

**WORLD METEOROLOGICAL ORGANIZATION**  
***CBS OPAG SURVEY ON PUBLIC WEATHER SERVICES (PWS)***

**Please return questionnaire to : Mr. Gerald Fleming (OPAG Chair)**

**(e-mail : [gffleming@eircom.net](mailto:gffleming@eircom.net); Fax : (353 1) 283 9684 ; Mail: 30 Parkview Wexford, Ireland )**

**In replying, Members are welcome to make use of the questionnaire form online at <http://www.worldweather.org/pws/nhw-questionnaire.html> with the following User Name : OPAGPWS and Password : wsc7q5eh**

**The objectives of this survey are :**

- (a) To compile information on the severe weather warning systems operated by Members with a view to publishing a handy reference on such systems,
- (b) To assess the vulnerability of various Members to weather-related disasters with a view to developing workshops to address the gaps and weaknesses identified, and
- (c) To assess the PWS needs of National Meteorological and Hydrological Services with a focus on identifying opportunities to improve products and services, in particular, on severe weather warning services.

**This questionnaire is mainly concerned with:**

- (a) Your scope of severe weather warning services,
- (b) Identification of opportunities/needs in your PWS in the provision of severe weather warnings and other services/products , and
- (c) Support and resources required for development and improvement of your PWS in relation to the operation of severe weather warnings.

**Part I Member’s Information**

Member: .....

Region: Regional Association \*

Website URL: (if available): .....

**Part II Please complete the following tables:**

**(a) Severe Weather Warning Services associated with Hot and Dry Weather**

Please select ‘Y’ for ‘yes’, ‘N’ for ‘no’ and blank for ‘not applicable’													
Weather Element	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u> .			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please see Footnote.# and select using a “√” for as many items as appropriate. Leave blank if not applicable.)					
			to public or media	to partners/ disaster management agencies	for cross border/ boundary exchange			1	2	3	4	5	Others (Please specify)
(i) Extreme High Temperature	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) Drought	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iii) Fire Danger (Wildfire)	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

(\* Select as appropriate)

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

**(b) Severe Weather Warning Services associated with Cold Weather**

Please select 'Y' for 'yes', 'N' for 'no' and blank for 'not applicable'													
Weather Element	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u>			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please select using a "✓" for as many items as appropriate. Leave blank if not applicable.)					
			to public or media	to partners/disaster management agencies	for cross border/boundary exchange			1	2	3	4	5	Others (Please specify)
(i) Blizzard or Drifting Snow	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) Heavy Snow	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iii) Rapid snow melt	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iv) Freezing rain	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(v) Frost	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(vi) icy Road	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(vii) Avalanche	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(viii) Extreme wind chill	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ix) Extreme Low Temperature	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

(c) Severe Weather Warning Services associated with Rain

Weather Element  (* Select as appropriate)	Please select 'Y' for 'yes', 'N' for 'no' and blank for 'not applicable'						What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please select using a "✓" for as many items as appropriate. Leave blank if not applicable.)						
	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u>			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	1	2	3	4	5	Others (Please specify)
			to public or media	to partners/disaster management agencies	for cross border/boundary exchange								
(i) Heavy Rain *with <input type="checkbox"/> flood <input type="checkbox"/> landslide <input type="checkbox"/> mudflow <input type="checkbox"/> thunderstorms <input type="checkbox"/> tornado	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(ii) Flood	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(iii) Landslide or mudflow	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(iv) Thunderstorms *with <input type="checkbox"/> gale <input type="checkbox"/> hail <input type="checkbox"/> lightning <input type="checkbox"/> flood <input type="checkbox"/> tornado	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(v) Hail	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(vi) Lightning	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(vii) Tornado	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Others (please specify)	---	---	---	---	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

(d) Severe Weather Warning Services associated with Tropical Cyclones

Please select 'Y' for 'yes', 'N' for 'no' and blank for 'not applicable'													
Weather Element	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u>			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please select using a "✓" for as many items as appropriate. Leave blank if not applicable.)					
			to public or media	to partners/disaster management agencies	for cross border/boundary exchange			1	2	3	4	5	Others (Please specify)
(i) Tropical Cyclone *with <input type="checkbox"/> high winds <input type="checkbox"/> heavy rain <input type="checkbox"/> flood <input type="checkbox"/> landslide <input type="checkbox"/> mudflow <input type="checkbox"/> thunderstorms <input type="checkbox"/> tornado <input type="checkbox"/> storm surge	—	—	—	—	—	—	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) Storm Surge	—	—	—	—	—	—	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)	—	—	—	—	—	—	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

(\* Select as appropriate)

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

(e) Severe Weather Warning Services associated with High Winds other than Tropical Cyclone, Rainstorm or Snowstorm

Please select 'Y' for 'yes', 'N' for 'no' and blank for 'not applicable'													
Weather Element	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u>			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please select using a "✓" for as many items as appropriate. Leave blank if not applicable.)					
			to public or media	to partners/disaster management agencies	for cross border/boundary exchange			1	2	3	4	5	Others (Please specify)
(i) Monsoon Winds	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) Winds in Coastal Waters	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iii) High Winds	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)	___	___	___	___	___	___	___	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

**(f) Severe Weather Warning Services associated with Low Visibility and Other Hazards**

Please select 'Y' for 'yes', 'N' for 'no' and blank for 'not applicable'															
Weather Element	Is this element a hazard in your country/territory?	Is alert/warning on this element available in your country/territory?	If you provide alerts/warnings on this element, are they available <u>in real time</u> .			If you provide alerts/warnings, do you issue advisory/guidance on response action?	If you do not currently provide alerts/warnings on this element, do you plan to introduce one in your PWS?	What are the challenges or obstacles in the provision of alerts/warnings on this element? (Please see Footnote.# and select using a "√" for as many items as appropriate. Leave blank if not applicable.)							
			to public or media	to partners/disaster management agencies	for cross border/boundary exchange			1	2	3	4	5	Others (Please specify)		
(i) Dense Fog	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(ii) Smog	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(iii) Haze	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(iv) Duststorm or Sandstorm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Others (please specify)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

# Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination; 4=Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

**(g) Areas of improvement or support you would like to obtain for development of your PWS in relation to warning services as well as other new products and services (please specify)**

**Part III Please provide a contact for further information or update details of your PWS Focal Point:**

**Last name:** \* [Dr.](#) .....

**First name:** .....

**Telephone:** ..... **Fax:** .....

**E-mail:** .....

(\* Select as appropriate)

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~ Thank you ~



