**COMPLIANCE MATRIX**

**UK (EU) Regulation No 2017/373**

**Meteorological Service Requirements**

**ANNEX V — PART-MET**

**SPECIFIC REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES**

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| --- | --- | --- | --- |
| **Service Provider** |  | | |
| **Matrix version number** |  | Date |  |

Complete all relevant sections and send the compliance matrix and supporting documents to [ansp.certification@caa.co.uk](mailto:ansp.certification@caa.co.uk)

**General Introduction to the ATM/ANS UK (EU) Regulation No 2017/373 Compliance Matrices**

Regulation (EU) No 373/2017 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 is applicable to all the service providers and functions shown in the diagram below which has been extracted from the regulation. This CM also includes amendments made by ED Decision 2020/008/R which become applicable in the UK November 2020



The Compliance matrices have been divided into the following Parts:

ANNEX III ATM/ANS ORGANISATIONAL REQUIREMENTS

ANNEX IV AIR TRAFFIC SERVICES

ANNEX V METEOROLOGICAL SERVICES

ANNEX VI AERONAUTICAL INFORMATION SERVICES

ANNEX VIII COMMUNICATION NAVIGATION OR SURVEILLANCE SERVICES

ANNEX IX AIR TRAFFIC FLOW MANAGEMENT

ANNEX X AIRSPACE MANAGEMENT

ANNEX XI PROCEDURE DESIGN

ANNEX XIII AIR TRAFFIC SAFETY PERSONNEL

Note: ANNEX VII Part DAT and ANNEX XII Part NM not included.

**The table below indicates which of the compliance matrices must be complete by which type of service provider**

**Service Providers must complete the relevant Compliance Matrices sections as indicated below**

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| **Compliance Matrix** | **Compliance Matrix Section** | **ATS** | **MET** | | | **AIS** | **CNS** | **ATFM** | | **ASM** | **FPD** |
| **Local only** | **METARS** | **Forecast** | **NATS (En Route)** | **ATS Units** |
| ANNEX III | Section 1 | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |
| Section 2 | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |
| Section 3 | **X** | **X** | **X** | **X** | **X** | **X** |  |  |  |  |
| Section 4 | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |
| Section 5 | **X** |  |  |  |  |  |  |  |  |  |
| Section 6 | **\*** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |
| ANNEX IV | Sections 1 to 4 | **X** |  |  |  |  |  |  |  |  |  |
| ANNEX V | Section 1 |  | **X** | **X** | **X** |  |  |  |  |  |  |
| Section 2 |  | **X** | **X** |  |  |  |  |  |  |  |
| Section 3 |  |  |  | **X** |  |  |  |  |  |  |
| Section 4 |  |  |  | **X** |  |  |  |  |  |  |
| Section 5 |  |  |  | **X** |  |  |  |  |  |  |
| Section 6 |  |  |  |  |  |  |  |  |  |  |
| Section 7 |  |  |  | **X** |  |  |  |  |  |  |
| ANNEX VI |  |  |  |  |  | **X** |  |  |  |  |  |
| ANNEX VIII |  |  |  |  |  |  | **X** |  |  |  |  |
| ANNEX IX | Section 1 |  |  |  |  |  |  | **X** |  |  |  |
| Section 2 |  |  |  |  |  |  |  | **X** |  |  |
| ANNEX X |  |  |  |  |  |  |  |  |  | **X** |  |
| ANNEX XI |  |  |  |  |  |  |  |  |  |  | **X** |
| ANNEX XIII |  |  |  |  |  |  | **X** |  |  |  |  |
| **\*ANNEX III Section 6 may be applicable to some ATS providers. See notes in Section 6**  **\*The Applicability of ANNEX XIII is dependent upon the scope as specified within each of the subparts of ANNEX XIII** | | | | | | | | | | | |

**Introduction to Compliance Matrix ANNEX V METEOROLOGICAL SERVICE REQUIREMENTS**

UK (EU) Regulation 2017/373 requires that Meteorological service providers must comply with the specific requirements detailed in Annex V of the regulation.

This Compliance Matrix contains all the Annex V MET specific Organisational Requirements (OR), Technical Requirements (TR) and Acceptable Means of Compliance (AMC).

It should be noted that some AMCs contain words ‘Should’ and ‘May’, unless an Alternative Means of Compliance (AltMoC) is approved and used the words ‘Should’ and ‘May’ are to be interpreted as ‘Shall’ and ‘Must’.

The compliance matrix should be used as a checklist to enable you to establish the level of compliance of your organisation with the new regulation and to identify areas where further action is required.

A list of the supporting documents referred to in the compliance matrix should be entered into the table below.

This Compliance Matrix is to be maintained and amended when changes are made to the supporting documents.

Applicants are to submit the completed compliance matrices and the referenced supporting documentation.

**How to complete this Compliance Matrix**

The Matrix is divided into seven sections:

**SECTION 1** - To be completed by all Meteorological Service Providers.

**SECTION 2** – To be Completed by Service Providers providing Local Reports and METARS only.

**SECTIONS 3, 4, 5 and 7** - To be completed the Meteorological Office.

**SECTION 6** Is not applicable in the UK and does not require completion. Included for reference only.

The Matrix is laid out in the format shown in the example below.

The first column lists the regulation and associated AMC. Where there is no AMC, compliance must be indicated against the regulation or the part of the regulation that has no AMC associated.

Where there is a Technical Requirement (TR) associated with an Organisational Requirement (OR) this is shown underneath the OR. No details of the TR content or its related AMC are provided in this document but should be considered when declaring compliance with the OR.

The second column provides a very brief description of the requirements.

The third column provides a link to the actual regulation or AMC so full details of the requirement can be viewed as shown below. After viewing the regulation or AMC clicking on the ‘return link’ will bring you back to where you were in the compliance matrix. The third column also provides links to UK Guidance Material (UK GM) where applicable.

The original UK (EU) Regulation No 2017/373 and current AMC and GM can be accessed via the CAA web site. [ATM/ANS provision of services | Civil Aviation Authority (caa.co.uk)](https://info.caa.co.uk/uk-regulations/atmans-provision-of-services/)

The requirements and AMC listed below are in the order shown in the regulation

Under each requirement a space is provided to enable you to indicate in which of your organisation’s documents compliance can be demonstrated.

Unless specifically asked for, statements of compliance are not required within the compliance matrix.

Where your organisation is not yet compliant with a requirement enter ‘UNDER DEVELOPMENT’ followed by a target date for completion. This should be no more than 6 months. Items marked as under development will be in the scope of the next routine oversight audit.

Complete all relevant sections and send the compliance matrix and supporting documentation to [ansp.certification@caa.co.uk](mailto:ansp.certification@caa.co.uk)

**Example of compliance matrix**

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| **The Regulation and AMC** | **Requirements for all providers (except where indicated)** | **Link** |
| **ATM/ANS.OR.A.055 Findings and corrective actions** | Document a process for dealing with findings raised by the CAA. Identify root cause and development of corrective action plan | 373 |
| **AMC1 ATM/ANS.OR.A.055(b) Findings and corrective actions** | This relates to the scope of the corrective action, include in above documented process | 373 |
| **Enter reference(s) where compliance is indicated** | Detailed in Management system procedure MSP.002 Audits and Findings |  |

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| **ATM/ANS.OR.A.055 Findings and corrective actions**  After receipt of notification of findings from the competent authority, the service provider shall:  (a) identify the root cause of the non-compliance;  (b) define a corrective action plan that meets the approval by the competent authority;  (c) demonstrate corrective action implementation to the satisfaction of the competent authority within the time period proposed by the service provider and agreed with that authority, as defined in point ATM/ANS.AR.C.050(e). | Return Link |
| **AMC1 ATM/ANS.OR.A.055(b) Findings and corrective actions**  **GENERAL**  The corrective action plan defined by the service provider should address the effects of the non-conformity and its root cause. | Return Link |

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| **Referenced Documents** | | | |
| **Index** | **Title of Document** | **Current Issue No.** | **Date of Issue** |
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| **Index** | **Title of Document** | **Current Issue No.** | **Date of Issue** |
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**Compliance Matrix SECTION 1**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**GENERAL REQUIREMENTS**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable to **all meteorological service providers**

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| **The Regulation and AMC** | **Requirements for all meteorological providers (except where indicated)** | **Link** |
| **MET.OR.100 Meteorological data and information** **(a)** | A meteorological services provider shall provide operators, flight crew members, air traffic services units, search and rescue services units, aerodrome operators, accident and incident investigation bodies, and other service providers and aviation entities with the meteorological information necessary for the performance of their respective functions, as determined by the competent authority. *(Note AMC requirements below).* | [373](#OR_100) |
| **AMC1 MET.OR.100(a)** **Meteorological data and information** | Provide a reference that indicates that an agreement between the meteorological services provider and the appropriate ATS unit has been established that covers the following:  (a) the provision in air traffic services units of displays related to semi automatic observing systems or automatic observing systems and;  (b) the calibration and maintenance of these displays/instruments and;  (c) the use to be made of these displays/instruments by air traffic services personnel and;  (d) as and where necessary, supplementary visual observations, such as meteorological phenomena of operational significance in the climb-out and approach areas, if and when made by air traffic services personnel to update or supplement the information supplied by the meteorological station and;  (e) meteorological information obtained from aircraft taking off or landing such as on wind shear; and  (f) if available, meteorological information obtained from ground weather radar.  Amended by ED Decision 2020/008/R | [373](#AMC1_OR_100a) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.100 Meteorological data and information (b****)** | Provide a reference that indicates how the following is achieved:  Confirmation of the operationally desirable accuracy of the information distributed for operations, including the source of such information, whilst also ensuring that such information is distributed in a timely manner and updated, as required. | [373](#OR_100) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.105 Retention of meteorological information (a)** | Provide a reference that indicates that a process is documented for ensuring that meteorological information issued is retained for a period of at least 30 days from the date of issue. | [373](#OR_105) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.105 Retention of meteorological information (b)** | Provide a reference which indicates that a process is documented for ensuring that meteorological information issued shall be made available, on request, for inquiries or investigations and which shall be retained until the inquiry or investigation is completed. | [373](#OR_105) |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.110 Meteorological** **information exchange requirements (a)** | Provide a reference which indicates that your organisation ensures that it has systems and processes in place, as well as access to suitable telecommunications facilities to:  (a) enable the exchange of operational meteorological information with other meteorological services providers. | [373](#OR_110) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.110 Meteorological information exchange requirements (b)** | Provide a reference which indicates that your organisation ensures that it has systems and processes in place, as well as access to suitable telecommunications facilities to:  (b) provide the required meteorological information to the users in a timely manner. | [373](#OR_110) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.115 Meteorological** **bulletins** | Provide a reference which indicates that your organisation details how meteorological bulletins are provided to the relevant users, via the aeronautical fixed service or the internet. | [373](#OR_115) |
| **MET.TR.115 Meteorological bulletins** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.120 Notification of** **discrepancies to the world area forecast centres (WAFC)** | Provide a reference which indicates that, when your organisation is the services provider responsible for the area concerned, how the WAFC concerned is notified immediately, using WAFS BUFR data, if significant discrepancies are detected or reported in respect of WAFS significant weather (SIGWX) forecasts, concerning:  (a) icing, turbulence, cumulonimbus clouds that are obscured, frequent, embedded, or occurring at a squall line, and sandstorms/dust storms;  (b) volcanic eruptions or a release of radioactive materials into the atmosphere of significance to aircraft operations. | [373](#OR_120) |
| **Enter reference(s) where compliance is indicated** |  |  |

**Compliance Matrix SECTION 2**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 1 — REQUIREMENTS FOR AERONAUTICAL METEOROLOGICAL STATIONS**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable service providers providing METARS and/or Local Reports only.

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| **The Regulation and AMC** | **Requirements for Local Reports and METARS providers only (except where indicated)** | **Link** |
| **MET.OR.200 Meteorological reports and other information (a) (1)** | Provide a reference which indicates that your organisation details how the following are disseminated:  (1) local routine reports at fixed intervals, only for dissemination at the aerodrome of origin; *(Note AMC requirements below).* | [373](#OR_200) |
| **MET.TR.200 Meteorological reports and other information**  **Regulation** |
| **AMC1 MET.OR.200(a)(1)** **Meteorological reports and other information** | **ROUTINE OBSERVATIONS**  Meteorological stations should make routine observations throughout the 24 hours of each day or as determined by the competent authority. | [373](#AMC1_OR_200a1) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.200 Meteorological reports and other information (a) (2)** | Provide a reference which indicates that your organisation details how the following are disseminated  (2) local special reports, only for dissemination at the aerodrome of origin; | [373](#OR_200) |
| **MET.TR.200 Meteorological reports and other information**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.200 Meteorological** **reports and other information (a) (3)** | **Only applicable to aerodromes providing METARS**  Provide a reference which indicates that your organisation details how the following are disseminated:  METAR at half-hourly intervals at aerodromes serving scheduled international commercial air transport operations for dissemination beyond the aerodrome of origin. *(Note AMC requirements below and complete as applicable).* | [373](#OR_200) |
| **MET.TR.200 Meteorological reports and other information**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **AMC1 MET.OR.200(a)(3)** **Meteorological reports and other information** | **Only applicable to aerodromes providing METARS**  **METAR**  At aerodromes that are not operational throughout the 24 hours provide a reference that indicates that how your organisation ensures that the issuance of a METAR commences at least 3 hours prior to the aerodrome resuming operations, or as agreed between the meteorological services provider and the operators concerned to meet pre-flight and in-flight planning requirements for flights due to arrive at the aerodrome as soon as it is opened for use. | [373](#AMC1_OR_200a3) |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.200 Meteorological** **reports and other information (b)** | Provide a reference which indicates that your organisation details how the air traffic service units and aeronautical information service of an aerodrome are informed of changes in the serviceability status of the automated equipment used for assessing runway visual range. | [373](#OR_200) |
| **MET.TR.200 Meteorological reports and other information**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.200 Meteorological reports and other information (c)** | Provide a reference which indicates that your organisation details how reports are made to the associated air traffic services unit, aeronautical information services unit, and meteorological watch office relating to the occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud and formatted in accordance with the requirements of AMC1 MET.OR.200(c) *(Note AMC requirements below).* | [373](#OR_200) |
| **MET.TR.200 Meteorological reports and other information**  **Regulation** |
| **AMC1 MET.OR.200(c)** **Meteorological reports and other information** | **VOLCANIC ACTIVITY REPORT**  The report of occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds should be made in the format of a volcanic activity report comprising the following meteorological information in the order indicated:  (a) message type, VOLCANIC ACTIVITY REPORT;  (b) station identifier, location indicator or name of station;  (c) date/time of message;  (d) location of volcano and name, if known; and  (e) concise description of the event including, as appropriate, level of intensity of volcanic activity, occurrence of an eruption and its date and time and the existence of a volcanic ash cloud in the area together with direction of ash cloud movement and height | [373](#AMC1_OR_200c) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.205 Reporting of** **meteorological elements (First Part)** | **Only applicable to aerodromes providing METARS**  Provide a reference which indicates how your organisation ensures that the contents of the aeronautical meteorological station report comply with that detailed in this requirement (a) to (h) | [373](#OR_205) |
| **MET.TR.205 Reporting of meteorological elements** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.205 Reporting of meteorological elements (Second Part)** | **Only applicable to aerodromes that DO NOT provide METARS**  Where authorised by the competent authority, at aerodromes not serving scheduled international commercial air transport operations, an aeronautical meteorological station may report only a subset of the meteorological elements as relevant to the types of flights at that aerodrome. This data set shall be published in the aeronautical information publication.  Provide a reference which indicates how your organisation ensures that the contents of the aeronautical meteorological station report comply with that detailed in this requirement and how the data is published in the AIP. | [373](#OR_205) |
| **MET.TR.205 Reporting of meteorological elements** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.210 Observing** **meteorological elements (First Part)** | **Only applicable to aerodromes providing METARS**  Provide a reference which indicates how your organisation ensures that observations and/or measurements made/taken comply with that detailed in this requirement (a) to (h). | [373](#OR_210) |
| **MET.TR.210 Observing meteorological elements** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.210 Observing meteorological elements (Second Part)** | **Only applicable to aerodromes that DO NOT provide METARS**  Where authorized by the competent authority, at aerodromes not serving scheduled international commercial air transport operations, an aeronautical meteorological station may observe and/or measure only a subset of the meteorological elements as relevant to the types of flights at that aerodrome. This data set shall be published in the aeronautical information publication.  Provide a reference which indicates how your organisation ensures that observations/measurements made comply with that detailed in this requirement. | [373](#OR_210) |
| **MET.TR.210 Observing meteorological elements** |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **AMC1 MET.OR.210 Observing meteorological elements** | **DISPLAY** Where automated equipment forms part of an integrated semi-automatic observing system or automatic observing systems, displays of data which are made available to the local ATS units should be a subset of and displayed parallel to those available in the aeronautical meteorological stations or meteorological offices. In those displays, each meteorological element should be annotated to identify, as appropriate, the locations for which the element is representative.  Amended by ED Decision 2020/008/R | [373](#AMC1_OR_210) |
|  | **Statement Only** |  |
| **AMC2 MET.OR.210 Observing meteorological elements (a)** | **CLIMATOLOGICAL INFORMATION**  (a) Meteorological observations for regular and alternate aerodromes should be collected, processed and stored in a form suitable for the preparation of aerodrome climatological information. State where it is detailed | [373](#AMC2_OR_210) |
|  | ‘Response not required - Climatological information for certain UK aerodromes is available for civil aviation purposes from the Met Office, according to certain criteria. For details refer to the UK Aeronautical Information Package, General Information section, GEN 3.5 Meteorological Services’. |  |
| **AMC2 MET.OR.210 Observing meteorological elements (b)** | **CLIMATOLOGICAL INFORMATION**  (b) Aeronautical climatological information should be exchanged on request between meteorological services providers. | [373](#AMC2_OR_210) |
|  | ‘Response not required - Climatological information for certain UK aerodromes is available for civil aviation purposes from the Met Office, according to certain criteria. For details refer to the UK Aeronautical Information Package, General Information section, GEN 3.5 Meteorological Services’. |  |

**Compliance Matrix SECTION 3**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 2 — REQUIREMENTS FOR AERODROME METEOROLOGICAL OFFICES**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable to the Meteorological Office only

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| **The Regulation and AMC** | **Requirements for the Meteorological Office** | **Link** |
| **MET.OR.215 (a) Forecasts and other information** | Provide a reference which indicates how your organisation prepares and/or obtains forecasts and other relevant meteorological information necessary for the performance of its respective functions for flights with which it is concerned, as determined by the competent authority; *(Note AMC requirements below).* | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **AMC1 MET.OR.215(a) Forecasts and other information** | **METEOROLOGICAL DATA TYPE**  On request by the operator, the meteorological information supplied for flight planning should include data for the determination of the lowest usable flight level. | [373](#AMC1_OR_215a) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (b) Forecasts and other information** | Provide a reference which indicates how your organisation provides forecasts and/or warnings for local meteorological conditions on aerodromes for which it is responsible. | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (c) Forecasts and other information** | Provide a reference which indicates how your organisation keeps the forecasts and warnings under continuous review and issues amendments promptly when necessary, and cancel any forecast of the same type previously issued for the same place and for the same period of validity or part thereof. *(Note AMC requirements below).* | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **AMC1 MET.OR.215(c) Forecasts and other information** | **FORMAT OF FORECASTS**  The length of the forecast messages and the number of changes indicated in the forecast should be kept to a minimum. | [373](#AMC1_OR_215c) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (d) Forecasts and other information** | Provide a reference which indicates how your organisation provides briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel. | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.215 (e) Forecasts and other information** | Provide a reference which indicates how your organisation provides climatological information. *(Note AMC requirements below).* | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **AMC1 MET.OR.215(e) Forecasts and other information** | **CLIMATOLOGICAL INFORMATION**  The aerodrome meteorological office should make available such climatological tables within a time period as agreed between the competent authority and the relevant user. | [373](#AMC1_OR_215e) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (f) Forecasts and other information** | Provide a reference which indicates how your organisation provides its associated air traffic services unit, aeronautical information service unit and meteorological watch office with information received on pre-eruption volcanic activity, a volcanic eruption or volcanic ash cloud. *(Note AMC requirements below).* | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **AMC1 MET.OR.215(f) Forecasts and other information (a) (b)** | **AIS — NOTAM/ASHTAM AND AIC**  The aerodrome meteorological office should provide the relevant aeronautical information service provider with meteorological information:  (a) necessary for the preparation of NOTAM or ASHTAM, including, in particular, information on the establishment, withdrawal and significant changes in operation of aeronautical meteorological services sufficiently in advance of the effective date to permit issuance of NOTAM; and  (b) necessary for the preparation of aeronautical information circulars, including, in particular, meteorological information on expected important changes in aeronautical meteorological procedures, services and facilities provided. | [373](#AMC1_OR_215f) |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.215 (g) Forecasts and other information** | Provide a reference which indicates how your organisation provides, if applicable, meteorological information to search and rescue services units and maintains liaison with the search and rescue services unit(s) throughout a search and rescue operation. *(Note AMC requirements below).* | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **AMC1 MET.OR.215(g) Forecasts and other information** | **SEARCH AND RESCUE**  To facilitate search and rescue operations, the aerodrome meteorological office or meteorological watch office should provide:  (a) complete and detailed meteorological information on the current and forecast meteorological conditions in the search area;  (b) current and forecast conditions en-route, covering flights by search aircraft from and returning to the aerodrome from which the search is being conducted; and  (c) on request from the rescue coordination centre, meteorological information required by ships undertaking search and rescue operations. | [373](#AMC1_OR_215g) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (h) Forecasts and other information** | Provide a reference which indicates how your organisation provides meteorological information to relevant aeronautical information services units, as necessary, for the conduct of their functions. | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.215 (i) Forecasts and other information** | Provide a reference which indicates how your organisation prepares and/or obtains forecast and other relevant meteorological information necessary for the performance of the ATS units functions in accordance with point MET.OR.242. | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.215 (j) Forecasts and other information** | Provide a reference which indicates how your organisation provides its associated air traffic services unit, aeronautical information service unit and meteorological watch offices with information received on the release of radioactive materials into the atmosphere. | [373](#OR_215) |
| MET.TR.215 Forecast and other information |
| **Enter reference(s) where compliance is indicated** |  |  |
| MET.OR.220 Aerodrome forecasts (a) (b) | Provide a reference which indicates how your organisation,  (a) Issues aerodrome forecasts as a TAF at a specified time and;  (b) When issuing TAF, the aerodrome meteorological office shall ensure that not more than one TAF is valid at an aerodrome at any given time. | [373](#OR_220) |
| MET.TR.220 Aerodrome forecasts |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.225 Forecasts for landing (a) (b) (c)** | Provide a reference which indicates how your organisation,  (a) prepares forecasts for landing as determined by the competent authority and ensures that;  (b) This forecast for landing shall be issued in the form of a TREND forecast and that;  (c) The period of validity of a TREND forecast shall be 2 hours from the time of the report which forms part of the landing forecast. | [373](#OR_225) |
| MET.TR.225 Forecasts for landing |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.230 Forecasts for take-off (a) (b)** | Provide a reference which indicates how your organisation,  (a) prepares forecasts for take-off as determined by the competent authority;  (b) supply’s forecasts for take-off to operators and flight crew members on request within the 3 hours before the expected time of departure. | [373](#OR_230) |
| MET.TR.230 Forecasts for take-off |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.235 Aerodrome warnings and wind shear warnings and alerts (a) (b) (c) (d)** | Provide a reference which indicates how your organisation,  (a) provides aerodrome warnings information and;  (b) prepares wind shear warnings for aerodromes where wind shear is considered a factor, in accordance with local arrangements with the appropriate ATS unit and operators concerned and;  (c) issues, at aerodromes where wind shear is detected by automated, ground-based, wind shear remote-sensing or detection equipment, wind shear alerts generated by these systems and;  (d) cancel warnings when the conditions are no longer occurring and/or no longer expected to occur at the aerodrome. *(Note AMC requirements below).* | [373](#OR_235) |
| **MET.TR.235 Aerodrome warnings and wind shear warnings and alerts** |
| **AMC1 MET.OR.235(c) Aerodrome warnings and wind shear warnings and alerts** | **WIND SHEAR FOLLOW-UP**  Wind shear alerts should be updated at least every minute. They should be cancelled as soon as the headwind/tailwind change falls below 15 kt (7.5 m/s).  Amended by ED Decision 2020/008/R | [373](#AMC1_OR_235b) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a)** **(1)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  (1) forecasts, originating from the WAFS, of the elements listed in points (1) and (2) of point MET.OR.275(a). | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (2)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  METAR or SPECI, including TREND forecasts, TAF or amended TAF for the aerodromes of departure and intended. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (3)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Aerodrome forecasts for take-off. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (4)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  SIGMET and special air-reports relevant to the whole route; ( | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.240 Information for use by operator or flight crew (a) (5****)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Volcanic ash and tropical cyclone advisory information relevant to the whole route. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (6)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Area forecasts for low-level flights in chart form prepared in support of the issuance of an AIRMET message, and an AIRMET message for low-level flights relevant to the whole route. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (7)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Aerodrome warnings for the local aerodrome. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (8)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Meteorological satellite images. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (a) (9)** | Provide a reference which indicates how your organisation provides operators and flight crew members with,  Ground-based weather radar information. (1) forecasts, originating from the WAFS, of the elements listed in points (1) and (2) of point MET.OR.275(a). | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.240 Information for use by operator or flight crew (b)** | Provide a reference which indicates how your organisation ensures that whenever the meteorological information to be included in the flight documentation differs materially from that made available for flight planning, the aerodrome meteorological office shall:  (1) advise immediately the operator or flight crew concerned;  (2) if practicable, provide the revised meteorological information in agreement with the operator. | [373](#OR_240) |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.242 Information to be provided to air traffic services units (a)** | Provide a reference which indicates how your organisation provides, as necessary, its associate aerodrome control tower with:  (1) local routine and special reports, METAR, TAF and TREND forecasts and amendments thereto and;  (2) SIGMET and AIRMET information, wind shear warnings and alerts and aerodrome warnings and ;  (3) any additional meteorological information agreed upon locally, such as forecasts of surface wind for the determination of possible runway changes and;  (4) information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the aerodrome meteorological office and the aerodrome control tower concerned and;  (5) information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the aerodrome meteorological office and the aerodrome control tower concerned. | [373](#OR_242) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.242 Information to be provided to air traffic services units (b)** | Provide a reference which indicates how your organisation provides its associate approach control unit with:  (1) local routine and special reports, METAR, TAF and TREND forecasts and amendments thereto;  (2) SIGMET and AIRMET information, wind shear warnings and alerts and appropriate special air-reports and aerodrome warnings;  (3) any additional meteorological information agreed upon locally;  (4) information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the aerodrome meteorological office and the approach control unit concerned;  (5) information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the aerodrome meteorological office and the approach control unit concerned. | [373](#OR_242) |
| **Enter reference(s) where compliance is indicated** |  |  |

**Compliance Matrix SECTION 4**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 3 — REQUIREMENTS METEOROLOGICAL WATCH OFFICES**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable to the Meteorological Office only

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| **The Regulation and AMC** | **Requirements for the Meteorological Office** | **Link** |
| **MET.OR.245 Meteorological watch and other information (a)** | Provide a reference which indicates how your organisation maintains, within its area of responsibility, continuous watch over meteorological conditions affecting flight operations. *(Note AMC requirements below).* | [373](#OR_245) |
| **AMC1 MET.OR.245(a) Meteorological watch and other information** | **BOUNDARIES**  The boundaries of the area over which meteorological watch is to be maintained by a meteorological watch office should be coincident with the boundaries of a flight information region or a control area or a combination of flight information regions and/or control areas. | [373](#AMC1_OR_245a) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (b)** | Provide a reference which indicates how your organisation coordinates with the organisation responsible for the provision of NOTAM and/or ASHTAM to ensure that meteorological information on volcanic ash included in SIGMET and NOTAM and/or ASHTAM messages is consistent. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (c)** | Provide a reference which indicates how your organisation coordinates with selected volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (d****)** | Provide a reference which indicates how your organisation provides its associated VAAC with information received on pre-eruption volcanic activity, a volcanic eruption and volcanic ash cloud for which a SIGMET has not already been issued. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (e)** | Provide a reference which indicates how your organisation provides its aeronautical information service units with information received on the release of radioactive materials into the atmosphere in the area or adjacent areas for which it maintains watch and for which a SIGMET has not already been issued. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f)** **(1)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  (1) METAR, including current pressure data for aerodromes and other locations, TAF and trend forecasts and amendments thereto. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (2)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Forecasts of upper winds, upper-air temperatures and significant en-route weather phenomena and amendments thereto, SIGMET and AIRMET information and appropriate special air-reports. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (3)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Any other meteorological information required by the ACC/FIC to meet requests from aircraft in flight. *(Note AMC requirements below).* | [373](#OR_245) |
| **AMC1 MET.OR.245(f)(3)** **Meteorological watch and other information** | **AIRCRAFT IN FLIGHT**  If the information requested from an aircraft in flight is not available in the associated meteorological watch office, that meteorological watch office should request the assistance of another meteorological office in providing it.  State where the above requirement is detailed | [373](#AMC1_OR_245f3) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (4)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the meteorological watch office and the ACC/FIC. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (5)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant  Information received concerning the release of radioactive material into the atmosphere, as agreed between the meteorological watch office and the ACC/FIC. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (6)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Tropical cyclone advisory information issued by a TCAC in its area of responsibility. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (7)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Volcanic ash advisory information issued by a VAAC in its area of responsibility. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.245 Meteorological watch and other information (f) (8)** | Provide a reference which indicates how your organisation provides its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  Information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the meteorological watch office and the ACC/FIC. | [373](#OR_245) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.250 SIGMET messages (a)** | Provide a reference which indicates how your organisation provides and disseminates SIGMET messages; *(Note AMC requirements below).* | [373](#OR_250) |
| **MET.TR.250 SIGMET messages** |
| **AMC1 MET.OR.250(a) SIGMET** | **FIR AND CTA**  Meteorological watch offices whose area of responsibility encompasses more than one FIR and/or CTA should provide separate SIGMET for each FIR and/or CTA.  Amended by ED Decision 2020/008/R | [373](#AMC1_OR_250a) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.250 SIGMET messages (b)** | Provide a reference which indicates how your organisation ensures that the SIGMET message is cancelled when the phenomena are no longer occurring or are no longer expected to occur in the area covered by the SIGMET message. | [373](#OR_250) |
| **MET.TR.250 SIGMET messages** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.250 SIGMET messages (c)** | Provide a reference which indicates how your organisation ensures that the period of validity of a SIGMET message is not more than 4 hours, and in the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, it shall be extended up to 6 hours. *(Note AMC requirements below).* | [373](#OR_250) |
| **MET.TR.250 SIGMET messages** |
| **AMC1 MET.OR.250(c) SIGMET** **messages** | **SOURCE**  SIGMET concerning volcanic ash clouds and tropical cyclones should be based on advisory information provided by VAACs and Tropical Cyclone Advisory Centres (TCACs), respectively.  Amended by ED Decision 2020/008/R | [373](#AMC1_OR_250c) |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.250 SIGMET messages (d)** | Provide a reference which indicates how your organisation ensures that SIGMET messages are issued not more than 4 hours before the commencement of the period of validity, and in the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, as soon as practicable, but not more than 12 hours before the commencement of the period of validity, and updated at least every 6 hours. | [373](#OR_250) |
| **MET.TR.250 SIGMET messages** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.255 AIRMET messages (a)** | Provide a reference which indicates how your organisation provides and disseminate AIRMET messages when the competent authority has determined that the density of traffic operating below flight level 100, or up to flight level 150 in mountainous areas, or higher, where necessary, warrants the issue and dissemination of area forecasts for such operations. *(Note AMC requirements below).* | [373](#OR_255) |
| **MET.TR.255 AIRMET messages** |
| **MET.OR.255 AIRMET messages (b)** | Provide a reference which indicates how your organisation cancels the AIRMET message when the phenomena are no longer occurring or are no longer expected to occur in the area. | [373](#OR_255) |
| **MET.TR.255 AIRMET messages** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.255 AIRMET messages (c)** | Provide a reference which indicates how your organisation ensures that the period of validity of an AIRMET message is not more than 4 hours. | [373](#OR_255) |
| **MET.TR.255 AIRMET messages** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.260 Area forecasts for low-level flights (a)** | Provide a reference which indicates how your organisation provides area forecast for low-level flights when the density of traffic operating below flight level 100, or up to flight level 150 in mountainous areas, or higher, where necessary, warrants the routine issue and dissemination of area forecasts for such operations. | [373](#OR_260) |
| **MET.TR.260 Area forecasts for low-level flights** |
| **Enter reference(s) where compliance is indicated** |  |  |

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| **MET.OR.260 Area forecasts for low-level flights (b)** | Provide a reference which indicates how your organisation ensures that the frequency of issue, the form, and the fixed time or period of validity of area forecast for low-level flights and the criteria for amendments thereto, are as determined by the competent authority. | [373](#OR_260) |
| **MET.TR.260 Area forecasts for low-level flights** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.260 Area forecasts for low-level flights (c)** | Provide a reference which indicates how your organisation ensures that area forecasts for low-level flights prepared in support of the issuance of an AIRMET message are issued every 6 hours for a period of validity of 6 hours and transmitted to the meteorological watch offices concerned not later than 1 hour prior to the beginning of their validity period. | [373](#OR_260) |
| **MET.TR.260 Area forecasts for low-level flights** |
| **Enter reference(s) where compliance is indicated** |  |  |

**Compliance Matrix SECTION 5**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 4 — REQUIREMENTS FOR VOLCANIC ASH ADVISORY CENTRE (VAAC)**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable to the Meteorological Office only

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| **The Regulation and AMC** | **Requirements for the Meteorological Office** | **Link** |
| **MET.OR.265 Volcanic ash advisory centre responsibilities (a)** | In its role as the VAAC and within its area of responsibility, provide a reference which indicates how your organisation will meet the following requirements:  When a volcano has erupted, or is expected to erupt, or volcanic ash is reported, provide advisory information regarding the extent and forecast movement of the volcanic ash cloud to:  (1) the European aviation crisis coordination cell and;  (2) meteorological watch offices serving flight information regions in its area of responsibility which may be affected and;  (3) operators, area control centres, and flight information centres serving flight information regions in its area of responsibility which may be affected and;  (4) world area forecast centres, international OPMET databanks, international NOTAM offices and centres designated by regional air navigation agreement for the operation of aeronautical fixed service satellite distribution systems and;  (5) other VAACs whose areas of responsibility may be affected. | [373](#OR_265) |
| **MET.TR.265 Volcanic ash advisory centre responsibilities**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.265 Volcanic ash advisory centre responsibilities (b)** | In its role as the VAAC and within its area of responsibility, provide a reference which indicates how your organisation will meet the following requirement:  Coordinate with selected volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner. | [373](#OR_265) |
| **MET.TR.265 Volcanic ash advisory centre responsibilities**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.265 Volcanic ash advisory centre responsibilities (c)** | In its role as the VAAC and within its area of responsibility, provide a reference which indicates how your organisation will meet the following requirement:  Provide the advisory meteorological information referred to in point (a)of MET.OR.265 at least every 6 hours until such time as the volcanic ash cloud is no longer identifiable from satellite data, no further meteorological reports of volcanic ash are received from the area and no further eruptions of the volcano are reported. | [373](#OR_265) |
| **MET.TR.265 Volcanic ash advisory centre responsibilities**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.265 Volcanic ash advisory centre responsibilities (d)** | In its role as the VAAC and within its area of responsibility, provide a reference which indicates how your organisation will meet the following requirement:  Maintain a 24-hour watch. | [373](#OR_265) |
| **MET.TR.265 Volcanic ash advisory centre responsibilities**  **Regulation** |
| **Enter reference(s) where compliance is indicated** |  |  |

**Compliance Matrix SECTION 6**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 5 — REQUIREMENTS FOR TROPICAL CYCLONE ADVISORY CENTRE (TCAC)**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation NOT APPLICABLE IN THE UK

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| **MET.OR.270 Tropical cyclone advisory centre responsibilities (a)** | A TCAC shall issue:  (a) advisory information concerning the position of the cyclone centre, its direction and speed of movement, central pressure and maximum surface wind near the centre in abbreviated plain language to:  (1) meteorological watch offices in its area of responsibility.  (2) other TCACs whose areas of responsibility may be affected.  (3) world area forecast centres, international OPMET databanks and centres responsible for the operation of aeronautical fixed service satellite distribution systems; |  |
|  | No content required |  |
| **MET.OR.270 Tropical cyclone advisory centre responsibilities (b)** | (b) updated advisory information to meteorological watch offices for each tropical cyclone, as necessary, but at least every 6 hours. |  |
|  | No content required |  |

**Compliance Matrix SECTION 7**

**ANNEX V —SUBPART A — ADDITIONAL ORGANISATIONAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES (MET.OR)**

**SPECIFIC REQUIREMENTS**

**CHAPTER 5 — REQUIREMENTS FOR WORLD AREA FORECAST CENTRE (WAFC)**

This section of the compliance matrix contains extracts from the above annexe and subpart of the regulation that are applicable to the Meteorological Office only

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| **The Regulation and AMC** | **Requirements for the Meteorological Office** | **Link** |
| **MET.OR.275 World area forecast centre responsibilities (a) (1)** | Provide a reference which indicates how your organisation ensures that the WAFC shall provide, in a digital form, gridded global forecasts of:  (i) upper wind.  (ii) upper-air temperature and humidity.  (iii) geopotential altitude of flight levels.  (iv) flight level and temperature of tropopause.  (v) direction, speed and flight level of maximum wind.  (vi) cumulonimbus clouds.  (vii) icing.  (viii) turbulence. | [373](#OR_275) |
| **MET.TR.275 World area forecast centre responsibilities** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.275 World area forecast centre responsibilities (a) (2)** | Provide a reference which indicates how your organisation ensures that the WAFC shall provide, in a digital form, global forecasts of significant weather (SIGWX) phenomena, including volcanic activity and release of radioactive materials. | [373](#OR_275) |
| **MET.TR.275 World area forecast centre responsibilities** |
| **Enter reference(s) where compliance is indicated** |  |  |
| **MET.OR.275 World area forecast centre responsibilities (b)** | Provide a reference which indicates how your organisation ensures that world area forecast system products, in digital form, are transmitted using binary data communications techniques. | [373](#OR_275) |
| **MET.TR.275 World area forecast centre responsibilities** |
| **Enter reference(s) where compliance is indicated** |  |  |

**The UK (EU) Regulations and the AMC reference material**

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| **MET.OR.100 Meteorological data and information**  (a) A meteorological services provider shall provide operators, flight crew members, air traffic services units, search and rescue services units, aerodrome operators, accident and incident investigation bodies, and other service providers and aviation entities with the meteorological information necessary for the performance of their respective functions, as determined by the competent authority.  (b) A meteorological services provider shall confirm the operationally desirable accuracy of the information distributed for operations, including the source of such information, whilst also ensuring that such information is distributed in a timely manner and updated, as required. | [Return OR 100 (a)](#RETURN_OR_100a) |
| [Return OR 100 (b)](#RETURN_OR_100b) |
|  |
| **AMC1 MET.OR.100(a) Meteorological data and information**  **INFORMATION TO BE PROVIDED**  An agreement between the meteorological services provider and the appropriate ATS unit should be established to cover:  (a) the provision in air traffic services units of displays related to semi-automatic observing systems or automatic observing systems;  (b) the calibration and maintenance of these displays/instruments;  (c) the use to be made of these displays/instruments by air traffic services personnel;  (d) as and where necessary, supplementary visual observations, such as meteorological phenomena of operational significance in the climb-out and approach areas, if and when made by air traffic services personnel to update or supplement the information supplied by the meteorological station;  (e) meteorological information obtained from aircraft taking off or landing such as on wind shear; and  (f) if available, meteorological information obtained from ground weather radar. | [Return AMC1 0R 100 (a)](#RETURN_AMC1_OR_100a) |
|  | |
| **MET.OR.105 Retention of meteorological information**  (a) A meteorological services provider shall retain meteorological information issued for a period of at least 30 days from the date of issue.  (b) This meteorological information shall be made available, on request, for inquiries or investigations and, for these purposes, shall be retained until the inquiry or investigation is completed. | [Return OR 105 (a)](#RETURN_OR_105) |
| [Return OR 105 (b)](#RETURN_OR_105_b) |

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| **MET.OR.110 Meteorological information exchange requirements**  A meteorological services provider shall ensure it has systems and processes in place, as well as access to suitable telecommunications facilities to:  (a) enable the exchange of operational meteorological information with other meteorological services providers;  (b) provide the required meteorological information to the users in a timely manner. | [Return OR 110 (a)](#RETURN_OR_110a) |
| [Return OR 110 (b)](#RETURN_OR_110b) |
|  |
| **MET.OR.115 Meteorological bulletins**  The meteorological services provider responsible for the area concerned shall provide meteorological bulletins to the relevant users, via the aeronautical fixed service or the internet. | [Return OR 115](#RETURN_OR_115) |
|  | |
| **MET.OR.120 Notification of discrepancies to the world area forecast centres (WAFC)**  The meteorological services provider responsible for the area concerned shall, using WAFS BUFR data, notify the WAFC concerned immediately if significant discrepancies are detected or reported in respect of WAFS significant weather (SIGWX) forecasts, concerning:  (a) icing, turbulence, cumulonimbus clouds that are obscured, frequent, embedded, or occurring at a squall line, and sandstorms/dust storms;  (b) volcanic eruptions or a release of radioactive materials into the atmosphere of significance to aircraft operations. | [Return OR 120](#RETURN_OR_120) |
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| **MET.OR.200 Meteorological reports and other information**  (a) An aeronautical meteorological station shall disseminate:  (1) local routine reports at fixed intervals, only for dissemination at the aerodrome of origin;  (2) local special reports, only for dissemination at the aerodrome of origin;  (3) METAR at half-hourly intervals at aerodromes serving scheduled international commercial air transport operations for dissemination beyond the aerodrome of origin.  (b) An aeronautical meteorological station shall inform the air traffic service units and aeronautical information service of an aerodrome of changes in the serviceability status of the automated equipment used for assessing runway visual range.  (c) An aeronautical meteorological station shall report to the associated air traffic services unit, aeronautical information services unit, and meteorological watch office the occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud.  (d) An aeronautical meteorological station shall establish a list of criteria to provide local special reports in consultation with the appropriate ATS units, operators and others concerned. | [Return OR 200 (a) (1)](#RETURN_OR_200_a_1) |
| [Return OR 200 (a) (2)](#RETURN_OR_200_a_2) |
| [Return OR 200 (a) (3)](#RETURN_OR_200_a_3) |
| [Return OR 200 (b)](#RETURN_OR_200b) |
| [Return OR 200 (c)](#RETURN_OR_200c) |

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| **AMC1 MET.OR.200(a)(1) Meteorological reports and other information**  **ROUTINE OBSERVATIONS**  Meteorological stations should make routine observations throughout the 24 hours of each day or as determined by the competent authority. | [Return AMC1 OR 200 (a) (1)](#RETURN_AMC1_OR_200a1) | |
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| **AMC1 MET.OR.200(a)(3) Meteorological reports and other information**  **METAR**  At aerodromes that are not operational throughout the 24 hours, the issuance of a METAR should commence at least 3 hours prior to the aerodrome resuming operations, or as agreed between the meteorological services provider and the operators concerned to meet pre-flight and in-flight planning requirements for flights due to arrive at the aerodrome as soon as it is opened for use. | [Return AMC1 OR 200 (a) (3)](#RETURN_AMC1_OR_200a3) | |
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| **AMC1 MET.OR.200(c) Meteorological reports and other information**  **VOLCANIC ACTIVITY REPORT**  The report of occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds should be made in the format of a volcanic activity report comprising the following meteorological information in the order indicated:  (a) message type, VOLCANIC ACTIVITY REPORT;  (b) station identifier, location indicator or name of station;  (c) date/time of message;  (d) location of volcano and name, if known; and  (e) concise description of the event including, as appropriate, level of intensity of volcanic activity, occurrence of an eruption and its date and time and the existence of a volcanic ash cloud in the area together with direction of ash cloud movement and height | | [Return AMC1 OR 200 (c)](#RETURN_AMC1_OR_200c) |

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| **MET.OR.205 Reporting of meteorological elements**  At aerodromes serving scheduled international commercial air transport operations, an aeronautical meteorological station shall report:  (a) surface wind direction and speed;  (b) visibility;  (c) runway visual range, if applicable;  (d) present weather at the aerodrome and its vicinity;  (e) clouds;  (f) air temperature and dew point temperature;  (g) atmospheric pressure;  (h) supplementary information when applicable.  Where authorised by the competent authority, at aerodromes not serving scheduled international commercial air transport operations, an aeronautical meteorological station may report only a subset of the meteorological elements as relevant to the types of flights at that aerodrome. This data set shall be published in the aeronautical information publication. | [Return OR 200 First Part](#RETURN_OR_205_FirstPart) |
| [Return OR 200 Second Part](#RETURN_OR_205_SecondPart) |
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| **MET.OR.210 Observing meteorological elements**  At aerodromes serving scheduled international commercial air transport operations, an aeronautical meteorological station shall observe and/or measure:  (a) surface wind direction and speed;  (b) visibility;  (c) runway visual range, if applicable;  (d) present weather at the aerodrome and its vicinity;  (e) clouds;  (f) air temperature and dew point temperature;  (g) atmospheric pressure;  (h) supplementary information, when applicable:  Where authorized by the competent authority, at aerodromes not serving scheduled international commercial air transport operations, an aeronautical meteorological station may observe and/or measure only a subset of the meteorological elements as relevant to the types of flights at that aerodrome. *This data set shall be published in the aeronautical information publication (possible cut and paste error NA here)* | [Return OR 210 First Part](#RETURN_OR_210_FirstPart) |
| [Return OR 210 Second Part](#RETURN_OR_210_SecondPart) |

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| **AMC1 MET.OR.210 Observing meteorological elements**  **DISPLAY**  Where automated equipment forms part of an integrated semi-automatic observing system, displays of data which are made available to the local ATS units should be a subset of and displayed parallel to those available in the aeronautical meteorological stations or meteorological offices. In those displays, each meteorological element should be annotated to identify, as appropriate, the locations for which the element is representative. | [Return AMC1 OR 210](#RETURN_AMC1_OR_210) |
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| **AMC2 MET.OR.210 Observing meteorological elements**  **CLIMATOLOGICAL INFORMATION**  (a) Meteorological observations for regular and alternate aerodromes should be collected, processed and stored in a form suitable for the preparation of aerodrome climatological information.  (b) Aeronautical climatological information should be exchanged on request between meteorological services providers.  Amended by ED Decision 2020/008/R | [ReturnAMC2 OR 210](#RETURN_AMC2_OR_210a) |

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| **MET.OR.215 Forecasts and other information**  An aerodrome meteorological office shall:  (a) prepare and/or obtain forecasts and other relevant meteorological information necessary for the performance of its respective functions for flights with which it is concerned, as determined by the competent authority;  (b) provide forecasts and/or warnings for local meteorological conditions on aerodromes for which it is responsible;  (c) keep the forecasts and warnings under continuous review and issue amendments promptly when necessary, and cancel any forecast of the same type previously issued for the same place and for the same period of validity or part thereof;  (d) provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel;  (e) provide climatological information;  (f) provide its associated air traffic services unit, aeronautical information service unit and meteorological watch office with information received on pre-eruption volcanic activity, a volcanic eruption or volcanic ash cloud;  (g) provide, if applicable, meteorological information to search and rescue services units and maintain liaison with the search and rescue services unit(s) throughout a search and rescue operation;  (h) provide meteorological information to relevant aeronautical information services units, as necessary, for the conduct of their functions;  (i) prepare and/or obtain forecast and other relevant meteorological information necessary for the performance of the ATS units functions in accordance with point MET.OR.242;  (j) provide its associated air traffic services unit, aeronautical information service unit and meteorological watch offices with information received on the release of radioactive materials into the atmosphere. | [Return OR 215 (a)](#RETURN_OR_215) |
| [Return OR 215 (b)](#RETURN_OR_215b) |
| [Return OR 215 (c)](#RETURN_OR_215c) |
| [Return OR 215 (d)](#RETURN_OR_215d) |
| [Return OR 215 (e)](#RETURN_OR_215e) |
| [Return OR 215 (f)](#RETURN_OR_215f) |
| [Return OR 215 (g)](#RETURN_OR_215g) |
| [Return OR 215 (h)](#RETURN_OR_215h) |
| [Return OR 215 (i)](#RETURN_OR_215i) |
| [Return OR 215 (j)](#RETURN_OR_215j) |
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| **AMC1 MET.OR.215(a) Forecasts and other information**  **METEOROLOGICAL DATA TYPE**  On request by the operator, the meteorological information supplied for flight planning should include data for the determination of the lowest usable flight level. | [Return AMC1 OR 215 (a)](#RETURN_AMC1_OR_215a) |

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| **AMC1 MET.OR.215(c) Forecasts and other information**  **FORMAT OF FORECASTS**  The length of the forecast messages and the number of changes indicated in the forecast should be kept to a minimum. | [Return AMC1 OR 215 (c)](#RETURN_AMC1_OR_215c) |
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| **AMC1 MET.OR.215(e) Forecasts and other information**  **CLIMATOLOGICAL INFORMATION**  The aerodrome meteorological office should make available such climatological tables within a time period as agreed between the competent authority and the relevant user. | [Return AMC1 or 215 (e)](#RETURN_AMC1_OR_215e) |
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| **AMC1 MET.OR.215(f) Forecasts and other information**  **AIS — NOTAM/ASHTAM AND AIC**  The aerodrome meteorological office should provide the relevant aeronautical information service provider with meteorological information:  (a) necessary for the preparation of NOTAM or ASHTAM, including, in particular, information on the establishment, withdrawal and significant changes in operation of aeronautical meteorological services sufficiently in advance of the effective date to permit issuance of NOTAM; and  (b) necessary for the preparation of aeronautical information circulars, including, in particular, meteorological information on expected important changes in aeronautical meteorological procedures, services and facilities provided. | [Return AMC1 OR 215 (f)](#RETURN_AMC1_OR_215f) |
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| **AMC1 MET.OR.215(g) Forecasts and other information**  **SEARCH AND RESCUE**  To facilitate search and rescue operations, the aerodrome meteorological office or meteorological watch office should provide:  (a) complete and detailed meteorological information on the current and forecast meteorological conditions in the search area;  (b) current and forecast conditions en-route, covering flights by search aircraft from and returning to the aerodrome from which the search is being conducted; and  (c) on request from the rescue coordination centre, meteorological information required by ships undertaking search and rescue operations. | [Return AMC1 OR 215 (g)](#RETURN_AMC1_OR_215g) |

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| **MET.OR.220 Aerodrome forecasts**  (a) An aerodrome meteorological office shall issue aerodrome forecasts as a TAF at a specified time.  (b) When issuing TAF, the aerodrome meteorological office shall ensure that not more than one TAF is valid at an aerodrome at any given time. | [Return OR 220](#RETURN_OR_220) |
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| **MET.OR.225 Forecasts for landing**  (a) An aerodrome meteorological office shall prepare forecasts for landing as determined by the competent authority.  (b) This forecast for landing shall be issued in the form of a TREND forecast.  (c) The period of validity of a TREND forecast shall be 2 hours from the time of the report which forms part of the landing forecast. | [Return OR 225](#RETURN_OR_225) |
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| **MET.OR.230 Forecasts for take-off**  An aerodrome meteorological office shall:  (a) prepare forecasts for take-off as determined by the competent authority;  (b) supply forecasts for take-off to operators and flight crew members on request within the 3 hours before the expected time of departure. | [Return OR 230](#RETURN_OR_230) |
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| **MET.OR.235 Aerodrome warnings and wind shear warnings and alerts**  An aerodrome meteorological office shall:  (a) provide aerodrome warnings information;  (b) prepare wind shear warnings for aerodromes where wind shear is considered a factor, in accordance with local arrangements with the appropriate ATS unit and operators concerned;  (c) issue, at aerodromes where wind shear is detected by automated, ground-based, wind shear remote-sensing or detection equipment, wind shear alerts generated by these systems;  (d) cancel warnings when the conditions are no longer occurring and/or no longer expected to occur at the aerodrome. | [Return OR 235](#RETURN_OR_235) |
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| **AMC1 MET.OR.235(c) Aerodrome warnings and wind shear warnings and alerts**  **WIND SHEAR FOLLOW-UP**  Wind shear alerts should be updated at least every minute. They should be cancelled as soon as the headwind/tailwind change falls below 15 kt (7.5 m/s). | [Return AMC1 OR 235 (b)](#RETURN_AMC1_OR_235b) |

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| **MET.OR.240 Information for use by operator or flight crew**  a) An aerodrome meteorological office shall provide operators and flight crew members with:  (1) forecasts, originating from the WAFS, of the elements listed in points (1) and (2) of point MET.OR.275(a);  (2) METAR or SPECI, including TREND forecasts, TAF or amended TAF for the aerodromes of departure and intended landing, and for take-off, en-route and destination alternate aerodromes;  (3) aerodrome forecasts for take-off;  (4) SIGMET and special air-reports relevant to the whole route;  (5) volcanic ash and tropical cyclone advisory information relevant to the whole route;  (6) area forecasts for low-level flights in chart form prepared in support of the issuance of an AIRMET message, and an AIRMET message for low-level flights relevant to the whole route;  (7) aerodrome warnings for the local aerodrome;  (8) meteorological satellite images;  (9) ground-based weather radar information.  (b) Whenever the meteorological information to be included in the flight documentation differs materially from that made available for flight planning, the aerodrome meteorological office shall:  (1) advise immediately the operator or flight crew concerned;  (2) if practicable, provide the revised meteorological information in agreement with the operator | [Return OR 240 (a)(1)](#RETURNOR_240a) |
| [Return OR 240 (a)(2)](#RETURNOR_240a2) |
| [Return OR 240 (a)(3)](#RETURNOR_240a3) |
| [Return OR 240 (a)(4)](#RETURNOR_240a4) |
| [Return OR 240 (a)(5)](#RETURNOR_240a5) |
| [Return OR 240 (a)(6)](#RETURNOR_240a6) |
| [Return OR 240 (a)(7)](#RETURNOR_240a7) |
| [Return OR 240 (a)(8)](#RETURNOR_240a8) |
| [Return OR 240 (a)(9)](#RETURNOR_240a9) |
| [Return OR 240 (b)](#RETURNOR_240b) |

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| **MET.OR.242 Information to be provided to air traffic services units**  (a) An aerodrome meteorological office shall provide, as necessary, its associate aerodrome control tower with:  (1) local routine and special reports, METAR, TAF and TREND forecasts and amendments thereto;  (2) SIGMET and AIRMET information, wind shear warnings and alerts and aerodrome warnings;  (3) any additional meteorological information agreed upon locally, such as forecasts of surface wind for the determination of possible runway changes;  (4) information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the aerodrome meteorological office and the aerodrome control tower concerned;  (5) information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the aerodrome meteorological office and the aerodrome control tower concerned.  (b) An aerodrome meteorological office shall provide its associate approach control unit with:  (1) local routine and special reports, METAR, TAF and TREND forecasts and amendments thereto;  (2) SIGMET and AIRMET information, wind shear warnings and alerts and appropriate special air-reports and aerodrome warnings;  (3) any additional meteorological information agreed upon locally;  (4) information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the aerodrome meteorological office and the approach control unit concerned;  (5) information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the aerodrome meteorological office and the approach control unit concerned. | [Return OR 242 (a)](#RETURN_OR_242a) |
| [Return OR 242 (b)](#RETURN_OR_242b) |

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| **MET.OR.245 Meteorological watch and other information**  Within its area of responsibility, the meteorological watch office shall:  (a) maintain continuous watch over meteorological conditions affecting flight operations;  (b) coordinate with the organisation responsible for the provision of NOTAM and/or ASHTAM to ensure that meteorological information on volcanic ash included in SIGMET and NOTAM and/or ASHTAM messages is consistent;  (c) coordinate with selected volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;  (d) provide its associated VAAC with information received on pre-eruption volcanic activity, a volcanic eruption and volcanic ash cloud for which a SIGMET has not already been issued;  (e) provide its aeronautical information service units with information received on the release of radioactive materials into the atmosphere in the area or adjacent areas for which it maintains watch and for which a SIGMET has not already been issued;  (f) provide its associated area control centre and flight information centre (ACC/FIC), as necessary, with relevant:  (1) METAR, including current pressure data for aerodromes and other locations, TAF and trend forecasts and amendments thereto;  (2) forecasts of upper winds, upper-air temperatures and significant en-route weather phenomena and amendments thereto, SIGMET and AIRMET information and appropriate special air-reports;  (3) any other meteorological information required by the ACC/FIC to meet requests from aircraft in flight;  (4) information received on volcanic ash cloud, for which a SIGMET has not already been issued, as agreed between the meteorological watch office and the ACC/FIC;  (5) information received concerning the release of radioactive material into the atmosphere, as agreed between the meteorological watch office and the ACC/FIC;  (6) tropical cyclone advisory information issued by a TCAC in its area of responsibility;  (7) volcanic ash advisory information issued by a VAAC in its area of responsibility;  (8) information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the meteorological watch office and the ACC/FIC. | [Return OR 245 (a)](#RETURN_OR_245a) |
| [Return OR 245 (b)](#RETURN_OR_245b) |
| [Return OR 245 (c)](#RETURN_OR_245c) |
| [Return OR 245 (d)](#RETURN_OR_245d) |
| [Return OR 245 (e)](#RETURN_OR_245e) |
| [Return OR 245 (f)(1)](#RETURN_OR_245f1) |
| [Return OR 245 (f)(2)](#RETURN_OR_245f2) |
| [Return OR 245 (f)(3)](#RETURN_OR_245f3) |
| [Return OR 245 (f)(4)](#RETURN_OR_245f4) |
| [Return OR 245 (f)(5)](#RETURN_OR_245f5) |
| [Return OR 245 (f)(6)](#RETURN_OR_245f6) |
| [Return OR 245 (f)(7)](#RETURN_OR_245f7) |
| [Return OR 245 (f)(8)](#RETURN_OR_245f8) |

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| **AMC1 MET.OR.245(a) Meteorological watch and other information**  **BOUNDARIES**  The boundaries of the area over which meteorological watch is to be maintained by a meteorological watch office should be coincident with the boundaries of a flight information region or a control area or a combination of flight information regions and/or control areas. | [ReturnAMC1 OR 245 (a)](#RETURN_AMC1_OR_245a) | |
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| **AMC1 MET.OR.245(f)(3) Meteorological watch and other information**  **AIRCRAFT IN FLIGHT**  If the information requested from an aircraft in flight is not available in the associated meteorological watch office, that meteorological watch office should request the assistance of another meteorological office in providing it. | | [Return AMC1 OR 245 (f) (3)](#RETURN_AMC1_OR_245f3) |
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| **MET.OR.250 SIGMET messages**  A meteorological watch office shall:  (a) provide and disseminate SIGMET messages;  (b) ensure that the SIGMET message is cancelled when the phenomena are no longer occurring or are no longer expected to occur in the area covered by the SIGMET message;  (c) ensure that the period of validity of a SIGMET message is not more than 4 hours, and in the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, it shall be extended up to 6 hours;  (d) ensure that SIGMET messages are issued not more than 4 hours before the commencement of the period of validity, and in the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, as soon as practicable, but not more than 12 hours before the commencement of the period of validity, and updated at least every 6 hours. | | [Return OR 250 (a)](#RETURN_OR_250a) |
| [Return OR 250 (b)](#RETURN_OR_250b) |
| [Return OR 250 (c)](#RETURN_OR_250c) |
| [Return OR 250 (d)](#RETURN_OR_250d) |
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| **AMC1 MET.OR.250(a) SIGMET messages**  **FIR AND CTA**  Meteorological watch offices whose area of responsibility encompasses more than one FIR and/or CTA should provide separate SIGMET messages for each FIR and/or CTA. | | [Return AMC1 OR 250 (a)](#RETURN_AMC1_OR_250a) |

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| **AMC1 MET.OR.250(c) SIGMET**  **SOURCE**  SIGMET messages concerning volcanic ash clouds and tropical cyclones should be based on advisory information provided by VAACs and Tropical Cyclone Advisory Centres (TCACs), respectively. | [Return AMC1 OR 250 (c)](#RETURN_AMC1_OR_250c) |
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| **MET.OR.255 AIRMET messages**  A meteorological watch office shall:  (a) provide and disseminate AIRMET messages when the competent authority has determined that the density of traffic operating below flight level 100, or up to flight level 150 in mountainous areas, or higher, where necessary, warrants the issue and dissemination of area forecasts for such operations;  (b) cancel the AIRMET message when the phenomena are no longer occurring or are no longer expected to occur in the area;  (c) ensure that the period of validity of an AIRMET message is not more than 4 hours. | [Return OR 255 (a)](#RETURN_OR_255a) |
| [Return OR 255 (b)](#RETURN_OR_255b) |
| [Return OR 255 (c)](#RETURN_OR_255c) |
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| **AMC1 MET.OR.255(a) AIRMET messages**  **DIGITAL FORMAT**  In addition to the issuance of AIRMET information in abbreviated plain language, AIRMET information should be issued in a digital format. | [Return AMC1 OR 255 (a)](#RETURN_AMC1_OR_255a) |
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| **MET.OR.260 Area forecasts for low-level flights**  A meteorological watch office shall:  (a) provide area forecast for low-level flights when the density of traffic operating below flight level 100, or up to flight level 150 in mountainous areas, or higher, where necessary, warrants the routine issue and dissemination of area forecasts for such operations;  (b) ensure that the frequency of issue, the form, and the fixed time or period of validity of area forecast for low-level flights and the criteria for amendments thereto, are as determined by the competent authority;  (c) ensure that area forecasts for low-level flights prepared in support of the issuance of an AIRMET message are issued every 6 hours for a period of validity of 6 hours and transmitted to the meteorological watch offices concerned not later than 1 hour prior to the beginning of their validity period. | [Return OR 260 (a)](#RETURN_OR_260a) |
| [Return OR 260 (b)](#RETURN_OR_260b) |
| [Return OR 260 (c)](#RETURN_OR_260c) |

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| **MET.OR.265 Volcanic ash advisory centre responsibilities**  In its area of responsibility, the VAAC shall:  (a) when a volcano has erupted, or is expected to erupt, or volcanic ash is reported, provide advisory information regarding the extent and forecast movement of the volcanic ash cloud to:  (1) the European aviation crisis coordination cell;  (2) meteorological watch offices serving flight information regions in its area of responsibility which may be affected;  (3) operators, area control centres, and flight information centres serving flight information regions in its area of responsibility which may be affected;  (4) world area forecast centres, international OPMET databanks, international NOTAM offices and centres designated by regional air navigation agreement for the operation of aeronautical fixed service satellite distribution systems;  (5) other VAACs whose areas of responsibility may be affected.  (b) coordinate with selected volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;  (c) provide the advisory meteorological information referred to in point (a) at least every 6 hours until such time as the volcanic ash cloud is no longer identifiable from satellite data, no further meteorological reports of volcanic ash are received from the area and no further eruptions of the volcano are reported; and  (d) maintain a 24-hour watch. | [Return OR 265 (a)](#RETURN_OR_265a) |
| [Return OR 265 (b)](#RETURN_OR_265b) |
| [Return OR 265 (c)](#RETURN_OR_265c) |
| [Return OR 265 (d)](#RETURN_OR_265d) |
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| **MET.OR.275 World area forecast centre responsibilities**  (a) The WAFC shall provide, in a digital form:  (1) gridded global forecasts of:  (i) upper wind;  (ii) upper-air temperature and humidity;  (iii) geopotential altitude of flight levels;  (iv) flight level and temperature of tropopause;  (v) direction, speed and flight level of maximum wind;  (vi) cumulonimbus clouds;  (vii) icing;  (viii) turbulence;  (2) global forecasts of significant weather (SIGWX) phenomena, including volcanic activity and release of radioactive materials.  (b) The WAFC shall ensure that world area forecast system products in digital form are transmitted using binary data communications techniques. | [Return OR 275 (a)(1)](#RETURN_OR_275a1) |
| [Return OR 275 (a)(2)](#RETURN_OR_275a2) |
| [Return OR 275 (b)](#RETURN_OR_275b) |