

# United Kingdom Overseas Territories Aviation Circular

OTAC 174-1

## Meteorological Services to Aviation – Definition of Forecast and Observing Services

Issue 4.00  
31 December 2021

Effective: on issue

### GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

### PURPOSE

The Civil Aviation Act commits the UK, and hence the Territories, to implementing the Chicago Convention and its Annexes. ICAO Annex 3 to the Convention places a responsibility on the State to ensure that arrangements are in place to meet the Standards and Recommended Practices (SARPs) of the Annex, ie to ensure Meteorological (MET) services are provided.

In accordance with the Annex 3 requirement for States to designate the authority, hereinafter referred to as the meteorological authority (MET Authority), to provide or to arrange for the provision of meteorological services the AN(OT)O gives the Governor responsibility for ensuring that appropriate arrangements for the provision and oversight of MET services within the Territory are made. The Governor shall set out the services to be provided within the Territory and arrange for provision of such services. This Circular sets out the procedures for defining the service to be provided and the production of a Service Definition Document in accordance with OTAR Part 174 Subpart C.

### RELATED REQUIREMENTS

This Circular relates to OTAR Part 174.

### CHANGE INFORMATION

This issue removes much of the text already included in OTAR Part 174 and focuses on the process of defining the MET services to be provided by entity (eg Meteorological Service Provider, Meteorological Regulator etc).

## ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website [www.airsafety.aero](http://www.airsafety.aero) or to the appropriate Overseas Territory Aviation Authority.

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# 1 Definition of Service Required

1.1 Service definition is undertaken by the MET Authority.

1.2 As part of the process there shall be consultation with users, including:

**Table 174-1.1 Service definition consultees and Annex 3 reference**

User Group	ICAO Annex 3
Air Traffic Service (ATS) provider	Chapter 2
commercial and private pilots	Chapter 9
commercial air operators	
Air Traffic Services (ATS)	Chapter 10
Search and Rescue organisations	
other interested parties	As appropriate

Other interested parties will include the designated regulator and entities with which the meteorological authority has established arrangements for the provision and oversight of MET services.

1.3 One suggested consultation method is by Questionnaire, distributed to all those on the list above. A basic example of such a questionnaire is at Appendix A to this OTAC. The consultation is intended to ensure that the MET services provided are suitable for the type of operations in the Territory. For example, it is unlikely to be of value to provide detailed Upper Air information (wind, temperatures etc), if all operations from the Territory remain in lower airspace.

1.4 Where a user identifies a significant change in its circumstances, eg a new route or aircraft type for an aircraft operator, or a new ATS service for ATC, then the user shall notify the MET Authority as soon as practicable so that the change can be assessed for impact on the MET services to be provided.

1.5 In addition to the users' opinions, the MET Authority shall also consider the requirements of the ICAO Regional Air Navigation Agreement with regard to Meteorological services in the Territory.

1.6 The MET Authority shall formally consult the users not less than every five (5) years in order to ensure that the services provided remain appropriate.

1.7 The results of the definition process shall be captured within a Service Definition Document (SDD), a template for which is at Appendix B. This needs to define:

- (a) the services to be provided, and method of provision (face to face briefing; fax; paper; electronic etc);
- (b) the locations and hours during which they will be provided;
- (c) the standards and criteria to be applied (ICAO Annex 3 at minimum), including, for example, the criteria for the production and distribution of Special Reports and Post-Accident Reports;
- (d) a Quality Management System (QMS) which shall be used by the service provider;

- (e) the requirements for agreements between the MET service provider, ATS and other users where appropriate.
- (f) the requirements for aircraft observations to be made by aircraft of its registry operating on international routes and for the recording and reporting of these observations.
- (g) the requirements for the servicing and calibration of all meteorology equipment.
- (h) A formal, agreed system or arrangement(s) for identifying and/or raising concerns and dispute resolution.

## 2 Arranging for Service Provision

Having achieved a suitable definition of the service to be provided in the SDD, it is now for the MET Authority to determine how best the service shall be provided. As prescribed by ICAO Annex 3, the Met Authority is responsible for providing or arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State. Table 174-1.2 provides some common options.

**Table 174-1.2 Service Provision options**

Body	Meteorological Service Provider Options		No charge	Charged	Notes
	Aerodrome Meteorological Office (Forecasts)	Aerodrome Meteorological Station (Observations)			
MET Authority	MET Authority		SDD must be agreed with Regulator	N/A	
	Territory MET Office		Letter of Agreement (LoA)	Contract	-
	N/A	Aerodrome Operator/ATS Provider			
	Other State/Territory MET Office	N/A	Letter of Agreement (LoA)	Contract	(inc scope of work - SDD)
	Commercial MET provider	N/A	N/A	Contract	(inc scope of work - SDD)

## 3 Quality Management System

- 3.1 Any agreement or contract shall include the requirement for a quality management system to be implemented by the Meteorological Service Provider.
- 3.2 Annex 3 requires that the QMS includes the following elements:
  - (a) staff qualifications and training (meeting World MET Organisation standards);

- (b) the system confirms that the service provided meets the requirements of the SDD;
  - (c) verification and validation procedures are in place for any MET information being disseminated;
  - (d) procedures exist to ensure that the transmission of information is appropriate and timely;
  - (e) that MET information supplied to users conforms with human factors principles which require the minimum of interpretation by users.
- 3.3 Any agreement or contract shall include the specific requirement for compliance with Annex 3 for:
- (a) preparation, content and format of reports;
  - (b) preparation, content and format of forecasts and briefings;
  - (c) the schedule for the issue and validity of reports and forecasts;
  - (d) content, format and requirements for issue of SIGMET, AIRMET, Aerodrome Warnings and Wind Shear Warnings (where these are required);
  - (e) the suitability and operation of any automatic weather reporting equipment;
  - (f) communications requirements and provision.
- 3.4 The service provider shall maintain records of observations and to retain these without time limit. This data shall be made available to organisations undertaking research, investigation or analysis.

**Appendix A Meteorological Services Questionnaire**

**Meteorological Services for Aviation  
Questionnaire**

Section A – Your Contact Information					
A1	Name of Organisation				
A2	Name of contact (for follow up questions etc)				
A3	Telephone number				
A4	Telephone number				
A5	email				
A6	Are you a user of MET services to aviation?	Yes	<input type="checkbox"/>	Go to A7	No <input type="checkbox"/> Go to Section E
A7	What type of user are you?				
	Commercial air operator				
	Charter	<input type="checkbox"/>	Scheduled	<input type="checkbox"/>	
	Flying School	<input type="checkbox"/>	Private pilot/aircraft operator	<input type="checkbox"/>	
	Fixed wing	<input type="checkbox"/>	Helicopters	<input type="checkbox"/>	
	Air Traffic Service Unit				
	Aerodrome	<input type="checkbox"/>	En-route	<input type="checkbox"/>	
	Search and Rescue				

<b>Section A – Your Contact Information</b>	
Other - please specify:	

<b>Section B - AIRCRAFT OPERATORS AND PILOTS (others go to Section C – Air Traffic Services or Section D – Search and Rescue)</b>																																																															
<b>B1</b>	What are the routes on which you most frequently operate to, from or or within <i>[insert name of Territory]?</i>																																																														
	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 25%;">From</th> <th style="width: 25%;">To</th> <th style="width: 30%;">Aircraft Type</th> <th style="width: 20%;">Approximately how often?</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	From	To	Aircraft Type	Approximately how often?																																																										
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<i>Please continue on a separate sheet of paper if required.</i>																																																															
<b>B2</b>	While operating the above routes, approximately what altitudes/levels do you fly at? Cruise <span style="margin-left: 100px;"></span> Maximum																																																														
<b>B3</b>	If you are a commercial operator, do you have central route and flight planning, or are your flight crews responsible for this task? Yes <span style="margin-left: 100px;"></span> No																																																														
<b>B4</b>	Do you use MET briefing facilities at <i>[insert name of airport(s)]</i> Yes <span style="margin-left: 100px;"></span> No How often? Daily <span style="margin-left: 20px;">Weekly</span> <span style="margin-left: 20px;">Monthly</span> <span style="margin-left: 20px;">Less than monthly</span>																																																														
<b>B5</b>	Which of the following MET services do you use – or would you use if they were available? <i>(Please tick all those which apply)</i>																																																														
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	En route High Level Temperature Forecasts		
	SIGMET information		
	AIRMET information		
	Regional QNH Information?		
<b>Section C - AIR TRAFFIC SERVICES (Search And Rescue go to Section D)</b>			
	Volcanic Ash Warnings		
	Tropical Cyclone/hurricane Warnings		
<b>GoTo Section E</b>			

<b>Section D – SEARCH AND RESCUE</b>			
	<i>(Note: Please answer all questions in this section from the point of view of your SAR organisation. If you have an additional function (pilot for example) then please answer the questions in that section of the questionnaire from your point of view as a pilot, other than in SAR role. Thank you)</i>		
D1	What is your main source of MET information prior to the commencement of a mission?		
D2	What is your main source of MET information during a mission?		
D3	Which of the following MET services do you use – or would you use if they were available? <i>(Please tick all those which apply)</i>		
	Aerodrome Actual Weather Reports (METARs)		
	Aerodrome Forecasts (TAFs)		
	How far ahead?	6hrs	12hrs
			18hrs
			24hrs
	En route Low Level Wind Forecasts		
	How far ahead?	6hrs	12hrs
			18hrs
			24hrs
	En route High Level Wind Forecasts		
	How far ahead?	6hrs	12hrs
			18hrs
			24hrs
	En route High Level Temperature Forecasts		
	How far ahead?	6hrs	12hrs
			18hrs
			24hrs
	Significant Weather Chart		
	High level	Medium level	Low level
	SIGMET information		
	AIRMET information		
	Regional QNH Information? <i>[if appropriate]</i>		
	Volcanic Ash Warnings		

	Tropical Cyclone/hurricane Warnings	
	Please list below any reports or forecasts which we have omitted from the above list and which you wish to be available to you in <i>[insert name of Territory]</i> ?	

<b>Section E – ALL RESPONDENTS</b>
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Please use the space below to provide any additional information which you think may be of value to us in determining the MET services which we should provide in.

<i>[insert Territory name]</i>	
--------------------------------	--

Please use the space below to provide any additional information which you think may be of value to us in determining the MET services which we should provide in.

<i>[insert Territory name]</i>	
--------------------------------	--

Thank you for the time you have taken to complete this questionnaire. I will let you know the results of the survey as soon as they are available. Any changes in the MET services provided will be notified in the normal manner.

Please return this form to: *[insert return address]*.

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## Appendix B

## Service Definition Document Template

# Service Definition Document Template

Issued dd mmmm yyyy

**1. Introduction**

- 1.1 All products specified in this Service Definition Document are required to meet the standards and recommended practices specified in Meteorological Service for International Air Navigation, ICAO Annex 3 to the Chicago Convention, unless otherwise stated. Where standards and recommended practices do not exist for any product, the product is required to conform to the requirements specified in this document.
- 1.2 The specific value of any of the elements given in a forecast shall be the most probable value that the element is likely to assume during the period of the forecast. Similarly, when the time of occurrence or change of an element is given in a forecast, this time shall be understood to be the most probable time. The issue of a new forecast shall cancel automatically any forecast of the same type previously issued for the same place and for the same period of validity or part thereof.
- 1.3 Whilst it is acknowledged that different forecast products have different issue times and periods of validity, forecast products should strive to maintain consistency of message. All products specified shall be provided solely to support aeronautical operations.
- 1.4 All products, unless specified otherwise, shall give height indications as follows:

**Table 174-1.3 Height indications**

Area	Meteorological conditions	Height or Level
en-route	indications of upper winds, turbulence or bases and tops of clouds	flight levels, pressure levels or altitude
low-level flights	All	height above mean sea level;
Aerodrome	All	height above the aerodrome elevation meteorological
forecasts for offshore installations	All	height above mean sea level

- 1.5 Records of aviation forecast products issued shall be kept for a minimum period of two years.

**2. Products and services required**

**2.1 Spot winds and temperatures**

2.1.1 A chart is required depicting spot winds and temperatures at the following altitudes for each of the listed points of latitude/longitude:

- Altitude (feet): 1000, 2000, 5000, 10000
- Points of Latitude/Longitude:

Altitude	Latitude	Longitude

2.1.2 The required time of issue and period of validity of the chart is as follows:

Required Time of Issue	Period of validity

**2.2 Low-level significant weather chart**

2.2.1 A low-level significant weather chart is required depicting both graphical and textual representations of the weather up to 10000 feet above mean sea level. These should include surface visibility, significant weather, mountain obscuration, cloud, icing, turbulence, mountain wave, pressure centres and fronts and freezing level.

2.2.2 Four issues of this chart are required per day, issued at the times and valid for the periods described below.

Required Time of Issue	Fronts and Weather Zones forecast time	Period of validity

2.2.3 Amendment criteria for low-level significant weather charts and area forecasts are detailed in the table below.

Element	Original Forecast	Revised Opinion
a) Surface Wind	All forecasts of surface wind	A change in direction of 30° or more, the speed before and/or after the change being at least 30 kt A change of speed of 20 kt or more

Element	Original Forecast	Revised Opinion
b) AIRMET Wind Forecasts for 1000 feet, 3000 feet and 6000 feet	All AIRMET forecasts of wind at 1000, 3000 and 6000 feet	A change in direction of 30° or more, the speed before and/or after the change being at least 30 kt A change of speed of 20 kt or more
c) Surface visibility (general visibility)	8 km or more	Less than 8 km
	5000 m to 8 km	Less than 5000 m or more than 8 km
	3700 m to 5000 m	Less than 3700 m or more than 5 km
	2500 m to 3700 m	Less than 2500 m or more than 3700 m
	1600m to 2500 m	Less than 1600 m or more than 2500 m
	800m to 1600 m	Less than 800 m or more than 1600 m
	0 m to 800 m	Less than 800 m
d) Weather phenomena TS, SQ, GR, SA, RASN, SN, FZFG, FZRA, FZDZ	Not included	Now expected
	Included	Not now expected
e) Cloud Amount	All forecasts of cloud amount	Changes in the general forecast lowest cloud base below 1500 feet from 4 oktas or less to more than 4 oktas, or more than 4 oktas to 4 oktas or less
f) Cloud Height (general forecast lowest cloud base AMSL (amounts of SCT or more)	2500 ft or more	Less than 2500 ft
	1500 ft to 2500 ft	Less than 1500 ft or more than 2500 ft
	700 ft to 1500 ft	Less than 700 ft or more than 1500 ft
	500 ft to 700 ft	Less than 500 ft or more than 700 ft
	300 ft to 500 ft	Less than 300 ft or more than 500 ft
	200 ft to 300 ft	Less than 200 ft or more than 300 ft
	Surface to 200 ft	Less than 200 ft
g) Temperature	All forecasts of temperature	5°C or more
h) Turbulence	Nil	Moderate or severe
	Light	Severe
	Moderate	Nil
	Severe	Nil or light

Element	Original Forecast	Revised Opinion
i) Zero degree Celsius isotherm	Below 5000 ft	Changes of 1000 ft or more
	Above 5000 ft	Changes or $\pm 25\%$ or 2000 ft, whichever is smaller
j) Airframe Icing	Nil	Moderate or severe
	Light	Severe
	Moderate	Nil
	Severe	Nil or light
k) Areas boundaries, significant fronts and tropical disturbances	Not included	Now expected
	Included	Not now expected or $\pm 60$ nm different from forecast

## 2.3 TAF, Trend and Aerodrome Warnings

2.3.1 All aerodrome forecasts (TAFs), and landing forecasts (TRENDS), provided for those aerodromes as notified by Regional Air Navigation Plan FASID, shall meet the standards and recommended practices specified in ICAO Annex 3 Chapter 6.

2.3.2 Aerodrome warnings are issued when certain phenomena are forecast, as detailed below. Aerodrome warnings shall meet the standards and recommended practices specified in ICAO Annex 3 Chapter 7.

2.3.3 a) **TAFs** – TAFs shall be issued and amended in accordance with the requirements and formats as detailed in ICAO Annex 3 (Chapter 6 and Appendix 5) and WMO Document 306, *Manual on Codes*. TAFs shall consist of a concise statement of the expected meteorological conditions at an aerodrome for a specified period. All TAFs are required to be kept under continuous review, including the continuous monitoring of METAR, where this is not possible a cancellation shall be issued. Not more than one TAF per aerodrome shall be valid at any given time.

Note: The designated regulator should be notified if the meteorological forecaster is unable to produce a TAF, or has to cancel a TAF, because of missing or erroneous information in a METAR.

2.3.4 Routine TAFs are required to be issued within the time of issue periods stated for compilation into bulletins. If a TAF needs to be amended due to a deterioration or improvement that has not been forecast or is mis-timed, such amendments are required to be issued within 15 minutes of receipt of the observation at the forecast office in accordance with WMO message amendment procedures.

2.3.5 b) **Trend (Landing Forecasts)** – Trend forecasts shall be prepared for the aerodromes specified below [*The SDD must include a table of aerodromes subject to its provisions. The table shall identify the aerodrome and the services provided in compliance with Annex 3*]. These forecasts are intended to meet the requirements of local users and of aircraft within about one hour's flying time from the aerodrome.

2.3.6 Trend forecasts shall be issued in accordance with the requirements and formats as detailed in ICAO Annex 3 (Chapter 6 and Appendix 5) and appended to the METAR. Each trend forecast is valid for 2 hours.

- 2.3.7 c) **Aerodrome Warnings** – Aerodrome warnings shall be issued giving concise information of the meteorological conditions which could adversely affect aircraft on the ground, including parked aircraft, and aerodrome facilities and services.
- 2.3.8 Aerodrome warnings shall be issued to the aerodromes detailed in the table below for the following phenomena; strong winds or gale, squalls, hail or thunderstorms, snow, frost, fog and freezing precipitation.
- 2.3.9 Additionally, a marked temperature inversion warning shall be provided, on request, when a temperature differential of 10°C or more is forecast to be present in the lowest levels of the atmosphere up to 1000 feet above ground level.
- 2.4 **Take-off Forecasts**
- 2.4.1 Take-off forecasts shall be issued in accordance with ICAO Standards detailed in Annex 3 Chapter 6. They comprise wind speed and direction, temperature and mean sea level pressure. Take-off forecasts shall provide expected conditions at each hour for the following 3 hours and use the following format:
- FORECAST TAKE OFF DATA FOR [LOCATION] AIRPORT ON [DAY] [DATE]
- TIME UTC    TEMP (C)    QNH (HpA)    WIND (DEG AND KT)
- 2.4.2 Ad-hoc requests for take-off forecasts at UK airports may be made without prior notification up to three hours before the expected time of departure.
- 2.4.3 Take-off forecasts should be kept under continuous review and amendments issued whenever forecasts fall outside the following criteria:
- **Surface Wind.** A change in direction of 30° or more, the speed before and/or after the change being at least 30 kt. A change of speed of 20 kt or more.
  - **Temperature/Dew Point.** A change of 2°C or more.
  - **Mean Sea Level Pressure.** A change of 1 hPa or more
- 2.5 **SIGMET**
- 2.5.1 SIGMETs give a concise description, in abbreviated plain language, of the occurrence and or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft. The Meteorological Watch Office (MWO) issues these warnings whenever the specific conditions listed in ICAO Annex 3 Chapter 7 occur or are expected to occur within the Flight Information Region / Upper Information Region (FIR/UIR) for which they are responsible.
- 2.5.2 SIGMET messages for these areas are required to be disseminated to Flight Information Centres (FIC), Area Control Centres (ACC), and other MWOs so that they are available for aircraft in flight for distances corresponding to two hours flying time ahead of the aircraft. This is achieved largely by broadcasts of SIGMETs on OPMET and by AFTN.
- 2.5.3 SIGMET shall be issued as soon as practicable. SIGMET messages shall be issued not more than 4 hours before the commencement of the period of validity. In the case of SIGMET for volcanic ash cloud and tropical cyclones, it should be issued as soon as practicable but not more than 12 hours before the commencement of validity. SIGMET messages for volcanic ash shall be updated at least every 6 hours.

- 2.5.4 At the end of its' period of validity, a SIGMET message must be re-issued if it is to remain valid. When the phenomena reported is no longer occurring or no longer expected to occur in the area a SIGMET should be cancelled, this may be carried out at any time within the validity period.
- 2.5.5 SIGMET shall be provided in accordance with the format given in ICAO Annex 3 Appendix 6.
- 2.6 **AIRMET**
- 2.6.1 AIRMETs give a concise description in abbreviated plain language concerning the occurrence and/or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level flights, and of the development of those phenomena in time and space.
- 2.6.2 AIRMET information shall be issued by a meteorological watch office in accordance with regional air navigation agreement, taking into account the density of air traffic operating below flight level 100. Where the meteorological watch office has an area of responsibility that encompasses more than one FIR and/or CTA, it shall issue separate AIRMET messages for each FIR and/or CTA within its area of responsibility. The flight information region may be divided in sub-areas, as necessary.
- 2.6.3 The period of validity of an AIRMET message shall be not more than 4 hours. AIRMET information shall be cancelled when the phenomena are no longer occurring or are no longer expected to occur in the area.
- 2.6.4 AIRMET shall be provided in accordance with the format given in ICAO Annex 3 Appendix 6.
- 2.7 **Wind Shear Warnings and Alerts**
- 2.7.1 Where a potential low level (below 1600 ft) wind shear condition, a wind shear warning is required to be issued whenever the following conditions are forecast to occur:
- Moderate low level wind shear;
  - Severe low level wind shear.
- 2.7.2 Warnings are also issued based on recent pilot reports of wind shear on the approach or climb-out.
- 2.7.3 Wind shear warnings should be cancelled when aircraft reports indicate that wind shear no longer exists.
- 2.7.4 Wind shear warnings are required to be issued in accordance with the template in Table A6-3 specified in ICAO Annex 3 Appendix 6. The sequence number corresponds to the number of wind shear warnings issued for the aerodrome since 0001 UTC on the day concerned. The period for which wind shear is forecast should not exceed 6 hours.
- 2.8 **Flight Briefing Documentation**
- 2.8.1 Meteorological information shall be supplied to operators and flight crew members for:
- a) pre-flight planning by operators;

- b) in-flight re-planning by operators using centralised operational control of flight operations;
  - c) use by flight crew members before departure; and
  - d) aircraft in flight.
- 2.8.2 Meteorological information supplied to operators and flight crew members shall cover the flight in respect of time, altitude and geographical extent, including the meteorological conditions expected between the aerodrome of intended landing and alternate aerodromes designated by the operator.
- 2.8.3 Meteorological information supplied to operators and flight crew members shall be up to date and include information as established by the meteorological authority in consultation with operators concerned.
- 2.9 **Information for Air Traffic Services, Search and Rescue and Aeronautical Information Services**
- 2.9.1 Any meteorological information requested by an air traffic services unit in connection with an aircraft emergency shall be supplied as rapidly as possible.
- 2.9.2 Any meteorological information requested by an authorised search and rescue organisation shall be supplied as rapidly as possible.
- 2.9.3 Relevant meteorological information shall be provided to aeronautical information services units, as required.
- 2.10 **Safety-related investigations**
- 2.10.1 Safety reports may be raised by pilots, Air Traffic Service personnel or other appropriate personnel to highlight safety concerns, typically regarding the provision of air navigation services. Reports relating to meteorological service provision may require investigation by a senior MET officer and findings/actions documented.
- 2.11 **Post Event Weather Information for Serious Incident / Air Accident Investigations**
- 2.11.1 ICAO Annex 13 provides the international requirements for the investigation of aircraft accidents and incidents. Responsibility for an investigation belongs to the State in which the accident or incident occurred and the State usually conducts the investigation. The State conducting the investigation may call on the best technical expertise available from any source to assist with the investigation.
- 2.11.2 As part of serious incident / air accident investigations, authorised investigators may request hindcasts detailing the most probable weather conditions that existed at the time of the incident. The exact details of any request will be dependent on the incident and the investigator's requirements.
- 2.12 **Climatology Services**
- 2.12.1 Climatological information shall be provided in accordance with the relevant provisions specified in Chapter 8 and Appendix 7 of ICAO Annex 3 and appropriate WMO procedures.

## 2.13 Standards and Dispute Resolution

- 2.13.1 The standards identified in the above agreement are the minimum required to satisfy ICAO compliance and ensure the provision of a timely and efficient provision of a MET service to support aviation. However, it is acknowledged that there may be occasions when the agreed, minimum standards of MET provision may not be achieved due to technical, staff/resource issues or circumstances outside of the service provider's control. In these circumstances either party to the agreement may raise their concerns formally so that they may be assessed, discussed and recommendations made by the appropriate managers and technical specialists. Instances of this nature shall be formally recorded in accordance with Paragraph 3.4 of this OTAC.