#### WORLD METEOROLOGICAL ORGANIZATION

CBS OPAG SURVEY ON PUBLIC WEATHER SERVICES (PWS)

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

(e-mail: gfleming@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 <a href="http://www.worldweather.org/pws/nhw-questionnaire.html">http://www.worldweather.org/pws/nhw-questionnaire.html</a> 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	Is alert/ warning on this element	If you provide alerts/ warnings, do	rovide currently provide alerts/ (		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							
	country/ territory?	in your country/ or media disaster management b		itory? in your or media disaster border/ advisory/ do you plan country/ management boundary guidance on introduce or	or media disaster border/ management boundary agencies exchange		this element, do you plan to introduce one in your PWS?	applicable.)					
						action:		1	2	3	4	5	Others (Please specify)
(i) Extreme High Temperature													
(ii) Drought													
(iii) Fire Danger (Wildfire)						_							
Others (please specify)													

<sup>(\*</sup> Select as appropriate)

<sup>#</sup> 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

	Plea	se select '	Y' for 'ye	s', 'N' for 'no	o' and blar	ık for 'not ap	plicable'							
Weather Element	Is this element a warning hazard in vour element		If you provide alerts/warnings on this element, are they available <u>in real time</u>			provide alerts/	If you do not currently provide alerts/ warnings on	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.)						
	country/ territory?	available in your country/ territory?	to public or media	to partners/ disaster management agencies	for cross border/ boundary exchange	you issue advisory/ guidance on response	this element, do you plan to introduce one in your PWS?		,,,,,				ommer not apparently	
				ageneres	CACHAIIge	action?		1	2	3	4	5	Others (Please specify)	
(i) Blizzard or Drifting Snow														
(ii) Heavy Snow														
(iii) Rapid snow melt														
(iv)Freezing rain														
(v) Frost														
(vi) icy Road														
(vii) Avalanche														
(viii) Extreme wind chill														
(ix) Extreme Low Temperature														
Others (please specify)														

<sup>#</sup> 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

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

<sup>#</sup>Footnote (for answers to last column): 1 = Forecast accuracy; 2 = Design of warning products; 3=Warning communication and dissemination;

<sup>4=</sup>Constraints in coordinating with disaster management agencies; 5 =Public understanding of warnings

## (d) Severe Weather Warning Services associated with Tropical Cyclones

	Plea	se select '	'Y' for 'ye	s', 'N' for 'ne	o' and blar	nk for 'not ap	plicable'								
Weather Element	Is this element a hazard in your	Is alert/ warning on this element		rovide alerts/w ement, are they in real time	available	If you provide alerts/ warnings, do	If you do not currently provide alerts/ warnings on	provision of alerts/warnin lerts/ (Please select using a "\square"			allenges or obstacles in the s/warnings on this element? a "✓" for as many items as blank if not applicable.)				
	country/ territory?	available in your country/	to public or media	blic to partners/ for cross border/	partners/ for cross border/		you issue this element, advisory/ do you plan to guidance on introduce one		approximation approximation						
		territory?		agencies	exchange	response action?	in your PWS?	in your PWS?	in your PWS?	1	1 2 3 4 5	Others (Please specify)			
(i) Tropical Cyclone *with															
high winds															
heavy rain															
flood															
landslide											ı—				
mudflow								Ш			<u> </u>				
thunderstorms															
tornado															
storm surge															
(ii) Storm Surge											Ĺ				
Others (please															
specify)															

<sup>(\*</sup> Select as appropriate)

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

	Plea	se select '	Y' for 'ye	s', 'N' for 'no	for 'no' and blank for 'not applicable'								
hazard in your country/	element a hazard in on this this element, are they available in real time				If you provide alerts/ warnings, do	de currently s/ provide alerts/			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.)				
	country/ territory?	ntry/ available	to public or media		for cross border/ boundary	you issue advisory/ guidance on	this element, do you plan to introduce one						. ,
	territory?		agencies	exchange	response action?	in your PWS?	1	2	3	4	5	Others (Please specify)	
(i) Monsoon Winds													
(ii) Winds in Coastal Waters													
(iii) High Winds													
Others (please specify)													

# (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'												
element a warning hazard in on this this element, are they available in real time.				available	alerts/ provide alerts/	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						
country/ territory?	ntry/ available			for cross border/ boundary exchange	you issue advisory/ guidance on response	this element, do you plan to introduce one in your PWS?	applicable.)					
					action?			2	3	4	5	Others (Please specify)
	Is this element a hazard in your country/	Is this element a hazard in your country/ territory? Is alert/ warning on this element available in your country/	Is this element a hazard in your country/ territory? Is alert/ warning this element available in your country/	Is this element a hazard in your country/ territory? Is alert/ warning hazard in your country/ territory? Is alert/ warning hazard in your element available in your country/	Is this element a hazard in your country/ territory? Is alert/ warning bazard in your country/ territory? Is alert/ warning on this element, are they available in your country/ to public or media disaster management boundary	Is this element a hazard in your country/ territory? Is alert/ in your country/ available territory? Is alert/ warning on this element, are they available in real time. If you provide alerts/warnings on this element, are they available in real time. It o public or media disaster warnings, do you issue advisory/ guidance on	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  Is this element, are they available in real time.  If you provide alerts/warnings on this element, are they available alerts/ warnings, do warnings, do you issue this element, advisory/ do you plan to introduce one in your PWS?	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  Is this element, are they available in real time.  If you provide alerts/warnings on this element, are they available in real time.  If you provide alerts/ provide alerts/ warnings, do warnings on this element, are they available alerts/ provide alerts/ warnings, do warnings on this element, advisory/ guidance on introduce one in your PWS?	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  If you provide alerts/warnings on this element, are they available in real time. warnings, do you issue disaster border/ management agencies   for cross border/ boundary exchange   for cross border/ advisory/ do you plan to introduce one in your PWS?	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  Is this element, are they available in real time. warnings on this element, are they available in real time. warnings, do you issue applicable.)  If you do not currently provide alerts/ warnings, do you issue applicable.)  What are they available alerts/ warnings, do you issue advisory/ advisory/ do you plan to introduce one in your PWS?	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  If you provide alerts/warnings on this element, are they available in your country/ territory?  If you do not currently provide alerts/ warnings, do you issue disaster border/ management agencies exchange  If you do not currently provide alerts/ warnings on this element, do you plan to introduce one in your PWS?	Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  Is this element a hazard in your country/ territory?  If you provide alerts/warnings on this element, are they available in real time. warnings, do you issue advisory/ do you plan to introduce one response continuation.  If you provide alerts/warnings on this element, are they available alerts/ warnings, do you issue advisory/ do you plan to introduce one in your PWS?

<sup>#</sup> 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 improveme products and services (		you would like to o	obtain for development	of your $\ensuremath{\mathrm{PWS}}$ in relation to warning services as well as other new
Part III Please prov	vide a contac	t for further inf	formation or update	details of your PWS Focal Point:
Last name: * Dr.				First name:
Telephone:		Fax:		E-mail:
(* Select as appropriate)				
Reset	Submit	Print	~ Thank you	