



Our ref.: 24106/2020/S/DPS/SWFP-E-Africa

16 December 2020

Annexes: 2 (available in English only)

Subject: Severe Weather Forecasting programme (SWFP) – Eastern Africa- Online Training Workshop on Severe Weather and Impact Based Forecasting and Warning Services, 22-26 February 2021

Action required: To nominate a maximum of three operational forecasters from your Service to attend the subject SWFP online training workshop and convey the nominations to WMO Secretariat as soon as possible, but **no later than 20 January 2021**

Dear Sir/Madam,

As you may be aware, the WMO Severe Weather Forecasting Programme (SWFP) has been implemented in various sub-regions of the world including Eastern Africa. SWFP makes efficient use of the 'cascading forecasting process' with contributions from the Global Data Processing and Forecasting System (GDPS) Centres. Numerical weather prediction (NWP) outputs are made available from the contributing World Meteorological Centres (WMCs) and the daily severe weather forecast guidance product is issued to the National Meteorological and Hydrological Services (NMHSs) by the relevant Regional Centre(s) in each sub-region. Within the framework of SWFP-Eastern Africa, the daily guidance products are issued by the Regional Specialized Meteorological Centres (RSMCs) in Nairobi and Dar Es Salaam to participating NMHSs.

Capacity development of the operational forecasters and public weather services (PWS) staff of the NMHSs in improving their skills in severe weather and impact-based forecasting through specialized training workshops is a salient feature of SWFP. Since 2010, several SWFP workshops have been organized in Eastern Africa to develop capacity of the participating NMHSs. The last workshop was organized in Nairobi, Kenya in early 2019.

In this context, WMO, in collaboration with the development partners involved in the High Impact Weather Lake System (HIGHWAY) project as well as RSMC Nairobi and RSMC Dar Es Salaam, is organizing a HIGHWAY/SWFP-Eastern Africa Training Workshop on Severe Weather and Impact Based Forecasting and Warning Services from 22 to 26 February 2021. Due to COVID-19 and various national and international travel restrictions this workshop will be delivered, fully online.

The one-week workshop will include training on the use of the NWP/EPS and nowcasting tools and guidance products including those available through the HIGHWAY project, with the aim of improving severe weather and impact-based forecasting and early warning services, with a focus on the Lake Victoria Basin. This online training workshop will follow a blended learning approach to training, with a mix of synchronous ("live") sessions, supplemented with online self-study modules, to be completed outside of the facilitated sessions. The workshop will be conducted in English. An Information Note including training objectives, topics and a provisional program is attached as **Annex-I**.

To: Permanent Representatives (or Directors of National Meteorological or Hydrometeorological Services) of Members of WMO (Burundi, Ethiopia, Kenya, Rwanda, South Sudan, United Republic of Tanzania, Uganda) (limited distribution)

You are invited to kindly nominate, from your Service, up to three operational forecasters (preferably those currently involved in, or with recent experience in, the delivery of public weather services) to attend the subject training workshop from 22 to 26 February 2021. One of the participants from your Service will be required to present a case study on severe weather during a session as specified in the tentative program.

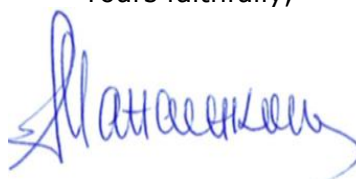
Although the nominated forecasters will attend the training remotely, most parts will need to be completed in real-time. Therefore, the nomination will commit to guaranteeing participants will be available to attend all live sessions, and also have sufficient time allocated to allow for the completion of all self-study modules. For each participant, the time commitment is expected to be around 30 hours during the week. Each participant needs to have access to an individual computer or laptop, with a reliable internet connection, which allows streaming of video and sound, as well as connection to remote servers to complete self-study modules.

A prescribed nomination form is attached as **Annex II**. Its electronic copy is available on WMO Community Platform here: <https://community.wmo.int/meetings/highway-swfp-eastern-africa-training-workshop-severe-weather-and-impact-based-forecasting-and-warning-services-online>

Nomination forms should be completed and returned to the WMO Secretariat at your earliest convenience, but **no later than 20 January 2021**.

I would like to express my appreciation for your continued support to the WMO Programmes and activities including SWFP.

Yours faithfully,



Dr Elena Manaenkova  
for the Secretary-General



Ref.: 24108/2020-1.1 S/DPS

HIGHWAY / SWFP – Eastern Africa  
Training Workshop on Severe Weather and Impact Based Forecasting and Warning  
Services (ONLINE), 22-26 February 2021

## Information Note

### Training Objectives

To address the capacity building needs of operational forecasters and public weather services (PWS) staff of NMHSs of countries involved in HIGHWAY & SWFP in Eastern Africa

This will be achieved through enhancing the participants' capability in the:

- interpretation of Numerical Weather Prediction (NWP), including Ensemble Prediction System (EPS) outputs;
- use of the tools developed with HIGHWAY contribution and SWFP web portal and products;
- understanding of impact-based forecasting and warnings services;
- communication of severe weather through impact-based forecasting and warning services provided to the general public, stakeholders and users, including disaster managers and media.

### Qualification of participants

- Participants must be proficient in English.
- Participants are required to be operational forecasters. They should have at least 2 years' experience in weather forecasting, preferably including experience with the delivery of public weather services (PWS).
- Participants are required to provide the course organizers with feedback on the usefulness and effectiveness of the online training immediately following the workshop. WMO will send an online survey for this purpose.
- Participants are also required to provide the course organizers with feedback pertaining to knowledge and skills acquired, within 3 months following participation in the workshop including how these skills can be, or have been, applied in their NMHSs.
- Participants are encouraged to actively maintain technical exchanges and communication with the lecturers/experts, organizers and their peers, both during, and after, the workshop.

### Medium of instruction

English

## Contents/Topics/Program

The tentative training program for the HIGHWAY/SWFP-Eastern Africa online remote training workshop consists of the live sessions and self-study modules. It may be subject to minor changes and adjustments.

	Monday 22 <sup>nd</sup> February	Tuesday 23 <sup>rd</sup> February	Wednesday 24 <sup>th</sup> February	Thursday 25 <sup>th</sup> February	Friday 26 <sup>th</sup> February
	08:00-10:00 (UTC time)	08:00-10:00 (UTC time)	08:00-10:00 (UTC time)	08:00-10:00 (UTC time)	08:00-10:00 (UTC time)
<b>First Live Session</b>	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Forecast uncertainty (TBD)</li> <li>• Impact Based Forecasting (TBD)</li> </ul>	Global Hazard Map (Joan Robbins)	SWFP web portals updates <ul style="list-style-type: none"> <li>• RSMC Nairobi (David Koros)</li> <li>• RSMC Dar Es Salaam (TBD)</li> <li>• ECMWF products (TBD)</li> <li>• NOAA/NCEP products (TBD)</li> </ul>	Impact Based Forecasting (practical) (TBD)	Forecast verification <ul style="list-style-type: none"> <li>• RSMC Nairobi (David Koros)</li> <li>• RSMC Dar Es Salaam (TBD)</li> </ul>
<b>Rest/lunch break for one hour (10:00-11:00 UTC)</b>					
	11:00-13:00 (UTC)	11:00-13:00 (UTC)	11:00-13:00 (UTC)	11:00-13:00 (UTC)	11:00-13:00 (UTC time)
<b>Second Live Session</b>	Met Office African Web Viewer (Catherine Moore)	<ul style="list-style-type: none"> <li>• Interactive session on needs for visualization (Caroline Bain)</li> <li>• Nearcast system (Ralph Peterson?)</li> </ul>	NWP interpretation & use in severe weather forecasting (Caroline Bain & others)	Impact Based Forecasting (practical) (TBD)	Case studies by NMHSs <ul style="list-style-type: none"> <li>• Burundi</li> <li>• Ethiopia</li> <li>• Kenya</li> <li>• Rwanda</li> <li>• South Sudan</li> <li>• Tanzania</li> <li>• Uganda</li> </ul>
<b>Online Modules</b>	Introduction to ensembles, ECMWF modules on forecast uncertainty (EPS/EFI), dealing with forecast uncertainty, impact base forecasting, NWP interpretation, commonly available tools and products (including SWFP portals) etc.				

Live Sessions	Local Time	Countries
<b>First Session</b> (08:00-10:00 UTC)	10:00 – 12:00	Burundi & Rwanda
	11:00 – 13:00	Ethiopia; Kenya; South Sudan; Tanzania; and Uganda
<b>Second Session</b> (11:00-13:00 UTC)	13:00 – 15:00	Burundi & Rwanda
	14:00 – 16:00	Ethiopia; Kenya; South Sudan; Tanzania; and Uganda

Participants have to attend all live sessions and should also complete self-study modules. A time commitment of approximately 30 hours during the week is expected. Daily live sessions are important for giving participants the chance to contextualise and apply theoretical knowledge from self-study modules, and also work together and learn from the experience of their peers. Therefore, it is mandatory that participants attend all these sessions. The live sessions will take place twice a day (Monday to Friday) during **0800 -1000 UTC & 11:00-13:00 UTC** each day. The local timings for the live sessions are given in above table.

### **Places offered**

Around 20 registered participants (a maximum of 3 participants per country) from the NMHSs of countries involved in HIGHWAY and SWFP in Eastern Africa.

### **Deadline for application**

The completed prescribed Nomination Form should be returned to the WMO Secretariat no later than **20 January 2020**.

### **Lecturers**

Weather forecasting and NWP experts from the Met Office UK, ECMWF, NOAA/NCEP, RSMC Nairobi and RSMC Dar Es Salaam.

### **Training delivery**

The training will be delivered in a blended learning format making use of both self-study modules hosted on an online learning platform, and synchronous sessions delivered in real-time using video conferencing software. For this to be effective each delegate will need to have access to an individual computer with a reliable internet connection which allows streaming of video and audio, as well as access to remote servers to complete online self-study modules. More information including instructions for how to use the various platforms, along with log-in details will be provided to the participants via email at a later date, likely early February 2021. Therefore, please ensure to include direct email addresses for the nominated delegates on the nomination forms in **Annex-II** as these will be required to generate each participant a unique login for the learning platforms.

### **Enquiries**

For any queries or clarification, please contact the following:

- Mr Ata HUSSAIN, Scientific Officer (SWFP), DRR and Public Services Branch (DPS), WMO Headquarters, Geneva, Switzerland ([AHussain@wmo.int](mailto:AHussain@wmo.int)),
- Mr Samuel MUCHEMI, Scientific Officer (PWS), DPS, WMO Headquarters ([SMuchemi@wmo.int](mailto:SMuchemi@wmo.int))

- Mr Alessandro CHIARIELLO, Project Officer, WMO Regional Office, Nairobi  
([achiariello@wmo.int](mailto:achiariello@wmo.int))



Foreign, Commonwealth  
& Development Office

Ref.: 24107/2020-1.2 S/DPS

HIGHWAY/SWFP – Eastern Africa  
Training Workshop on Severe Weather and Impact Based Forecasting and Warning  
Services (ONLINE), 22-26 February 2021

**PARTICIPANT NOMINATION FORM**

The following operational forecasters are nominated from (name of country): \_\_\_\_\_ to attend the above captioned HIGHWAY/SWFP Online Training Workshop from 22 to 26 February 2021:

Sr #	Nominees particulars	Participant Contact detail
1.	<div style="display: flex; justify-content: space-between;"> <div> Name: Date of birth: Title/Designation: Responsibilities: Place of work: Qualification: Experience as forecaster (no. of years): </div> <div> Gender       years </div> </div>	E-Mail*:  Tel:  Mobile:
2.	<div style="display: flex; justify-content: space-between;"> <div> Name: Date of birth: Title/Designation: Responsibilities: Place of work: Qualification: Experience as forecaster (no. of years): </div> <div> Gender       years </div> </div>	E-Mail*:  Tel:  Mobile:
3.	<div style="display: flex; justify-content: space-between;"> <div> Name: Date of birth: Title/Designation: Responsibilities: Place of work: Qualification: Experience as forecaster (no. of years): </div> <div> Gender       years </div> </div>	E-Mail*:  Tel:  Mobile:

*\*Please ensure the email address is a direct email for the delegate you are nominating as this will be required to generate the login and provide access to the online learning portal.*

It is confirmed that each of the above nominee(s) will have access to his/her individual computer or laptop with good internet connection to ensure smooth streaming of video and sound, as well as connection to remote servers to enable him/her to take part in self-study modules and practical sessions during the online training workshop. It also confirms that they will be given time to attend all live sessions, and adequate time to complete self-study modules, a time commitment of approximately 30 hours during the week is expected.

To enable us to provide you with the best service please complete all the fields by computer and send us an electronic copy

Date: \_\_\_\_\_ Nominating NMHS:  
Signature of Director of NMHS (or Permanent Representative): \_\_\_\_\_

**Note:** Please complete and submit this nomination form by E-Mail to Ata HUSSAIN ([AHussain@wmo.int](mailto:AHussain@wmo.int)) with cc to Mr Samuel MUCHEMI ([SMuchemi@wmo.int](mailto:SMuchemi@wmo.int)) and Mr Alessandro CHIARIELLO ([AChiariello@wmo.int](mailto:AChiariello@wmo.int)) at WMO Secretariat as soon as possible, but **no later than 20 January 2021**.

Ref.: 24107/2020-1.2 S/DPS