermore, sometimes there are communication gaps between the NMHSs and the emergency authorities which might cause the emergency authorities not to be fully aware of the abilities and limitations of the NMHSs in producing real time and near real time warnings, and might cause the meteorologists not realize the information needed in the decision making process. Thus, an important aim of this course is to enhance the collaboration between the NMHSs' experts and the civil protection agencies experts.

This workshop is a result of a joint effort of the Israeli Meteorological Service (IMS), Israel's National Emergency Management Authority (NEMA), the Finnish Meteorological Institute (FMI) and the U.K. Met office.

The workshop's curriculum will include a combination of classroom lectures, exercises, demonstrations, field trips and round-table discussions.

2. Workshop Objectives

- To discuss the possible effects of severe weather events on different sectors
- To demonstrate modern techniques for issuing weather warnings, their dissemination and verification
- To discuss ways to improve the collaboration between the different key players in DRR and to promote risk-informed decisions
- To assess, via case studies, different approaches of emergency authorities to DRM
- To Strengthen impact-based forecasts and risk-based warning services
- To develop possible Countries' preparedness frameworks for Weather Emergency Management

3. Learning Outcomes

After the workshop, participants will be able:

For NMHSs Personnel:

- To understand possible impacts of severe weather and the information needed by emergency managers in order to prepare and in order to react properly to the forecasted event
- To characterize or build modern warning and dissemination systems
- To appreciate the importance of the common alert protocol (CAP) and to understand the way it should be used in alert dissemination
- To adjust the warning system attributes according to international and national requirements
- To realize the importance of real time continuous communications with the civil protection agencies and the public before and during an high impact weather event
- To create and improve the verification and validation of warnings

For Emergency Management Authorities:

- To realize the abilities and limitations of modern hydro-meteorological tools and the information that can be received from the NMHSs before and during high impact weather event
- To realize the characteristics of modern weather warning and dissemination systems, including the importance of the common alert protocol (CAP)
- To realize the importance of real time continuous communications with the NMHSs and the public before and during an high impact weather event
- To incorporate weather information into the DRM practices

4. Main Workshop Content:

Forecasts, Detection and Warning

- Impacts of severe weather events and the role of the Warnings system
- Warning types, Multi-Hazard warning systems
- International requirements and recommended practices
- Setting thresholds for warnings (including impact based)
- Modern forecaster Tools for the forecasting and monitoring hazardous hydro-meteorological events and timely issue of warnings

Dissemination and Communication

- Vulnerability and Risk
- Adjusting the Communication Channel to the user needs
- Methods and technologies for warning provision and dissemination
- Common Alert Protocol (CAP)

Incorporation of the NMHS information into the DRM cycle

- Needed hydro-meteorological information in the DRM cycle (Prevention-Preparedness-Response-Recovery)
- Collaboration between the key players before and during a severe event
- Importance of follow ups and operational debriefs
- Warnings verification as a tool for building credibility and continuous improvement

5. Participation cost

The airfare cost should be covered by the participant, by his/her employer, or by the granting institution. The total cost of lodging at full board for single in a double room during the duration of the workshop, including tuition fees and field trips transportation will amount to app. 270\$ per day (incl. insurance). Total for the whole period is 2970\$.

6. Scholarships

Scholarships, covering accommodations at full board (two persons per room) during the duration of the workshop, tuition fees and field trip transportation will be provided for participants from developing countries, by the Government of Israel – MASHAV – Israel's Agency for International Development Cooperation. These scholarships would be provided in accordance with MASHAV's requirements and Procedures.

7. Audience

The advanced workshop is designed primarily for two populations:

- Meteorological/hydrological staff of NMHSs engaged and interested in preparing, issuing and disseminating warnings, as well as creating a warning system.
- Professional officers of Emergency Management Authorities making use of the hydro-meteorological warnings for decision making before and during severe weather event.

The mixture of these two populations will enhance the knowledge and awareness for Common Extreme Weather and Emergency Management issues.

8. Language

The workshop will be held in English. A working knowledge of English is mandatory. As a mandatory part of the acceptance procedure, all relevant candidates will have to be interviewed by local representatives of MASHAV in their countries.

9. Training Staff

Senior staff of the IMS/WMO RTC Bet Dagan, expert participants from the Finnish Meteorological Institute (FMI) and the U.K. Meteorological Office (Met Office), having extensive knowledge and experience in Meteorology and Climatology, will conduct the workshop. Invited guest lecturers will also participate in providing and sharing their knowledge and experience in specific fields of expertise, especially from the Israeli National Emergency Management Authority (NEMA), and from different Israeli governmental organizations and Emergency Management Authorities.

10. Visa Information

Most of the participants will require a visa in order to enter Israel. For additional information - <http://mfa.gov.il/MFA/ConsularServices/Pages/Visas.aspx>

The required time for obtaining a visa varies from country to country, but might take up to a few weeks. For participants flying through other countries, an additional entrance visa for these countries may be required.

11. Registration

Interested candidates are requested to complete the attached Participant Application Form for the workshop and return it directly to RTC Bet-Dagan, Israel Meteorological Service, P.O. 25 Bet-Dagan 5025001 Israel, to rmtc@ims.gov.il or to milshteina@ims.gov.il not later than the **15 September 2018**.



Israel's Agency for International
Development Cooperation
Ministry of Foreign Affairs



World Meteorological Organisation



Israel Meteorological Service
Ministry of Transport



MASHAV International
Agricultural Training Center



FINNISH METEOROLOGICAL INSTITUTE



Annex II

ADVANCED WORKSHOP ON Meteorological Warnings and Emergency Response to Hazardous Weather Events

SHEFAYIM, ISRAEL

10 –20 December 2018

APPLICATION FORM

1. Country : _____
2. Title : Mr/Ms/Miss/Dr/Prof/_____
3. First Name (Given) : _____
4. FAMILY NAME (SURNAME) : _____
5. E-mail : _____
6. Telephone: _____
7. Fax No: _____
8. Official Address: _____

9. Date of Birth: _____
10. Nationality: _____
11. Gender : Female Male

12. What other WMO courses have you attended in the last 5 years? : _____

Place: _____

Date: _____

Signature of the Candidate: _____

Statement by the Permanent Representative with WMO on why this nominee should be selected for this course.

Signature of the Permanent Representative with WMO

To be completed and returned as soon as possible to the Organization Committee **not later than 15 September 2018** to:

Mr. Giora. G. H. Gershtein,

IMS/WMO RTC Bet Dagan, Bet Dagan 50250, POB 25, Israel

E-mail: milshteina@ims.gov.il; rmtc@ims.gov.il;

Phone: +97239403179; Mob: +9720506212099

For those willing to receive a scholarship from MASHAV, please attach the filled in MASHAV Application Form. The Form can be found here:

<http://mfa.gov.il/MFA/mashav/Courses/Documents/ENGLISH-Application%20Form-Updated.pdf>