



STATE OF ISRAEL



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



Israeli Meteorological Service



MASHAV's International  
Agricultural Training Center



World Meteorological  
Organization



Israel's National Emergency  
Management Authority



FINNISH METEOROLOGICAL INSTITUTE

## MASHAV - Israel's Agency for International Development Cooperation

together with

the Israeli Meteorological Service – IMS,  
the Finnish Meteorological Institute – FMI,  
the UK MET Office, Israel's National Emergency  
Management Agency – NEMA and the World  
Meteorological Organization -WMO

invite professionals

to participate in the

## International Course: Meteorological Warnings and Emergency Response to Hazardous Weather Events

9<sup>th</sup> – 21<sup>th</sup> December, 2018

Shefayim – Israel



## About the Course

### Background

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.

### Aims

- 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

Regarding NMHS's Personnel, it is expected that participants will be able to:

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

Regarding Emergency Management Authorities, it is expected that participants will be able to:

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

## Main Subjects

### 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

## Application

### Application Requirements

The course is designed for:

- Meteorological/hydrological staff of NMHS's 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

Candidates should hold an academic degree in related disciplines and at least two years of professional work experience. A full command of English is required.

### Application Forms

Application forms and other information may be obtained at the nearest Israeli mission or at MASHAV's website: <http://mashav.mfa.gov.il/MFA/mashav/Courses/Pages/default.aspx>.

Completed application forms, including the health declaration and letters of recommendation, should be sent to the relevant Israeli mission until **3<sup>rd</sup> October, 2018**.

## General Information

### Arrival and Departure

Arrival date: **09.12.2018**

Opening date: **10.12.2018**

Closing date: **20.12.2018**

Departure date: **21.12.2018**

Participants must arrive at the training center on the arrival date, and leave on the departure date. Early arrivals/late departures if required, must be arranged by the participants themselves, directly with the hotel/center, and must be paid for by the participant him/herself.

## Location and Accommodation

The course will be held at **MATC - MASHAV's** International Agricultural Training Center at Kibbutz Hotel Shefayim, situated 20 km north of Tel Aviv near the coastal city of Netanya.

Participants will be accommodated at Hotel Kibbutz Shefayim in double rooms (two participants per room).

**MASHAV** awards a limited number of scholarships. The scholarship covers the cost of the training program including lectures and field visits, full board accommodation in double rooms, health insurance (see below) and transfers to and from the airport. Airfares and daily allowance are not included in the scholarship.

## Health Services

Medical insurance covers medical services and hospitalization in case of emergency. It does not cover the treatment of chronic or serious diseases, specific medications taken by the participant on a regular basis, dental care and eyeglasses. Participants will be responsible for all other expenses, which are not covered by policy conditions. Health authorities recommend that visitors to Israel make sure they have been vaccinated against tetanus in the last ten years.

## About MASHAV

**MASHAV** – Israel's Agency for International Development Cooperation is dedicated to providing developing countries with the best of Israel's experience in development and planning. As a member of the family of nations, The State of Israel is committed to fulfilling its responsibility to contribute to the fight against poverty and to the global efforts to achieve sustainable development.

**MASHAV**, representing Israel and its people, focuses its efforts on capacity building, sharing relevant expertise accumulated during Israel's own development experience to empower governments, communities and individuals to improve their own lives.

**MASHAV's** approach is to ensure social, economic and environmental sustainable development, and is taking active part in the international community's process of shaping the Post-2015 Agenda, to define the new set of the global Sustainable Development Goals (SDG).

**MASHAV's** activities focus primarily on areas in which Israel has a competitive advantage, including agriculture and rural development; water resources management; entrepreneurship and innovation; community development; medicine and public health, empowerment of women and education. Professional programs are based on a "train the trainers" approach to institutional and human capacity building, and are conducted both in Israel and abroad. Project development is supported by the seconding of short and long-term experts, as well as on-site interventions. Since its establishment, **MASHAV** has promoted the centrality of human resource enrichment and institutional capacity building in the development process – an approach which has attained global consensus.

<http://mashav.mfa.gov.il>

<https://www.facebook.com/MASHAVisrael>

## About WMO/IMS RTC Bet-Dagan

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 aspects of economic activity.

## About MATC

**MATC** - MASHAV's International Agricultural Training Center - specializes since 1963 in human capacity building and training programs in the fields of agriculture, water management, environment and rural development. **MATC** conducts international, regional and country specific courses as well as professional study-tours, workshops and conferences based on Israeli agricultural know-how, innovation, and development experience. Its training programs, conducted in English, Spanish, French, Russian, and Arabic, are specifically designed to improve agricultural production in developing countries, to promote food security and to create partnerships as well as ongoing international cooperation for sustainable development. **MATC** works in close cooperation with Israel's Ministry of Agriculture and Rural Development and its Center for International Agricultural Development Cooperation - CINADCO.

<https://www.facebook.com/MATCShefayim>

## About NEMA: Israel's National Emergency Management Authority – Ministry of Defense

NEMA (est. 2007) is an independent authority in Israel's M.O.D. subordinated directly to the Minister of Defense. The organization's main goal is to prepare Israel's homeland to successfully face emergency situations by coordinating and directing government offices, local authorities and relevant organizations. NEMA serves as a coordinating body under The Minister of Defense (MOD) in order to help him manage his responsibility in emergency situations in the civil arena. NEMA staff is responsible for several roles in routine and in emergency. During routine, the organization is tasked with prioritizing potential threats to the civilian sphere, defining preparedness criteria, and coordinating response protocols, among other responsibilities. In a time of emergency, NEMA is charged with operating the National Emergency Management Center (NEMC), consolidating real-time situation analysis, and presenting assessments to the MOD along with recommendations.

**For further information, please contact:**

**Regional Training Center - RTC**

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