

European Aviation Safety Agency — Rulemaking Directorate

Notice of Proposed Amendment 2013-08 (E)

Requirements for ATM/ANS providers and the safety oversight thereof

(Appendix VII to the Explanatory Note)

RMT.0148 (ATM.001 (A))/ RMT.0149 (ATM.001(B)) AND RMT.0157 (ATM.004(A))/ RMT.0158 (ATM.004(B)) - 10/05/2013

EXECUTIVE SUMMARY

This Notice of Proposed Amendment (NPA) addresses safety, proportionality and regulatory coordination issues related to provision of ATM/ANS by providers and to the safety oversight by competent authorities thereof.

It consists of 5 parts. This is Part E which is Appendix VII to the Explanatory Note.

The main objectives are to maintain a high level of safety, provide for a smooth transition, and ensure cost-efficient rules in the field of ATM/ANS. The specific objective is to mitigate the risks linked to the increase of air traffic and also the increase of the complexity in the ATM/ANS system.

This NPA proposes an amendment and replacement of the Commission Implementing Regulations (EU) No 1034/2011 and No 1035/2011.

The proposals aim at:

- implementing Regulation (EC) No 216/2008 (hereinafter referred to as the 'Basic Regulation') and at transposing certain ICAO SARPs provisions contained in Annex 3 in relation to the meteorological services providers requirements;
- aligning Safety Management Systems (SMS) requirements in Commission Implementing Regulation (EU) No 1035/2011 with SMS requirements within the ICAO SMS framework and Management Systems requirements in Commission Implementing Regulation (EU) No 1034/2011 with SSP requirements required by ICAO;
- aligning the scope of the requirements for competent authorities with the requirements for ATM/ANS providers;
- introducing management systems requirements and streamlining the requirements for quality management systems for all ATM/ANS providers;
- implementing the essential requirements on human factors for air traffic controllers; and
- introducing training and competence assessment requirements for ATSEPs.

	Applicability	Process map	
Affected regulations and decisions:	Commission Implementing Regulation (EU) No 1034/2011 and Commission Implementing Regulation (EU) No 1035/2011	Concept Paper: Terms of Reference: Rulemaking group: RIA type:	No 30/08/2010 Yes Full
Affected stakeholders:	Member States, Competent authorities/ National Supervisory Authorities, ATM/ANS providers, Network Manager and the Agency	Technical consultation during NPA drafting: Duration of NPA consultation: Review group:	No 3 months Yes
Driver/origin: Reference:	Legal obligations (Basic Regulation, EASp and ICAO SARPs) N/A	Focussed consultation: Publication date of the Opinion: Publication date of the Decision:	TBD 2014/Q1 2015/Q1

DRAFTING DOCUMENT TABLE

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Shows the text of ICAO Annex 3, with track changes if amendments are made. The identified transposed definitions covered by MET.OR will be contained in Article 2 to the new Regulation.	Explains why the text was changed. If no change is made, it is identified as 'no change'	Shows the text as it will be reflected in the NPA.	Identifies the Part where the text will be contained
Chapter 1. Definitions	N/A	N/A	N/A
1.1 Definitions			
Aerodrome. A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.	The definition of aerodrome is already contained in Article 3(m) of Regulation (EC) No 216/2008.	N/A	N/A
Aerodrome climatological summary. Concise summary of specified meteorological elements at an aerodrome, based on statistical data.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Aerodrome climatological table. Table providing statistical data on the observed occurrence of one or more meteorological elements at an aerodrome.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Aerodrome control tower. A unit established to provide air traffic control service to aerodrome traffic.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services)	N/A	MET.TR
Aerodrome elevation. The elevation of the highest point of the landing area.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Aerodrome meteorological office. An office, located at an aerodrome, designated to providinge meteorological service for aerodrome serving international air navigation.	This term is amended to align with the proposal made by ICAO in its SL 08/2012 on Proposals for amendment to Annex 3.	Aerodrome meteorological office. An office providing meteorological service for aerodrome serving international air navigation.	MET.OR
Aerodrome reference point. The designated geographical location of an aerodrome.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Aeronautical fixed service (AFS). A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.	No change.	Aeronautical fixed service (AFS). A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient, and economical operation of air services.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Aeronautical fixed telecommunication network (AFTN). A worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service, for the exchange of messages and/or digital data between aeronautical fixed stations having the same or compatible communications characteristics.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services.	N/A	MET.TR
Aeronautical mMeteorological station. A station designated established by a Member State to make observations and meteorological reports for use in international air navigation.	The word 'aeronautical' is deleted as it is implicit that it only applies to aviation. The term 'designated' is replaced by 'established by a Member State' in order to avoid confusion with the SES designation process, which is different from the obligation for Member States to establish a station.	Meteorological station. A station established by a Member State to make observations and meteorological reports for use in air navigation.	MET.OR
Aeronautical mobile service (RR S1.32). A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Aeronautical telecommunication station. A station in the aeronautical telecommunication service.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
	meteorological services).		
Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.	No change.	Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.	MET.OR
Aircraft observation. The evaluation of one or more meteorological elements made from an aircraft in flight.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
AIRMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.	No change.	AIRMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.	MET.OR
Air-report. A report from an aircraft in flight prepared in conformity with requirements for position, and operational and/or meteorological reporting.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Air traffic services unit. A generic term meaning variously, air traffic control unit, flight information center or air traffic services reporting office.	No change.	Air traffic services unit. A generic term meaning variously, air traffic control unit, flight information center or air traffic services reporting office.	MET.OR
Alternate aerodrome. An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing. Alternate aerodromes include the following:	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Take-off alternate. An alternate aerodrome at which an aircraft can land should this become necessary shortly after takeoff and it is not possible to use the aerodrome of departure.			
En route alternate. An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.			
ETOPS en route alternate. A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shut-down or other abnormal or emergency condition while en route in an ETOPS operation.			
Destination alternate. An alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
aerodrome of intended landing. Note. The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.			
Altitude. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).	No change.	Altitude. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).	MET.OR
Approach control unit. A unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Appropriate ATS authority. The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.	This term is not reproduced in the NPA as it is not compatible with the EASA approach of competent authority.	N/A	N/A
Area control centre. A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.	No change.	Area control centre. A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.	MET.OR
Automatic dependent surveillance (ADS). A surveillance technique in which aircraft automatically provide, via a data link, data derived from on board navigation and position	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
fixing systems, including aircraft identification, four-dimensional position and additional data as appropriate.			
Briefing. Briefing shall be understood as being a Oral Ppreparatory information commentary on existing and/or expected meteorological conditions.	The amendment is based on the fact that not only verbal briefings are given or transmitted. This term will be contained in a GM to MET.OR.215(d).	Briefing shall be understood as being a preparatory information on existing and/or expected meteorological conditions.	MET.OR
Cloud of operational significance. A cloud with the height of cloud base below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater, or a cumulonimbus cloud or a towering cumulus cloud at any height.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Consultation. Consultation shall mean Ddiscussion, including answers to questions with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations.; a discussion includes answers to questions.	Editorial change for better clarity.	Consultation shall mean discussion, including answers to questions with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations.	MET.OR
Control area. A controlled airspace extending upwards from a specified limit above the earth.	No changes.	Control area. A controlled airspace extending upwards from a specified limit above the earth.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Cruising level. A level maintained during a significant portion of a flight.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Elevation. The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Extended range operation. Any flight by an aeroplane with two turbine power units where the flight time at the one powerunit inoperative cruise speed (in ISA and still air conditions), from a point on the route to an adequate alternate aerodrome, is greater than the threshold time approved by the State of the Operator.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.	No change.	Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.	MET.OR
Flight documentation. Written or printed dDocuments, including charts or forms, containing meteorological information for a flight.	The change reflects the computerised documentation available today.	Flight documentation. Documents, including charts or forms, containing meteorological information for a flight.	MET.OR

Relevant Part
MET.OR
MET.OR
MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		'altitude', used in Note 1, indicate altimetric rather than geometric heights and altitudes.	
Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.	No change.	Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.	MET.OR
GAMET area forecast. An area forecast in abbreviated plain language for low-level flights for a flight information region or sub-area thereof, prepared by the meteorological office designated by the meteorological authority concerned and exchanged with meteorological offices in adjacent flight information regions, as agreed between the meteorological authorities concerned.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Gridded global forecasts. Forecasts of expected values of meteorological elements on a global grid with a defined vertical and horizontal resolution.	New definition proposed which is not in ICAO Annex 3.	Gridded global forecasts. Forecasts of expected values of meteorological elements on a global grid with a defined vertical and horizontal resolution.	MET.OR
Grid point data in digital form. Computer processed meteorological data for a set of regularly spaced points on a chart, for transmission from a meteorological computer to another computer in a code form suitable for automated use.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. — In most cases, such data are transmitted on medium or high-speed telecommunications channels.			
Height. The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.	No changes.	Height. The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.	MET.OR
Human Factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.	This term is not transposed as it is not used in this NPA and will be covered under the new Annex XI to the regulation xxx/201X on Personnel requirements.	N/A	Annex XI to Regulation xxx amending 1035/2011
International airways volcano watch (IAVW). International arrangements for monitoring and providing warnings to aircraft of volcanic ash in the atmosphere.	This term is not transposed as it is not used in this NPA	N/A	N/A
Note. The IAVW is based on the cooperation of aviation and non-aviation operational units using information derived from observing sources and networks that are provided by States. The watch is coordinated by ICAO with the cooperation of other concerned international organizations.			
Level. A generic term relating to the vertical position of an aircraft in flight and meaning	This term is not transposed as it is used in several different contexts	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
variously height, altitude or flight level.	and cannot be used solely for MET.		
Meteorological authority. The authority providing or arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State.	This definition is deleted as it conflicts with the EASA principle of competent authority. The ICAO approach is, therefore, not compatible with EASA rules as the authority may be the service provider. In EASA context, the MET authority is the competent authority (PART-AR).	N/A	N/A
Meteorological bulletin. A text comprising meteorological information preceded by an appropriate heading.	This term is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
Meteorological information. Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.	No change.	Meteorological information. Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.	MET.OR
Meteorological office. An office designated to provide meteorological service for international air navigation.	This term is not transposed as it is not used – changes made following proposal for amendment by ICAO to Annex 3 in SL08/2012.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Aerodrome Mmeteorological office. An office designated to providinge meteorological service for aerodromes serving international air navigation.	The deleted word is made to avoid confusion with the SES designation process, which is different. The amendment made reflects the proposal for the amendment of Annex 3 relating to aeronautical meteorology by ICAO as stated in its SL 08/2012. The word 'international' is ICAO-specific and is deleted as the rule should also apply to aerodromes serving only in the territory of one Member State.	Aerodrome meteorological office. An office providing meteorological service for aerodromes serving air navigation.	MET.OR
Meteorological watch office. An office designated to monitoring meteorological conditions affecting flight operations and to providinge information concerning the occurrence or expected occurrence of specified en-route weather phenomena, natural and other hazards which may affect the safety of aircraft operations within a specified area of responsibility	New proposed definition by WG02	Meteorological watch office. An office monitoring meteorological conditions affecting flight operations and providing information concerning the occurrence or expected occurrence of specified en route weather phenomena, natural and other hazards which may affect the safety of aircraft operations within a specified area of responsibility	MET.OR
Meteorological report. A statement of observed meteorological conditions related to a specified time and location.	No change.	Meteorological report. A statement of observed meteorological conditions related to a specified time and location.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Meteorological satellite. An artificial Earth satellite making meteorological observations and transmitting these observations to Earth.	This definition is not transposed as it is common dictionary meaning.	N/A	N/A
Minimum sector altitude. The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.	This definition is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services)	N/A	MET.TR
Meteorological observation (meteorological). The measurement and evaluation of one or more meteorological elements.	The proposed change reflects the need to specify that the meteorological elements are also measured.	Meteorological observation. The measurement and evaluation of one or more meteorological elements.	MET.OR
Operational control. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.	This definition is not transposed as it is not used in this NPA.	N/A	N/A
Operational flight plan. The operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.	This definition is not transposed as it is not used in this NPA.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Operational planning. The planning of flight operations by an operator.	This definition is not transposed as it is not used in this NPA.	N/A	N/A
Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.	This term is already defined in Article 3(h) of Regulation (EC) No 216/2008.	N/A	N/A
OPMET. Operational meteorological information for use in preparatory or in-flight planning of flight operations.	New proposed definition.	OPMET. Operational meteorological information for use in preparatory or inflight planning of flight operations.	MET.OR
Pilot in command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.	This definition is not transposed as it is not used in this NPA.	N/A	N/A
Pre-eruption volcanic activity. Unusual and/or increasing volcanic activity which could presage a volcanic eruption.	Proposed new definition.	Pre-eruption volcanic activity . Unusual and/or increasing volcanic activity which could presage a volcanic eruption.	MET.OR
Prevailing visibility. The greatest visibility value, observed in accordance with the definition of "visibility", which is reached within at least half the horizon circle or within at least half of the surface of the aerodrome. These areas could comprise contiguous or non-contiguous sectors. Note. This value may be assessed by human observation and/or instrumented systems. When	This term is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
instruments are installed, they are used to obtain the best estimate of the prevailing visibility.			
Prognostic chart. A forecast of a specified meteorological element(s) for a specified time or period and a specified surface or portion of airspace, depicted graphically on a chart.	This definition is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services)	N/A	MET.TR
Quality assurance. Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000*).	This definition is not transposed as it is as the concept is already covered by the provision on management system proposed in the NPA under Annex II.	N/A	N/A
Quality control. Part of quality management focused on fulfilling quality requirements (ISO 9000*).	This definition is not transposed as the concept is already covered by the provision on management system proposed in the NPA under Annex II.	N/A	N/A
Quality management. Coordinated activities to direct and control an organization with regard to quality (ISO 9000*).	This definition is not transposed as the concept is already covered by the provision on management system proposed in the NPA under Annex II.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Regional air navigation agreement. Agreement approved by the Council of ICAO normally on the advice of a regional air navigation meeting.	This term is not transposed as it is not a definition. It only specifies who approves the regional agreement. Additionally, referencing the regional agreements in the context of regional rules (Europe) is not relevant.	N/A	N/A
Reporting point. A specified geographical location in relation to which the position of an aircraft can be reported.	This term is deleted as it is not used in the NPA.	N/A	N/A
Rescue coordination centre. A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.	This term is not transposed as it is not used in the NPA.	N/A	N/A
Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.	No changes	Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.	MET.OR
Runway visual range (RVR). The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.	No changes	Runway visual range (RVR). The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Search and rescue services unit. A generic term meancovering, as the case may be, rescue coordination centre, rescue subcentre or alerting post.	Editorial change only.	Search and rescue services unit. A generic term covering, as the case may be, rescue coordination centre, rescue sub-centre or alerting post.	MET.OR
SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.	No change.	SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en route weather phenomena which may affect the safety of aircraft operations.	MET.OR
Standard isobaric surface. An isobaric surface used on a worldwide basis for representing and analysing the conditions in the atmosphere.	This definition is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services).	N/A	MET.TR
TAF. A concise statement of the expected meteorological conditions at an aerodrome for a specified period.	This term is defined based on the paragraph of 6.2.2.	TAF . A concise statement of the expected meteorological conditions at an aerodrome for a specified period.	MET.OR
Threshold. The beginning of that portion of the runway usable for landing.	This definition is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services)	N/A	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Touchdown zone. The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.	No change.	Touchdown zone. The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.	MET.OR
Tropical cyclone. Generic term for a non-frontal synoptic-scale cyclone originating over tropical or sub-tropical waters with organized convection and definite cyclonic surface wind circulation.	No change.	Tropical cyclone. Generic term for a non-frontal synoptic-scale cyclone originating over tropical or sub-tropical waters with organized convection and definite cyclonic surface wind circulation.	MET.OR
Tropical cyclone advisory centre (TCAC). A meteorological centre designated by regional air navigation agreement to providinge advisory information to meteorological watch offices, world area forecast centres and international OPMET databanks regarding the position, forecast direction and speed of movement, central pressure and maximum surface wind of tropical cyclones.	The definition is amended as the wording is not compatible with European rules and EASA terms.	Tropical cyclone advisory centre (TCAC). A meteorological centre providing advisory information to meteorological watch offices, world area forecast centres and international OPMET databanks regarding the position, forecast direction and speed of movement, central pressure and maximum surface wind of tropical cyclones.	MET.OR
Upper-air chart. A meteorological chart relating to a specified upper-air surface or layer of the atmosphere.	This term is deleted as it is not used neither in the NPA nor in ICAO Annex 3.	N/A	N/A
Visibility. Visibility for aeronautical purposes is the greater of:a) the greatest distance at which a black object	No change.	Visibility. Visibility for aeronautical purposes is the greater of: a) the greatest distance at which a black	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
of suitable dimensions, situated near the ground, can be seen and recogniszed when observed against a bright background;		object of suitable dimensions, situated near the ground, can be seen and recognised when observed against a bright background; and	
b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.		b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.	
Volcanic ash advisory centre (VAAC). A meteorological centre designated by regional air navigation agreement to providinge advisory information to meteorological watch offices, area control centres, flight information centres, world area forecast centres and international OPMET databanks regarding the lateral and vertical extent and forecast movement of volcanic ash in the atmosphere following volcanic eruptions.	The deleted text is not relevant as VAACs responsibilities will not conflict with the provisions laid down in the EUR ANP.	Volcanic ash advisory centre (VAAC). A meteorological centre providing advisory information to meteorological watch offices, area control centres, flight information centres, world area forecast centres and international OPMET databanks regarding the lateral and vertical extent and forecast movement of volcanic ash in the atmosphere following volcanic eruptions.	MET.OR
Volcano observatory. Observatory sending the relevant information as quickly as practicable to associated ACC when it observes significant preeruption volcanic activity, or a cessation thereof, a volcanic eruption, or a cessation thereof; and/or volcanic ash in the atmosphere.	New proposed definition.	Volcano observatory. Observatory sending the relevant information as quickly as practicable to associated ACC when it observes significant pre-eruption volcanic activity, or a cessation thereof, a volcanic eruption, or a cessation thereof; and/or volcanic ash in the atmosphere.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
VOLMET. Meteorological information for aircraft in flight. Data link VOLMET (D-VOLMET). Provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air reports not covered by a SIGMET and, where available, AIRMET via data link. VOLMET broadcast. Provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts.	This definition is not transposed as it is not used in this NPA and will be covered under Part-TR (technical requirements for meteorological services)	N/A	MET.TR
World area forecast centre (WAFC). A meteorological centre designated to preparinge and issuinge significant weather forecasts and upper-air forecasts in digital form on a global basis direct to Member States by appropriate means as part of the aeronautical fixed service.	Editorial changes to better clarify the responsibilities of the WAFC.	World area forecast centre (WAFC). A meteorological centre preparing and issuing significant weather forecasts and upper-air forecasts in digital form on a global basis direct to Member States.	MET.OR
World area forecast system (WAFS). A worldwide system by which world area forecast centres provide aeronautical meteorological enroute forecasts in uniform standardized formats.	No change.	World area forecast system (WAFS). A worldwide system by which world area forecast centres provide aeronautical meteorological en route forecasts in uniform standardised formats.	MET.OR
1.2 Terms used with a limited meaning	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
For the purpose of this Annex, the following terms are used with a limited meaning as indicated below: a) to avoid confusion in respect of the term "service" between the meteorological service considered as an administrative entity and the service which is provided, "meteorological authority" is used for the former and "service" for the latter; b) "provide" is used solely in connection with the provision of service; c) "issue" is used solely in connection with cases where the obligation specifically extends to sending out the information to a user; d) "make available" is used solely in connection with cases where the obligation ends with making the information accessible to a user; and e) "supply" is used solely in connection with cases where either c) or d) applies.	This provision is explanatory material used in the context of ICAO SARPs. Such explanation is not commonly provided, nor is necessary in EU regulations.	N/A	N/A
CHAPTER 2. GENERAL PROVISIONS	N/A	N/A	N/A
2.1. Objective, determination and provision of meteorological service	N/A	N/A	N/A
2.1.1 The objective of meteorological service for international air navigation shall be to contribute towards the safety, regularity and efficiency of international air navigation.	This is a generic objective that does not need to be transposed. Regulation (EC) No 216/2008 extended the scope of the Agency's	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
	competence to ATM/ANS with this objective.		
2.1.2 Theis objective of meteorological services shall be achieved by supplying the following users:—operators, flight crew members, air traffic services units, search and rescue services units, airport managements, accident and incident investigation bodies, and others entities in the scope of ATM/ANS concerned with the conduct or development of international air navigation, with the meteorological information necessary for the performance of their respective functions.	This paragraph is amended to identify all the relevant users that need to be provided with meteorological information.	MET.OR.005(b) Scope and objective of meteorological services The objective of meteorological services shall be achieved by supplying the following users: operators, flight crew members, air traffic services units, search and rescue services units, airport managements, accident and incident investigation bodies, and other entities in the scope of ATM/ANS with the meteorological information necessary for the performance of their respective functions.	MET.OR
2.1.3 Each Contracting State shall determine the meteorological service which it will provide to meet the needs of international air navigation. This determination shall be made in accordance with the provisions of this Annex and with due regard to regional air navigation agreements; it shall include the determination of the meteorological service to be provided for international air navigation over international waters and other areas which lie outside the territory of the State concerned.	This paragraph is not transposed as the objective is reflected in the SES legislation.	N/A	Annex I – Part ATM/ANS.A R

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
2.1.4 Each Contracting State shall designate the authority, hereinafter referred to as the meteorological authority, to provide or to arrange for the provision of meteorological service for international air navigation on its behalf. Details of the meteorological authority so designated shall be included in the State aeronautical information publication, in accordance with Annex 15, Appendix 1, GEN 1.1.	This paragraph is not transposed. It is ICAO specific and is not relevant in the context of SES legislation where the Member States is not obliged to designate a MET provider.	N/A	N/A
2.1.5 Each Contracting State shall ensure that the designated meteorological authority complies with the requirements of the World Meteorological Organization in respect of qualifications and training of meteorological personnel providing service for international air navigation.	This paragraph is not transposed. The requirements of MET personnel will be covered under a future rulemaking task.	N/A	Future rulemaking task
Note. Requirements concerning qualifications and training of meteorological personnel in aeronautical meteorology are given in WMO Publication No. 49, Technical Regulations, Volume I — General Meteorological Standards and Recommended Practices, Chapter B.4—Education and Training.	This paragraph is not transposed. The requirements of MET personnel will be covered under a future rulemaking task.	N/A	Future rulemaking task
2.2 Supply, use and quality management of meteorological information	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
2.2.1 Close liaison shall be maintained between those concerned with the supply and those concerned with the use of meteorological information on matters which affect the provision of meteorological service for international air navigation.	This paragraph lays down a general requirement. This obligation is ensured throughout the rules.	N/A	N/A
2.2.2 Recommendation. Until 14 November 2012, in order to meet the objective of meteorological service for international air navigation, the Contracting State should ensure that the designated meteorological authority referred to in 2.1.4 establishes and implements a properly organized quality system comprising procedures, processes and resources necessary to provide for the quality management of the meteorological information to be supplied to the users listed in 2.1.2.	This recommendation is not transposed as the obligation to establish and implement a quality management system by all service providers is already covered in Annex II to the NPA.	N/A	Reflected in Annex II to the NPA
2.2.3 From 15 November 2012, each Contracting State shall ensure that the designated meteorological authority referred to in 2.1.4 establishes and implements a properly organized quality system comprising procedures, processes and resources necessary to provide for the quality management of the meteorological information to be supplied to the users listed in 2.1.2.	This paragraph is not transposed as the obligation to establish and implement a quality management system by all service providers is already covered by Annex II to the NPA.	N/A	Reflected in Annex II to the NPA

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
2.2.4 Recommendation. The quality system established in accordance with 2.2.2 should be in conformity with the International Organization for Standardization (ISO) 9000 series of quality assurance standards and should be certified by an approved organization.	This recommendation is not transposed. The ISO 9001 is deemed to be an Acceptable Means of Compliance to the quality system requirement covered under Annex II to the NPA.	N/A	Reflected in AMC1 ATM/ANS.O R.B.015 Manageme nt system
Note. — The International Organization for Standardization (ISO) 9000 series of quality assurance standards provides a basic framework for the development of a quality assurance programme. The details of a successful programme are to be formulated by each State and in most cases are unique to the State organization. Guidance on the establishment and implementation of a quality system is given in the Manual on the Quality Management System for the Provision of Meteorological Service to International Air Navigation (Doc 9873).	This note is not transposed as it is only explanatory material and not considered necessary to be transposed in EU rules.	N/A	N/A
2.2.5 Recommendation. (a) The quality management system of meteorological services providers should provide the users with assurance that the meteorological information supplied complies with the stated requirements in terms of the geographical and spatial coverage, format and content, time and frequency of issuance and period of validity, as	This recommendation is MET specific and introduced as AMC in Annex II to the NPA, under management system.	AMC1 ATM/ANS.OR.B.015(a)(3) Management system MANAGEMENT OF METEOROLOGICAL SERVICES PERFORMANCE (a) The management system of meteorological services providers should provide users with assurance that the	Annex II – Part- ATM/ANS.O R – Subpart B

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
well as the accuracy of measurements, observations and forecasts. (b) When the quality management system indicates that meteorological information to be supplied to the users does not comply with the stated requirements, and automatic error correction procedures are not appropriate, such information should not be supplied to the users unless it is validated with the originator.		meteorological information supplied complies with the stated requirements in terms of the geographical and spatial coverage, format and content, time and frequency of issuance and period of validity, as well as the accuracy of measurements, observations and forecasts. (b) When the management system indicates that meteorological information to be supplied to users does not comply with the stated requirements, and automatic error correction procedures are not appropriate, such information should not be supplied to the users unless it is validated with the originator.	
Note. — Requirements concerning the geographical and spatial coverage, format and content, time and frequency of issuance and period of validity of meteorological information to be supplied to aeronautical users are given in Chapters 3, 4, 6, 7, 8, 9 and 10 and Appendices 2, 3, 5, 6, 7, 8 and 9 of this Annex and the relevant regional air navigation plans. Guidance concerning the accuracy of measurement and observation, and accuracy of forecasts is given in Attachments A and B, respectively, to this Annex.	This Note is not transposed as it only specifies the location of the requirements concerning the related meteorological information.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
2.2.6 Recommendation. — (C) In regard to the exchange of meteorological information for operational purposes, the quality management system should include verification and validation procedures and resources for monitoring adherence to the prescribed transmission schedules for individual messages and/or bulletins required to be exchanged, and the times of their filing for transmission. The quality management system should be capable of detecting excessive transit times of messages and bulletins received.	This recommendation is MET specific and introduced as AMC in Annex II to the NPA, under management system.	AMC1 ATM/ANS.OR.B.015(a)(3) Management system MANAGEMENT OF METEOROLOGICAL SERVICES PERFORMANCE (c) In regard to the exchange of meteorological information for operational purposes, the management system should include verification and validation procedures and resources for monitoring adherence to the prescribed transmission schedules for individual messages and/or bulletins required to be exchanged, and the times of their filing for transmission. The management system should be capable of detecting excessive transit times of messages and bulletins received.	Annex II – Part- ATM/ANS.O R – Subpart B
Note. Requirements concerning the exchange of operational meteorological information are given in Chapter 11 and Appendix 10 of this Annex.	This Note is not transposed as it is not considered necessary in European rules.	N/A	N/A
2.2.7 Recommendation. Demonstration of compliance of the quality system applied should be by audit. If nonconformity of the system is identified, action should be initiated to determine and correct the cause. All audit observations	This recommendation is not transposed as it is sufficiently covered by Annex I and II to the NPA.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
should be evidenced and properly documented.			
2.2.8 The meteorological information supplied to the users listed in 2.1.2 shall be consistent with Human Factors principles and shall be in forms which require a minimum of interpretation by these users, as specified in the following chapters.	This paragraph is not transposed as it will be covered by MET.TR (technical requirements).	N/A	Part-TR
Note. Guidance material on the application of Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).	This Note is not transposed as it will be covered by the future technical requirements, if assessed necessary.	N/A	Part-TR
2.3 Notifications required from operators	N/A	N/A	N/A
2.3.1 An operator requiring meteorological service or changes in existing meteorological service shall notify, sufficiently in advance, the meteorological authority or the meteorological office(s) concerned. The minimum amount of advance notice required shall be as agreed between the meteorological authority or meteorological office(s) and the operator.	This paragraph is not transposed. The requirement is put on the operator and not the MET provider.	N/A	N/A
2.3.2 The meteorological authority shall be notified by the operator requiring service when:	This paragraph is not transposed. The requirement is put on the	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
a) new routes or new types of operations are planned;	operator and not the MET provider.		
b) changes of a lasting character are to be made in scheduled operations; and			
c) other changes, affecting the provision of meteorological service, are planned.			
Such information shall contain all details necessary for the planning of appropriate arrangements by the meteorological authority.			
2.3.3 The aerodrome meteorological office, or the meteorological office concerned, shall be notified by the operator or a flight crew member:	This paragraph is not transposed. The requirement is put on the operator and not the MET provider.	N/A	N/A
a) of flight schedules;			
b) when non-scheduled flights are to be operated; and			
c) when flights are delayed, advanced or cancelled.			
Recommendation. The notification to the aerodrome meteorological office, or the meteorological office concerned, of individual flights should contain the following information except that, in the case of scheduled flights, the requirement for some or all of this information may be waived by agreement between the	This recommendation is not transposed. The requirement is put on the operator and not the MET provider.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
meteorological office and the operator:			
a) aerodrome of departure and estimated time of departure;			
b) destination and estimated time of arrival;			
c) route to be flown and estimated times of arrival at, and departure from, any intermediate aerodrome(s);			
d) alternate aerodromes needed to complete the operational flight plan and taken from the relevant list contained in the regional air navigation plan;			
e) cruising level;			
f) type of flight, whether under visual or instrument flight rules;			
g) type of meteorological information requested for a flight crew member, whether flight documentation and/or briefing or consultation; and			
h) time(s) at which briefing, consultation and/or flight documentation are required.			
CHAPTER 3. World Area Forecast System and Meteorological Offices	N/A	N/A	N/A
3.1 Objective of the world area forecast system	This paragraph is not transposed as the WAFS objectives are	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
The objective of the world area forecast system shall be to supply meteorological authorities and other users with global aeronautical meteorological en route forecasts in digital form. This objective shall be achieved through a comprehensive, integrated, worldwide and, as far as practicable, uniform system, and in a cost-effective manner, taking full advantage of evolving technologies.	covered by the provisions of the WAFC below.		
3.2 World area forecast centres	The requirements on the WAFC are contained in chapter 5 of section 2 – Annex IV to the NPA.	Section 2 – Chapter 5 Requirements for World Area Forecast Centres	MET.OR
3.2.1 A Contracting State, having accepted the responsibility for providing a (a) AThe World Area Forecast Centre within the framework of the world area forecast system,. Sshall provide to users, in a digital form: arrange for that centre: (a1) to prepare gridded global forecasts of: 1(i) upper wind; 2(ii) upper-air temperature and humidity; 3(iii) geopotential altitude of flight levels; 4(iv) flight level and temperature of tropopause; and	This paragraph is amended to better clarify the responsibilities of the WAFC. There are no changes to the obligations. The 'digital form' is not an additional requirement but comes from 3.2.1(c) below.	MET.OR.265 World area forecast centres responsibilities (a) The World Area Forecast Centre shall provide to users, 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; and (v) direction, speed and flight level of	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
5(v) direction, speed and flight level of maximum wind; 6(vi) cumulonimbus clouds; 7(vii) icing; and 8(viii) turbulence;	No change to the second This	maximum wind; (vi) cumulonimbus clouds; (vii) icing; and (viii) turbulence;	MET OR
Note. Gridded global forecasts of cumulonimbus clouds, icing and turbulence are currently of an experimental nature, labelled as "trial forecasts" and only distributed through the Internet-based FTP services.	No changes to the paragraph. This Note is now Guidance Material to MET.OR.265(a)(1)	GM1 MET.OR.265(a)(1) WAFC responsibilities Gridded global forecasts of cumulonimbus clouds, icing and turbulence are currently of an experimental nature, labelled as 'trial forecasts' and only distributed through the Internet-based FTP services.	MET.OR
(2b) to prepare global forecasts of significant weather (SIGWX) phenomena, including volcanic activity and accidental release of radioactive materials;	The added text transposes the content of (d) and (e) below and is placed in this requirement to simplify the text.	MET.OR.265 World area forecast centres responsibilities (a)(2) global forecasts of significant weather (SIGWX) phenomena, including volcanic activity and accidental release of radioactive material.	MET.OR
c) to issue the forecasts referred to in a) and b) in digital form to meteorological authorities and other users, as approved by the Contracting State on advice from the meteorological	The requirement on digital form is now included in MET.OR.265(a) above.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
authority;			
d) to receive information concerning the accidental release of radioactive materials into the atmosphere from its associated WMO regional specialized meteorological centre (RSMC) for the provision of transport model products for radiological environmental emergency response, in order to include the information in SIGWX forecasts; and	This paragraph is not entirely transposed. Only the reference to 'radioactive materialsis moved to MET.OR.265(a)(2) in order to simplify the rule.	N/A	N/A
e) to establish and maintain contact with VAACs for the exchange of information on volcanic activity in order to coordinate the inclusion of information on volcanic eruptions in SIGWX forecasts.	This paragraph is not entirely transposed. Only the reference 'volcanic activityis moved to MET.OR.265(a)(2) in order to simplify the rule	N/A	N/A
3.2.2 In case of interruption of the operation of a WAFC, its functions shall be carried out by the other WAFC.	This paragraph is not transposed. A general contingency obligation is foreseen for all providers in ATM/ANS.OR.C.035 (Annex II of the NPA). In the case of WAFC, as the only Centre located in Europe is located in London, it is not possible to put an obligation on the WAFC located in Washington.	N/A	N/A
Note. Back-up procedures to be used in case	The Note is not transposed as it is	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
of interruption of the operation of a WAFC are updated by the World Area Forecast System Operations Group (WAFSOPSG) as necessary; the latest revision can be found at the WAFSOPSG website at www.icao.int/anb/wafsopsg.	linked to the paragraph above.		
3.3 <u>Aerodrome Mm</u> eteorological offices	The responsibilities of aerodrome	Section 2 - Chapter 2	MET.OR
	meteorological offices are contained in chapter 2 of section 2 – Annex IV to this NPA.	Requirements for aerodrome meteorological offices	
3.3.1 Each Contracting State shall establish one or more aerodrome and/or other meteorological offices which shall be adequate for the provision of the meteorological service required to satisfy the needs of international air navigation.	This paragraph is not transposed as it conflicts with Article 9 of Regulation (EC) No 550/2004 that leaves the choice to the member States to designate or not providers of meteorological services.	N/A	N/A
3.3.2. An <u>aerodrome</u> meteorological office shall carry out all or some of the following functions as necessary to meet the needs of flight operations at the aerodrome:		MET.OR.215 Forecasts and other meteorological information - General An aerodrome meteorological office	MET.OR
		shall:	
a) (a) prepare and/or obtain forecasts and other relevant information necessary for the performance of its respective functions for flights	The amendment is made to limit the scope of their responsibilities	(a) prepare and/or obtain forecasts and other relevant information necessary for the performance of its respective	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
with which it is concerned, as determined by the Member State;	and the relevant authority needs to specify which flights are concerned.	functions for flights with which it is concerned, as determined by the Member State;	
the extent of the aerodrome meteorological officeits responsibilities to prepare forecasts shall be recommended to the least small builties and use of	The deleted text is downgraded and moved to GM to MET.OR.215(a) – this text is not	GM1 MET.OR.215(a) Forecasts and other meteorological information - General	
bemay related to the local availability and use of en-route and aerodrome forecast material received from other offices;	considered as being an obligation but rather explanation material.	PREPARATION OF FORECASTS The extent of the aerodrome meteorological office responsibilities to prepare forecasts may relate to the local availability and use of en route and aerodrome forecast material received from other offices;	
(b) prepare and/or obtain provide forecasts and/or warnings of for local meteorological conditions on aerodromes for which it is responsible;	This paragraph is amended to better specify the scope of responsibility of the aerodrome meteorological office.	(b) provide forecasts and/or warnings for local meteorological conditions on aerodromes for which it is responsible;	MET.OR
(c) maintain a continuous survey of meteorological conditions over the aerodromes for which it is designated to prepare forecasts	This paragraph is deleted and replaced by the provision contained in 6.2.4 and 6.2.5 below.	N/A	N/A
(d) provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel.	No change.	(d) provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
e) supply other meteorological information to aeronautical users;	This paragraph is deleted as it is now covered in (e) below.	N/A	N/A
f(e) display the available provide other meteorological information, necessary for the performance of their respective functions;	The paragraph is amended to better specify the responsibilities of the MET offices.	(e) provide other meteorological information, necessary for the performance of their respective functions;	MET.OR
g) exchange meteorological information with other meteorological offices; and	This paragraph is moved to MET.OR.125 Information exchange requirements	MET.OR.125 Information exchange requirements [](a) enable the exchange of operational meteorological information with other meteorological offices (11.1.8); and	MET.OR
hf) supply provide to its associated air traffic services unit, aeronautical information service unit and meteorological watch office information received on pre-eruption volcanic activity, a volcanic eruption or volcanic ash cloud, to its associated air traffic services unit, aeronautical information service unit and meteorological watch office as agreed between the meteorological, aeronautical information service and ATS authorities concerned.	Only editorial change.	MET.OR.215 Forecasts and other meteorological information - General An aerodrome meteorological office shall: (f) provide to its associated air traffic services unit, aeronautical information service unit and meteorological watch office information received on preeruption volcanic activity, a volcanic eruption or volcanic ash cloud.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
3.3.3. The aerodromes for which landing forecasts are required shall be determined by regional air navigation agreement.	This paragraph is not transposed as it refers to the regional air navigation agreement and is therefore not relevant to the context of rules developed for the European region.	N/A	N/A
3.3.4. For aerodromes without meteorological offices:	N/A	N/A	N/A
a) the meteorological authority concerned shall designate one or more meteorological offices to supply meteorological information as required; and	This paragraph is not transposed as it conflicts with Article 9 of Regulation (EC) No 550/2004 that leaves the choice to the member States to designate or not providers of meteorological services.		N/A
b) the competent authorities shall establish means by which such information can be supplied to the aerodromes concerned.	This paragraph is not transposed as it is linked to the paragraph above.		
3.4Requirements for Mmeteorological watch offices	The requirements on the meteorological watch offices are contained in chapter 1 of section 2 – Annex IV to this NPA.	Section 2 - Chapter 1 - Requirements for meteorological watch offices	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
3.4.1. A Contracting State, having accepted the responsibility for providing air traffic services within a flight information region or a control area, shall establish, on the basis of regional air navigation agreement, one or more meteorological watch offices, or arrange for another Contracting State to do so.	This paragraph is not transposed as it conflicts with Article 9 of Regulation (EC) No 550/2004 that leaves the choice to the member States to designate or not providers of meteorological services.	N/A	N/A
3.4.2. Within its area of responsibility, Aa meteorological watch office shall:	Editorial change only in order to avoid repeating it in each paragraphs below.	MET.OR.200 Watch and other meteorological information Within its area of responsibility, a meteorological watch office shall:	MET.OR
(a) maintain continuous watch over meteorological conditions affecting flight operations within its area of responsibility;	Deleted text is moved at the beginning of the requirement.	(a) maintain continuous watch over meteorological conditions affecting flight operations;	MET.OR
(c) coordinate with volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;	New and added – this paragraph summarises the requirements laid down in 3.6 volcano observatories.	(c) coordinate with volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;	MET.OR
(ba) prepareprovide and disseminate SIGMET messages and other information relating to its area of responsibility;	This paragraph is moved to MET.OR.205 SIGMET and amended to better reflect the intent of the requirement. It combines (b) and (d) for simplicity.	MET.OR.205 SIGMET The meteorological watch office shall: (a) provide and disseminate SIGMET messages;	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
c) supply SIGMET information and, as required, other meteorological information to associated air traffic services units;	This paragraph is not transposed as it is covered under (a), and the message is provided to the users which includes air traffic services units.	N/A	MET.OR
d) disseminate SIGMET information;	This paragraph is transferred to MET.OR.205(a) SIGMET.	N/A	MET.OR
 e) when required by regional air navigation agreement, in accordance with 7.2.1: 1) prepare AIRMET information related to its area of responsibility; 2) supply AIRMET information to associated air traffic services units; and 	This paragraph is transferred to MET.OR.210(a) AIRMET.	N/A	MET.OR
3) disseminate AIRMET information;	This paragraph is transferred to MET.OR.210(a) AIRMET.	N/A	MET.OR
(d) supply provide to its associated ACC/FIC and to its associated VAAC, information received on pre-eruption volcanic activity, a volcanic eruption and volcanic ash cloud for which a SIGMET has not already been issued, to its associated ACC/FIC, as agreed between the meteorological and ATS authorities concerned, and to its associated VAAC as determined by	This paragraph is contained in MET.OR.200(d). The deleted text is not considered necessary in the context of EU rules.	MET.OR.200 Watch and other meteorological information Within its area of responsibility, a meteorological watch office shall: (d) provide to its associated ACC/FIC and to its associated VAAC with information received on pre-eruption volcanic activity, a volcanic eruption and	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
regional air navigation agreement; and		volcanic ash cloud for which a SIGMET has not already been issued,	
e) supply provide to its associated ACC/FIC with information received concerningon the accidental release of radioactive materials into the atmosphere, in the area for which it maintains watch or adjacent areas and for which a SIGMET has not already been issued., to its associated ACC/FIC, as agreed between the meteorological and ATS authorities concerned, and to aeronautical information service units, as agreed between the meteorological and appropriate civil aviation authorities concerned. The information shall comprise location, date and time of the accident, and forecast trajectories of the radioactive materials.	This paragraph is contained in MET.OR.200(e) and amended for clarity. The deleted text is not considered necessary in the context of EU rules.	e) provide to its associated ACC/FIC with information received on the accidental release of radioactive materials into the atmosphere, in the area for which it maintains watch or adjacent areas and for which a SIGMET has not already been issued.	MET.OR
Note .— The information is provided by WMO regional specialized meteorological centres	specialized meteorological centres of the World Meteorological ation (WMO) for the provision of the model products for radiological mental emergency response, at the of the delegated authority of the _State in which the radioactive material leased into the atmosphere, or the ional Atomic Energy Agency (IAEA). The ion is sent by the RSMC to a single	GM1-MET.OR 200(e) Watch and other meteorological information	MET.OR
(RSMCs) of the World Meteorological Organisation (WMO) for the provision of transport model products for radiological environmental emergency response, at the		INFORMATION RECEIVED ON THE ACCIDENTAL RELEASE OF RADIOACTIVE MATERIALS	
request of the delegated authority of the Member State in which the radioactive material was released into the atmosphere, or the International Atomic Energy Agency (IAEA). The information is sent by the RSMC to a single contact point of the national provider of			The information is provided by regional specialized meteorological centres (RSMCs) of the World Meteorological Organisation (WMO) for the provision of transport model products for radiological environmental emergency response, at

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
meteorological service in each Member State. This contact point has the responsibility of redistributing the RSMC products within the State concerned. Furthermore, the information is provided by the IAEA to RSMCs co-located with the VAAC London Volcanic Ash Advisory Centre (VAAC), (designated as the focal point), which in turn notifies the Area Control Centres (ACCs) concerned about the release.		the request of the Member State in which the radioactive material was released into the atmosphere, or the International Atomic Energy Agency (IAEA). The information is sent by the RSMC to a single contact point of the provider of meteorological service in each Member State. This contact point has the responsibility of redistributing the RSMC products within the State concerned. Furthermore, the information is provided by the IAEA to RSMCs colocated with the London Volcanic Ash Advisory Centre (VAAC), designated as the focal point, which in turn notifies the Area Control Centres (ACCs) concerned about the release.	
3.4.3. Recommendation. 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.	This recommendation is now contained in GM to MET.OR.200(a) No change to the text.	GM1-OR.MET.200(a) Watch and other meteorological 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.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
3.5 Requirements for Volcanic ash advisory centres	The requirements on the VAAC responsibilities are contained in chapter 4 of section 2 – Annex IV to this NPA.	Section 2 - Chapter 4 - Requirements for Volcanic ash advisory centres	MET.OR
3.5.1. A Contracting State, having accepted, by regional air navigation agreement, the responsibility for providing a In its area of responsibility, a VAAC shall: within the framework of the international airways volcano watch, shall arrange for that centre to respond to a notification that a volcano has erupted, or is expected to erupt or volcanic ash is reported in its area of responsibility, by arranging for that centre to:	This paragraph is deleted as it is not adapted to EU context. The obligation to respond to a notification on a volcanic situation is now included in the list of responsibilities of a VAAC.	MET.OR.260 VAAC responsibilities In its area of responsibility, a VAAC shall:	MET.OR
a) monitor relevant geostationary and polar- orbiting satellite data to detect the existence and extent of volcanic ash in the atmosphere in the area concerned;	This paragraph is not transposed as it reflects more a means how the VAAC will provide the information.	N/A	N/A
b) activate the volcanic ash numerical trajectory/dispersion model in order to forecast the movement of any ash "cloud" which has been detected or reported;	This paragraph is not transposed as it is the mean how the VAAC will provide the information. The obligation is to provide the advisory information covered under	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
	MET.OR.260(a) below.		
Note.— The numerical model may be its own or, by agreement, that of another VAAC.	This Note is not transposed and will be covered, if relevant, by the technical requirements.	N/A	MET.TR
(ae) when a volcano has erupted, or is expected to erupt or volcanic ash is reported, provide issue advisory information regarding the extent and forecast movement of the volcanic ash "cloud" to:	Editorial change, the added text comes from 3.5.1 above.	(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:	MET.OR
(1) the European aviation crisis coordination cell;	The new European aviation crisis coordination cell is added to be in line with the current developments at EU level.	(1) the European aviation crisis coordination cell;	MET.OR
(21) meteorological watch offices, area control centres and flight information centres serving flight information regions in its area of responsibility which may be affected.;	The deleted text is now covered in paragraph (3) below.	(2) meteorological watch offices serving flight information regions in its area of responsibility which may be affected;	MET.OR
(3) operators, area control centres and flight information centres serving flight information regions in its area of responsibility which may be affected;	New paragraph includes the ACC and FIC referred to in paragraph above. The term 'operators' is moved from paragraph 4 below (airlines).	(3) operators, area control centres and flight information centres serving flight information regions in its area of responsibility which may be affected;	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
2) other VAACs whose areas of responsibility may be affected;	This paragraph is moved to (5) below.	N/A	MET.OR
3(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	No changes.	(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	MET.OR
4) airlines requiring the advisory information through the AFTN address provided specifically for this purpose; and	Deleted paragraph covered by new paragraph (3) above.	N/A	MET.OR
(5) other VAACs whose areas of responsibility may be affected;	Paragraph moved from former paragraph (2).	(5) other VAACs whose areas of responsibility may be affected.	MET.OR
Note. The AFTN address to be used by the VAACs is given in the Handbook on the International Airways Volcano Watch (IAVW) (Doc 9766) and at http://www.icao.int/icao/en/anb/met/index.htm	This Note is not transposed as the term 'AFTN' is not used in the rule text.	N/A	N/A
(b) coordinate with volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;	New paragraph based on 3.6 Volcano observatories requirements.	(b) coordinate with volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
d) issue updated advisory information to the meteorological watch offices, area control centres, flight information centres and VAACs referred to in c), as necessary, (c) provide the advisory information but at least every six6 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.	Paragraph amended to align with the previous requirements. The deleted text is now covered in (a)(2),(3) and (5).	(c) provide the advisory information but at least every 6 hours until such time as the volcanic ash 'cloudis 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	MET.OR
3.5.2. Volcanic ash advisory centres shall (d) maintain a 24-hour watch.		(d) maintain a 24-hour watch.	MET.OR
3.5.3. In case of interruption of the operation of a VAAC, its functions shall be carried out by another VAAC or another meteorological centre, as designated by the VAAC Provider State concerned.	This paragraph is deleted as the obligation to have a contingency plan for all ATM/ANS providers is already contained in Annex II to this NPA.	N/A	N/A
Note.— Back-up procedures to be used in case of interruption of the operation of a VAAC are included in the Handbook on the International Airways Volcano Watch (IAVW) (Doc 9766).	This Note is not transposed as it is linked with the paragraph above.	N/A	N/A
3.6. State volcano observatories	This section on State volcano observatories is not transposed as	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
	the provisions are now reflected in the watch office and VAAC provisions above.		
State volcano observatories, within the framework of the IAVW shall be designated by the competent authority.	This paragraph is not transposed as it relates to the designation process of State volcano observatories for which the provisions are not transposed.	N/A	N/A
Contracting States that maintain volcano observatories monitoring active volcanoes shall arrange that selected State volcano observatories, as designated by regional air navigation agreement, observing: a) significant pre-eruption volcanic activity, or a cessation thereof;	This paragraph is now covered in MET.OR.200(d) (Watch office) and MET.OR.260 (VAAC).	N/A	N/A
b) a volcanic eruption, or a cessation thereof; and/or	This paragraph is now covered in MET.OR.200(d) (Watch office) and MET.OR.260 (VAAC).	N/A	N/A
c) volcanic ash in the atmosphere	This paragraph is now covered in MET.OR.200(d) (Watch office) and MET.OR.260 (VAAC).	N/A	N/A
shall send this information as quickly as practicable to their associated ACC, MWO and	This paragraph is now covered by MET.OR.200(c) and MET.OR.260(b)	MET.OR.260 Volcanic Ash Advisory Centre (VAAC) responsibilities	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
VAAC.	that foresee coordination with volcano observatories to ensure that the information on volcanic activity is received in an efficient and timely manner.	(b) coordinate with volcano observatories to ensure that information on volcanic activity is received in an efficient and timely manner;	
<i>Note.</i> — Pre-eruption volcanic activity in this context means an unusual and/or increasing volcanic activity which could presage a volcanic eruption.	This paragraph is now covered in Article 2 (definitions) of the Cover Regulation.	N/A	MET.OR
3.7. Tropical cyclone advisory centres	The requirements on the TCAC responsibilities are contained in chapter 6 of section 2 – Annex IV to this NPA	Chapter 6 – Requirements for Tropical Cyclone Advisory Centres	MET.OR
A Contracting State having accepted, by regional air navigation agreement, the responsibility for providing a arrange for that A tropical cyclone advisory centre shall to: a) monitor the development of tropical cyclones in its area of responsibility, using geostationary and polar-orbiting satellite data, radar data and other meteorological information;	This paragraph is deleted as it lays down the means how tropical cyclone advisories will be provided and not the responsibility to provide information to the users.	MET.OR.270 Tropical cyclone advisory centre responsibilities A tropical cyclone advisory centre shall:	MET.OR
(a)b) issue 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:	The deleted text is not relevant to the context of rules developed for the European region.	(a) issue advisory information concerning the position of the cyclone centre, its direction and speed of movement, central pressure and maximum surface wind near the centre,	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
(1) meteorological watch offices in its area of responsibility; (2) other TCACs whose areas of responsibility may be affected; and (3) world area forecast centres, international OPMET databanks, and centres designated by regional air navigation agreement responsible for the operation of aeronautical fixed service satellite distribution systems; and		in abbreviated plain language to: (1) meteorological watch offices in its area of responsibility; (2) other TCACs whose areas of responsibility may be affected; and (3) world area forecast centres, international OPMET databanks, and centres responsible for the operation of aeronautical fixed service satellite distribution systems; and	
be) issue updated advisory information to meteorological watch offices for each tropical cyclone, as necessary, but at least every six hours.	No change.	b) issue updated advisory information to meteorological watch offices for each tropical cyclone, as necessary, but at least every six hours.	MET.OR
CHAPTER 4. Meteorological observations and reports	N/A	N/A	N/A
4.1Aeronautical Requirements for meteorological stations and observations	The requirements on the meteorological stations responsibilities are contained in chapter 3 of section 2.	Section 2 - Chapter 3 Requirements for meteorological stations	MET.OR
4.1.1. Each Contracting State shall establish, at aerodromes in its territory, such aeronautical meteorological stations as it determines to be necessary. An aeronautical meteorological station may be a separate station or may be	The deleted text is considered to be already covered by the SES legislation. The second sentence is moved to	GM1 MET.OR.250(a) Reports and other information TYPES OF METEOROLOGICAL STATIONS An aeronautical meteorological station	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
combined with a synoptic station.	Guidance Material.	may be a separate station or may be combined with a synoptic station.	
Note. — Aeronautical meteorological stations may include sensors installed outside the aerodrome, where considered justified, by the meteorological authority to ensure the compliance of meteorological service for international air navigation with the provisions of this Annex.	This note is transposed into a GM. The deleted text is not considered as relevant.	GM1 MET.OR.250(a) Reports and other information METEOROLOGICAL INSTRUMENTS Aeronautical meteorological stations may include sensors installed outside the aerodrome.	MET.OR
4.1.2 Recommendation. Each Contracting State should establish, or arrange for the establishment of, aeronautical meteorological stations on offshore structures or at other points of significance in support of helicopter operations to offshore structures, if required by regional air navigation agreement.	The deleted text is considered to be already covered by the SES legislation.		N/A
4.1.3. (a) Aeronautical mThe Mmeteorological stations shall disseminate to the appropriate entities specified in MET.OR.005: (1) local make routine and local special reports, only for dissemination at the aerodrome of origin; and observations at fixed intervals. At aerodromes, the routine observations shall be supplemented by special observations whenever specified changes occur in respect of surface	Text revised to limit the scope of entities to whom a met station must disseminate information and in (1) to simplify and better clarify the elements to be disseminated. The second paragraph is based on 4.4.2b (Special observation and reports) and added.	MET.OR.250 Reports and other information (a) The meteorological station shall disseminate to the appropriate entities specified in MET.OR.005: (1) local routine and local special reports, only for dissemination at the aerodrome of origin; and	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
wind, visibility, runway visual range, present weather, clouds and/or air temperature.			
4.1.4. Each Contracting State shall arrange for its aeronautical meteorological stations to be inspected at sufficiently frequent intervals to ensure that a high standard of observation is maintained, that instruments and all their indicators are functioning correctly, and that the exposure of the instruments has not changed significantly.	This paragraph is not transposed as the inspection process is already covered under Part-AR.	N/A	Part-AR
Note.— Guidance on the inspection of aeronautical meteorological stations including the frequency of inspections is given in the Manual on Automatic Meteorological Observing Systems at Aerodromes (Doc 9837).	This Note is not transposed as it is linked to the requirement above and is therefore covered by Part-AR.	N/A	Part-AR
4.1.5. At aerodromes with runways intended for Category II and III instrument approach and landing operations, automated equipment for measuring or assessing, as appropriate, and for monitoring and remote indicating of surface wind, visibility, runway visual range, height of cloud base, air and dew point temperatures and atmospheric pressure shall be installed to support approach and landing and take off operations. These devices shall be integrated automatic systems for acquisition, processing, dissemination and display in real time of the meteorological parameters affecting landing and	This paragraph is not transposed as it is related to the aerodrome infrastructure and to the equipment required for the aerodrome operation. It will, in the future, be covered under the ADR rules.	N/A	Part-ADR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
take-off operations. The design of integrated automatic systems shall observe Human Factors principles and include back-up procedures.			
Note 1.— Categories of precision approach and landing operations are defined in Annex 6, Part I. Note 2.— Guidance material on the application of Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).	This Note is not transposed as it is linked to the requirements above and is, therefore, related to the aerodrome infrastructure and to the equipment required for the aerodrome operation. It will, in the future, be covered under the ADR rules.	N/A	Part-ADR
4.1.6. Recommendation. At aerodromes with runways intended for Category I instrument approach and landing operations, automated equipment for measuring or assessing, as appropriate, and for monitoring and remote indicating of surface wind, visibility, runway visual range, height of cloud base, air and dewpoint temperatures and atmospheric pressure should be installed to support approach and landing and take off operations. These devices should be integrated automatic systems for acquisition, processing, dissemination and display in real time of the meteorological parameters affecting landing and take off operations. The design of integrated automatic systems should observe Human Factors	This Recommendation is not transposed as it is linked to the requirements above and therefore related to the aerodrome infrastructure and to the equipment required for the aerodrome operation. It will, in the future, be covered under the ADR rules.	N/A	Part-ADR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
principles and include back-up procedures.			
4.1.7. Recommendation. Where an integrated semi-automatic system is used for the dissemination/display of meteorological information, it should be capable of accepting the manual insertion of data covering those meteorological elements which cannot be observed by automatic means.	This Recommendation is not transposed as it is linked to the requirements above and, therefore, related to the aerodrome infrastructure and to the equipment required for the aerodrome operation. It will, in the future, be covered under the ADR rules.	N/A	Part-ADR
4.1.8. The observations shall form the basis for the preparation of reports to be disseminated at the aerodrome of origin and of reports to be disseminated beyond the aerodrome of origin.	This paragraph is identified as being a the technical requirement for meteorological services and will, therefore, be covered under Part-TR.		Part-TR
4.1.9. Owing to the variability of meteorological elements in space and time, to limitations of observing and forecasting techniques and to limitations caused by the definitions of some of the elements, the specific value of any of the elements given in an observation or forecast a provides report shall be understood by the recipient to be the best approximation to the actual conditions at the time of observation or the most probable value which the element is	This paragraph is amended to combine both forecasts and observation as it is covered under the 'general requirements' in 'quality of the data & information' requirement. The added text is proposed to complement this Guidance Material.	GM1 MET.OR.100 Quality of the data & information DATA AND INFORMATION RELIABILITY Owing to the variability of meteorological elements in space and time, to limitations of observing and forecasting techniques and to limitations caused by the definitions of some of the elements,	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
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 indicates the most probable time.		the specific value of any of the elements given in an observation or forecast provides the best approximation to the actual conditions at the time of observation or the most probable value which 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 indicates the most probable time.	
Note. Guidance on the operationally desirable accuracy of measurement or observation is given in Attachment A.	This Note is not transposed as it is considered as not being relevant tothe context of these rules.	N/A	N/A
4.2. Agreement between air traffic services authorities and meteorological authorities	This point 4.2 concerns the provisions of displays related to integrated automatic systems. This requirement has been identified as being a technical requirement and therefore is moved to Part-TR	N/A	Part-TR
Recommendation. An agreement between the meteorological authority and the appropriateATS authority should be established to cover, amongst other things: a) the provision in air traffic services units of	This recommendation is identified as being a the technical requirement for meteorological services and wills therefore be covered under Part-TR.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
displays related to integrated automatic 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 (for example, of 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 (for example, on wind shear); and			
f) if available, meteorological information obtained from ground weather radar.			
Note. Guidance on the subject of coordination between ATS and aeronautical meteorological services is contained in the Manual on Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services (Doc 9377).			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.3 Routine observations and reports	N/A	N/A	N/A
4.3.1. At aerodromes, Meteorological stations should make routine observations shall be made throughout the 24 hours each day, except as otherwise agreed between the meteorological authority, the appropriate ATS authority and the operator concerned. Such observations shall be made at intervals of one hour or, if so determined by regional air navigation agreement, at intervals of one half hour. At other aeronautical meteorological stations, such observations shall be made as determined by the meteorological authority taking into account the requirements of air traffic services units and aircraft operations.	This paragraph is downgraded to AMC level as it contains conditional criteria ('except'). The second sentence is covered in MET.OR.250(a)(2)	AMC1 MET.OR.250(a)(1) Reports and other information ROUTINE OBSERVATIONS Meteorological stations should make routine observations throughout the 24 hours each day.	MET.OR
4.3.2. Reports of routine observations shall be issued as: a) local routine reports, only for dissemination at the aerodrome of origin (intended for arriving and departing aircraft); and b) METAR for dissemination beyond the aerodrome of origin (mainly intended for flight planning, VOLMET broadcasts and D-VOLMET).	This paragraph is covered under MET.OR.250(a).	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. Meteorological information used in ATIS (voice ATIS and D-ATIS) is to be extracted from the local routine report, in accordance with Annex 11, 4.3.6.1 g).	This Note is not relevant anymore as no proposed requirement is linked to this Note.	N/A	N/A
4.3.3. At aerodromes that are not operational throughout the 24 hours, in accordance with 4.3.1, the issuance of a METAR shall be should commence at least two hours issued prior to the aerodrome resuming operations, or as agreed between the Member State and the operator, 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. In accordance with regional air navigation agreement.	This paragraph is amended to add another situation where the issuance of METAR should commence and to specify the European practice that is reflected in the air navigation plan. This provision has been downgraded to AMC level as it has been identified that the main objective is already sufficiently covered in the implementing rule.	AMC1 MET.OR.250(a)(2) Reports and other information METAR AT AERODROMES NOT CONTINUOUSLY OPERATIONAL At aerodromes that are not operational throughout the 24 hours, the issuance of a METAR should commence at least two hours prior to the aerodrome resuming operations, or as agreed between the Member State and the operator, 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.	MET.OR
4.4 Special observations and reports	N/A	N/A	N/A
4.4.1.(b)(4) establish Aa list of criteria to provide local special reports for special observations shall be established by the meteorological authority, in consultation with the appropriate ATS authority air traffic services	This paragraph is amended to align with the rest of the requirement in MET.OR.250. The objective remains unchanged.	MET.OR.250(b)(4) Reports and other information The meteorological stations shall:	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
units, operators and others concerned.		(b)(4) establish a list of criteria to provide local special reports in consultation with the appropriate air traffic services units, operators and others concerned.	
4.4.2. Reports of special observations shall be issued as: a) local special reports, only for dissemination at the aerodrome of origin (intended for arriving and departing aircraft); and	This paragraph is now integrated in MET.OR.250(a)(1).	N/A	MET.OR
b) SPECI for dissemination beyond the aerodrome of origin (mainly intended for flight planning, VOLMET broadcasts and D-VOLMET) unless (a)(2) METAR are issued at half-hourly intervals for dissemination beyond the aerodrome of origin.	The deleted text is now integrated in MET.OR.250(a)(1) and the amended text is now moved to MET.OR.250(a)(2).	MET.OR.250 Reports and other information (a)(2) METAR at half-hourly intervals for dissemination beyond the aerodrome of origin.	MET.OR
Note. Meteorological information used in ATIS (voice-ATIS and D-ATIS) is to be extracted from the local special report, in accordance with Annex 11, 4.3.6.1 g).	This Note is not relevant anymore as no proposed requirement is linked to this Note.	N/A	Part-TR
4.4.3. At aerodromes that are not operational throughout 24 hours in accordance with 4.3.1, following the resumption of the issuance of METAR, SPECI shall be issued, as necessary.	Not transposed as METAR are issued at half-hourly intervals as agreed in the ANP, so SPECI is not necessary.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.5 Contents of reports	N/A	N/A	N/A
4.5.1. Local routine and special reports and METAR and SPECI shall contain the following elements in the order indicated: a) identification of the type of report; b) location indicator; c) time of the observation; d) identification of an automated or missing report, when applicable; e) surface wind direction and speed; f) visibility; g) runway visual range, when applicable; h) present weather; i) cloud amount, cloud type (only for cumulonimbus and towering cumulus clouds) and height of cloud base or, where measured, vertical visibility; j) air temperature and dew point temperature; and k) QNH and, when applicable, QFE (QFE included only in local routine and special reports).	The elements included in the list are not necessary as they are already contained in MET.OR.250(a) – Report and METAR are always reported in the order indicated in the list. This paragraph will be covered under the technical requirements.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. The location indicators referred to under b) and their significations are published in Location Indicators (Doc 7910).	This Note will be covered under the technical requirement as it is linked to the above requirement.	N/A	Part-TR
In addition to elements listed under 4.5.1 a) to k), local routine and special reports and METAR and SPECI should contain supplementary information to be placed after element k).	This paragraph is linked to the above requirement which is already contained in MET.OR.250(a). It will, therefore, be covered under the technical requirements.	N/A	Part-TR
4.5.3. Optional elements included under supplementary information shall be included in METAR and SPECI in accordance with regional air navigation agreement.	This paragraph is linked to the above requirement which is already contained in MET.OR.250(a). It will, therefore, be covered under the technical requirements.	N/A	Part-TR
4.6 Observing and reporting meteorological elements	This point is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.1 (a) Surface wind, direction and speed;	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR	MET.OR.255 Observation of meteorological elements The meteorological station shall observe and/or measure the following elements:	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		(a) surface wind direction and speed;	
4.6.1.1 The mean direction and the mean speed of the surface wind shall be measured, as well as significant variations of the wind direction and speed, and reported in degrees true and metres per seconds (or knots), respectively.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.1.2 Recommendation. When local routine and special reports are used for departing aircraft, the surface wind observations for these reports should be representative of conditions along the runway; when local routine and special reports are used for arriving aircraft, the surface wind observations for these reports should be representative of the touchdown zone.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.1.3 Recommendation. — For METAR and SPECI, the surface wind observations should be representative of conditions above the whole runway where there is only one runway and the whole runway complex where there is more than one runway.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.2 (b) Visibility	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR	(b) visibility	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.6.2.1 The visibility as defined in Chapter 1 shall be measured or observed, and reported in metres or kilometres.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
Note. Guidance on the conversion of instrument readings into visibility is given in Attachment D.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.2.2 Recommendation. When local routine and special reports are used for departing aircraft, the visibility observations for these reports should be representative of conditions along the runway; when local routine and special reports are used for arriving aircraft, the visibility observations for these reports should be representative of the touchdown zone of the runway.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.2.3 Recommendation. For METAR and SPECI, the visibility observations should be representative of the aerodrome.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.3 Runway visual range	This point is covered by MET.OR.250(b)(1)	N/A	N/A
Note — Guidance on the subject of runway visual range is contained in the Manual of Runway Visual Range Observing and Reporting Practices (Doc 9328).	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.6.3.1(b)(1) assess the Rrunway visual range as defined in Chapter 1 shall be assessed , using instrumented systems, on all runways intended for Category II and III instrument approach and landing operations.	This paragraph is amended to specify that the meteorological station can use instrumented system to assess the RVR but with no specification of which kind of instrument must be used.	MET.OR.250 Reports and other information Meteorological stations shall: (b)(1) assess the runway visual range, using instrumented systems, on all runways intended for Category II and III instrument approach and landing operations.	MET.OR
4.6.3.2 Recommendation. Runway visual range as defined in Chapter 1 should be assessed on all runways intended for use during periods of reduced visibility, including: a) precision approach runways intended for Category I instrument approach and landing operations; and b) runways used for take off and having high-intensity edge lights and/or centre line lights.	This paragraph is not transposed in the rules as CAT I is out of scope – RVR only applies for CAT II and III.	N/A	N/A
Note - Precision approach runways are defined in Annex 14, Volume I, Chapter 1, under "Instrument runway".	N/A	N/A	Part-TR
4.6.3.3 The runway visual range, assessed in accordance with 4.6.3.1 and 4.6.3.2, shall be reported in metres throughout periods when either the visibility or the runway visual range is	This paragraph is not transposed in the rules as CAT I is out of the scope – RVR only applies for CAT II and III.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
less than 1 500 m.			
4.6.3.4 The assessment should be Runway visual range RVR assessments shall be representative of: a) the touchdown zone of the runway intended for non-precision or Category I instrument approach and landing operations; bal) the touchdown zone and the mid-point of the runway intended for Category II instrument approach and landing operations; and cb2) the touchdown zone, the mid-point and stop-end of the runway intended for Category III instrument approach and landing operations.	This paragraph is amended to move it to AMC to MET.OR.250(b) Met stations responsibilities. No changes to the intent.	AMC1 MET.OR.250(b) Reports and other information RUNWAY VISUAL RANGE ASSESSMENTS RVR assessment should be representative of: a) the touchdown zone and the midpoint of the runway intended for Category II instrument approach and landing operations; and b) the touchdown zone, the mid-point and stop-end of the runway intended for Category III instrument approach and landing operations.	MET.OR
4.6.3.5(b)(2) inform Tthe units providing air traffic service units and aeronautical information service for an aerodrome shall be kept informed without delay of changes in the serviceability status of the automated equipment used for assessing runway visual range.	This paragraph is amended to fit in the requirements laid down in MET.OR.250 and is inserted as (c).	MET.OR.250 Reports and other information [Meteorological stations shall:] (b)(2) inform the air traffic service units and aeronautical information service for an aerodrome without delay of changes in the serviceability status of the automated equipment used for assessing runway visual range.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.6.4 (c) Present weather at the aerodrome and its vicinity	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR. The addition is made in order to be more precise.	MET.OR.255 Observation of meteorological elements [The meteorological station shall observe and/or measure the following elements:] (c) Present weather at the aerodrome and it's vicinity	MET.OR
4.6.4.1 The present weather occurring at the aerodrome and/or its vicinity shall be observed and reported as necessary. The following present weather phenomena shall be identified, as a minimum: precipitation and freezing precipitation (including intensity thereof), fog, freezing fog and thunderstorms (including thunderstorms in the vicinity).	This paragraph is not transposed and identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.4.2 Recommendation. For local routine and special reports, the present weather information should be representative of conditions at the aerodrome.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.4.3 Recommendation. For METAR and SPECI, the present weather information should be representative of conditions at the aerodrome and, for certain specified present weather phenomena, in its vicinity.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
4.6.5 (d) Clouds	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR.	MET.OR.255 Observation of meteorological elements [The meteorological station shall observe and/or measure the following elements:] (d) Clouds	MET.OR
4.6.5.1 Cloud amount, cloud type and height of cloud base shall be observed and reported as necessary to describe the clouds of operational significance. When the sky is obscured, vertical visibility shall be observed and reported, where measured, in lieu of cloud amount, cloud type and height of cloud base. The height of cloud base and vertical visibility shall be reported in metres (or feet).	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.5.2 Recommendation. Cloud observations for local routine and special reports should be representative of the approach area.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.5.3 Recommendation. Cloud observations for METAR and SPECI should be representative of the aerodrome and its vicinity.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.6 (e) Aair temperature and dew-point temperature; and	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR.	MET.OR.255 Observation of meteorological elements [The meteorological station shall observe	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		and/or measure the following elements:] (e) air temperature and dew-point temperature; and	
4.6.6.1 The air temperature and the dew-point temperature shall be measured and reported in degrees Celsius.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.6.2 Recommendation. Observations of air temperature and dew point temperature for local routine and special reports and METAR and SPECI should be representative of the whole runway complex.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.7 (f) Aatmospheric pressure	The title is kept in the IR in the list of the elements to be observed – the related text is moved to the TR	MET.OR.255 Observation of meteorological elements [The meteorological station shall observe and/or measure the following elements:] (f) atmospheric pressure	MET.OR
The atmospheric pressure shall be measured, and QNH and QFE values shall be computed and reported in hectopascals.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.6.8 Supplementary information	This title is identified as to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Recommendation. Observations made at aerodromes should include the available supplementary information concerning significant meteorological conditions, particularly those in the approach and climb-out areas. Where practicable, the information should identify the location of the meteorological condition.	This paragraph is identified as to be covered under the technical requirements part.	N/A	Part-TR
4.7 Reporting meteorological information from automatic observing systems	This paragraph is not transposed and will be covered in the future technical requirements rules.	N/A	Part-TR
4.7.1. Recommendation. METAR and SPECI from automatic observing systems should be used by States in a position to do so during non-operational hours of the aerodrome, and during operational hours of the aerodrome as determined by the meteorological authority in consultation with users based on the availability and efficient use of personnel.	This paragraph is not transposed and will be covered in the future technical requirements rules.	N/A	Part-TR
Note. Guidance on the use of automatic meteorological observing systems is given in the Manual on Automatic Meteorological Observing Systems at Aerodromes (Doc 9837).	This paragraph is not transposed and will be covered in the future technical requirements rules.	N/A	Part-TR
4.7.2 Recommendation. Local routine and special reports from automatic observing systems should be used by States in a position	This recommendation is not transposed and will be covered in		Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
to do so during operational hours of the aerodrome as determined by the meteorological authority in consultation with users based on the availability and efficient use of personnel.	the future technical requirements rules.		
4.7.3. METAR and SPECI from automatic observing systems shall be identified with the word "AUTO".	This paragraph is not transposed and will be covered in the future technical requirements rules.	N/A	Part-TR
4.8 Observations and reports of volcanic activity Recommendation. — (b)(3) report without delay to the associated air traffic services unit, aeronautical information services unit and meteorological watch office Tt The occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud should be reported without delay to the associated air traffic services unit, aeronautical information services unit and meteorological watch office. The report of occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud should be made in the form of a volcanic activity report comprising the following information in the order indicated: a1) message type, VOLCANIC ACTIVITY REPORT; b2) station identifier, location indicator or name	This paragraph is amended to upgrade this recommendation into a requirement for safety reasons. It is moved to MET.OR.250(b)(3). The second sentence is moved to AMC1 MET.OR.250(b)(3)	MET.OR.250 Reports and other information Meteorological stations shall: (b)(3) report without delay 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. AMC1 MET.OR.250(b)(3) Reports and other information CONTENT OF THE VOLCANIC ACTIVITY REPORT The report of occurrence of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud should be made in the form of a volcanic activity report comprising the following information in	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
of station; e3) date/time of message; e4) location of volcano and name if known; and e5) concise description of 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.		the order indicated: 1) message type, VOLCANIC ACTIVITY REPORT; 2) station identifier, location indicator or name of station; 3) date/time of message; 4) location of volcano and name if known; and 5) concise description of 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.	
Note. Pre-eruption volcanic activity in this context means unusual and/or increasing volcanic activity which could presage a volcanic eruption.	This Note is already repeated in 3.6 and is contained in GM1 MET.OR.235	N/A	N/A
CHAPTER 5. Aircraft observations and reports	This chapter 5 is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR) which covers aircraft observations and reports by voice	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
	communication. The remaining provisions (automated reports) related to data link communication will be covered under the appropriate rules in the future.		
5.1 Obligations of States Each Contracting State shall arrange, according to the provisions of this chapter, for observations to be made by aircraft of its registry operating on international air routes and for the recording and reporting of these observations.	This paragraph is not relevant to the context of EU regulation.	N/A	N/A
5.2 Types of aircraft observations The following aircraft observations shall be made: a) routine aircraft observations during en-route and climb out phases of the flight; and b) special and other non-routine aircraft observations during any phase of the flight.	This paragraph is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR) in SERA.12001.	N/A	SERA IR
5.3 Routine aircraft observations - designation	The provisions on Routine aircraft observations are not transposed at this stage but will be covered at a later stage under the appropriate rules.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Recommendation. When air ground data link is used and automatic dependent surveillance (ADS) or secondary surveillance radar (SSR) Mode S is being applied, automated routine observations should be made every 15 minutes during the en-route phase and every 30 seconds during the climb out phase for the first 10 minutes of the flight.	This paragraph is not transposed as it is linked to 5.3 above.	N/A	N/A
5.3.2. Recommendation. For helicopter operations to and from aerodromes on offshore structures, routine observations should be made from helicopters at points and times as agreed between the meteorological authorities and the helicopter operators concerned.	This paragraph is not transposed as it is linked to 5.3 above rules.	N/A	N/A
5.3.3. In the case of air routes with high-density air traffic (e.g. organized tracks), an aircraft from among the aircraft operating at each flight level shall be designated, at approximately hourly intervals, to make routine observations in accordance with 5.3.1, as appropriate. The designation procedures shall be subject to regional air navigation agreement.	This paragraph is not transposed as it is linked to 5.3 above.	N/A	N/A
5.3.4. In the case of the requirement to report during the climb-out phase, an aircraft shall be designated, at approximately hourly intervals, at each aerodrome to make routine observations in	This paragraph is not transposed as it is linked to 5.3 above.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
accordance with 5.3.1.			
5.4 Routine aircraft observations - exemptions Aircraft not equipped with air-ground data link shall be exempted from making routine aircraft observations.	The provisions on Routine aircraft observations are not transposed at this stage but will be covered at a later stage under the appropriate rules.	N/A	N/A
5.5. Special aircraft observations	This paragraph is not transposed	N/A	SERA IR
Special observations shall be made by all aircraft whenever the following conditions are encountered or observed:	Commission Implementing Regulation (EU) No 923/2012		
a) moderate or severe turbulence; or	(SERA IR) in SERA.12005(a).		
b) moderate or severe icing; or			
c) severe mountain wave; or			
d) thunderstorms, without hail, that are obscured, embedded, widespread or in squall lines; or			
e) thunderstorms, with hail, that are obscured, embedded, widespread or in squall lines; or			
f) heavy duststorm or heavy sandstorm; or			
g) volcanic ash cloud; or			
h) pre-eruption volcanic activity or a volcanic eruption.			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. Pre-eruption volcanic activity in this context means unusual and/or increasing volcanic activity which could presage a volcanic cruption.	This Note is repeated and already covered in Article 2 (Definitions) of the Cover Regulation.	N/A	N/A
5.6. Other non-routine aircraft observations When other meteorological conditions not listed under 5.5, e.g. wind shear, are encountered and which, in the opinion of the pilot-in-command, may affect the safety or markedly affect the efficiency of other aircraft operations, the pilot-in-command shall advise the appropriate air traffic services unit as soon as practicable.	This paragraph is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR) in SERA.12010.	N/A	SERA IR
Note.— Icing, turbulence and, to a large extent, wind shear are elements which, for the time being, cannot be satisfactorily observed from the ground and for which in most cases aircraft observations represent the only available evidence.	This paragraph is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR).	N/A	SERA IR
5.7 Reporting of aircraft observations during flight	N/A	N/A	N/A
5.7.1. Aircraft observations shall be reported by air-ground data link. Where air-ground data link is not available or appropriate, special and other non-routine aircraft observations during flight shall be reported by voice communications.	This paragraph is covered by Regulation 923/2012 (SERA) in SERA.12015(a) but limited to voice communication only.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
5.7.2. Aircraft observations shall be reported during flight at the time the observation is made or as soon thereafter as is practicable.	This paragraph is covered by Regulation 923/2012 (SERA) in SERA.12015(a) but limited to voice communication only.	N/A	SERA IR
5.7.3. Aircraft observations shall be reported as air reports.	This paragraph is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR) in SERA.12015(b)	N/A	SERA IR
5.8. Relay of air-reports by ATS units	N/A	N/A	N/A
The meteorological authority concerned shall make arrangements with the appropriate ATS authority to ensure that, on receipt by the ATS units of: a) special air reports by voice communications, the ATS units relay them without delay to their associated meteorological watch office; and b) routine and special air reports by data link communications, the ATS units relay them without delay to their associated meteorological watch office and WAFCs;	This paragraph is not transposed under this NPA but covered by Commission Implementing Regulation (EU) No 923/2012 (SERA IR) in SERA.12020(a). This text has been adapted to cover only voice communication.	N/A	SERA IR
5.9. Recording and post-flight reporting of aircraft observations of volcanic activity	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Special aircraft observations of pre-eruption volcanic activity, a volcanic eruption or volcanic ash cloud shall be recorded on the special airreport of volcanic activity form. A copy of the form shall be included with the flight documentation provided to flights operating on routes which, in the opinion of the meteorological authority concerned, could be affected by volcanic ash clouds.	This paragraph is deleted as it is now covered under MET.OR.240.	N/A	N/A
CHAPTER 6. Forecasts	N/A	N/A	N/A
6.1 Interpretation and use of forecasts	N/A	N/A	N/A
6.1.1. Owing to the variability of meteorological elements in space and time, to limitations of forecasting techniques and to limitations caused by the definitions of some of the elements, the specific value of any of the elements given in a forecast shall be understood by the recipient to be the most probable value which 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.	This paragraph is repeated and now transposed to GM1 MET.OR.110 Quality of data and information. The new text combines the text of 4.1.9 and this paragraph.	N/A	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. Guidance on the operationally desirable accuracy of forecasts is given in Attachment B.	This paragraph is not considered relevant.	N/A	N/A
6.1.2. The issue of a new forecast by an aerodrome meteorological office, such as a routine aerodrome forecast, shall be understood to cancel automatically cancels any forecast of the same type previously issued for the same place and for the same period of validity or part thereof.	This paragraph is amended to adapt to Guidance Material and is now related to MET.OR.215 on meteorological office.	GM1 MET.OR.215(b) Forecasts and other Meteorological information - General AUTOMATIC CANCELLATION The issue of a new forecast by an	MET.OR
		aerodrome meteorological office, such as a routine aerodrome forecast, automatically cancels any forecast of the same type previously issued for the same place and for the same period of validity or part thereof.	
6.2 Aerodrome forecasts	N/A	N/A	N/A
6.2.1 An aerodrome forecast shall be prepared, on the basis of regional air navigation agreement, by the meteorological office designated by the meteorological authority concerned.	This paragraph is ICAO specific and is not relevant to the context of EU rules.	N/A	N/A
Note. The aerodromes for which aerodrome forecasts are to be prepared and the period of validity of these forecasts are listed in the relevant FASID.	This Note is not transposed and might be covered by the technical rule phase.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
6.2.2 (a) An aerodrome meteorological office shall issue An aerodrome forecast shall be issuedAerodrome Forecasts (TAF) at a specified time and shall provide consist of a concise statement of the expected meteorological conditions at an aerodrome for a specified period.	Editorial change.	MET.OR.220 Aerodrome forecasts (a) An aerodrome meteorological office shall issue Aerodrome Forecasts (TAF) at a specified time and shall provide concise statement of the expected meteorological conditions at an aerodrome for a specified period.	MET.OR
6.2.3 Aerodrome forecasts and amendments thereto shall be issued as TAF and include the following information in the order indicated: a) identification of the type of forecast; b) location indicator; c) time of issue of forecast; d) identification of a missing forecast, when applicable; e) date and period of validity of forecast; f) identification of a cancelled forecast, when applicable; g) surface wind; h) visibility; i) weather; j) cloud; and k) expected significant changes to one or more	This paragraph is already covered by MET.OR.220(a) – the order indicated is always the same in a TAF and will be covered under the technical requirements.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
of these elements during the period of validity. Optional elements shall be included in TAF in accordance with regional air navigation agreement.			
Note The visibility included in TAF refers to the forecast prevailing visibility.	This Note is linked to the above requirement and will be covered under the technical requirements.	N/A	Part-TR
6.2.4 Meteorological offices preparing TAF shall (c) keep the forecasts and warnings under continuous review and, when necessary, shall issue amendments promptly when necessary and cancel the forecasts that cannot be kept under continuous review. The length of the forecast messages and the number of changes indicated in the forecast shall be kept to a minimum.	This paragraph is moved to MET.OR.215(c) above. To keep warnings under continuous review is a change to Annex 3 but is implicitly covered in 7.3.2 below. The added text comes from 6.2.5 below. The deleted second sentence will be covered under the technical requirements part.	MET.OR.215 Forecasts and other meteorological information [](c) Aerodrome meteorological offices shall keep the forecasts and warnings under continuous review and issue amendments promptly when necessary and cancel the forecasts that cannot be kept under continuous review.	Part-OR Part-TR
Note.— Guidance on methods to keep TAF under continuous review is given in Chapter 3 of the Manual of Aeronautical Meteorological Practice (Doc 8896).	This Note remains unchanged and is now contained in Guidance Material to MET.OR.215(c).	GM1 MET.OR.215(c) Forecasts and other met information GUIDANCE DOCUMENT Guidance on methods to keep TAF under continuous review is given in Chapter 3 of the Manual of Aeronautical	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		Meteorological Practice (Doc 8896).	
6.2.5 TAF that cannot be kept under continuous review shall be cancelled.	This paragraph is combined with 6.2.4 above and is covered under MET.OR.215(c).	N/A	MET.OR
6.2.6 Recommendation. The period of validity of a routine TAF should be not less than 6 hours nor more than 30 hours; the period of validity should be determined by regional air navigation agreement. Routine TAF valid for less than 12 hours should be issued every 3 hours and those valid for 12 to 30 hours should be issued every 6 hours.	This Recommendation is considered as to be covered under the technical requirements part.	N/A	Part-TR
6.2.7 (b) When issuing TAF, the an aerodrome meteorological offices shall ensure that not more than one TAF is valid at an aerodrome at any given time.	This paragraph is now contained in MET.OR.220. Only an editorial change. was made.	MET.OR.220 Aerodrome forecasts [](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.	MET.OR
6.3 Landing forecasts	N/A	N/A	N/A
6.3.1 The A landing forecasts shall be prepared by the meteorological office designated by the meteorological authority concerned as determined by regional air navigation	This deleted text is ICAO specific and is not relevant to the context of EU rules. The remaining text is more explanatory material rather	GM1 MET.OR.225 Forecasts for landing RANGE OF LANDING FORECASTS	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
agreement; such forecasts are intended to meet the requirements of local users and of aircraft within about one hour's flying time from the aerodrome.	than a requirement as such.	Landing forecasts are intended to meet the requirements of local users and of aircraft within about one hour's flying time from the aerodrome.	
6.3.2 (a) An aerodrome meteorological office shall prepare Landing forecasts for landing, as determined by the Member State; (b) This forecast shall be issued prepared in the form of a trend TREND forecast.	This paragraph is amended and split into two paragraphs contained in MET.OR.225 (a) and (b). The change reflects the need to distinguish between the preparation of a trend forecast and the form that this forecast must have.	MET.OR.225 Forecasts for landing (a) An aerodrome meteorological office shall prepare forecasts for landing, as determined by the Member State. (b) This forecast shall be issued in the form of a TREND forecast.	MET.OR
6.3.3 A trend forecast shall consist of is understood as being a concise statement of the expected significant changes in the meteorological conditions at that aerodrome to be appended to a local routine or local special report, or a meteorological aerodrome report (METAR) or an aviation selected special weather report (SPECI). 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.	This paragraph is explanatory material related to point 6.3.2 above. It is proposed to include it as Guidance Material without any change.	GM2 MET.OR.225 Forecasts for landing TREND FORECAST A trend forecast is understood as being a concise statement of the expected significant changes in the meteorological conditions at that aerodrome to be appended to a local routine or local special report, or a meteorological aerodrome report (METAR) or an aviation selected special weather report (SPECI). 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.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
6.4 Forecasts <u>-for</u> <u>T</u> take-off	This section on forecasts is covered by MET.OR.226 (chapter 2 section 2)	MET.OR.226 Forecasts - Take-off The aerodrome meteorological office shall:	MET.OR
6.4.1 (a) prepare A forecast for forecasts for take-off shall be prepared by the meteorological office designated as determined by the Member Statemeteorological authority concerned; and-	Only editorial changes, the objective of this paragraph remains the same.	(a) prepare forecasts for take-off as determined by the Member State.	MET.OR
6.4.2 Recommendation. A forecast for take-off should refer to a specified period of time and should contain information on expected conditions over the runway complex in regard to surface wind direction and speed and any variations thereof, temperature, pressure (QNH), and any other elements as agreed locally.	This paragraph is considered to be covered under the technical requirements part.	N/A	Part-TR
6.4.3 Recommendation. — (b) A forecast for take- off should be supplyied forecasts for take-off to operators and flight crew members on request within the 3 hours before the expected time of departure.	This paragraph is amended to upgrade it to IR as it is considered as being an important safety objective. There is no change in the objective of this provision.	[](b) supply forecasts for take-off to operators and flight crew members on request within the 3 hours before the expected time of departure.	MET.OR
6.4.4 Recommendation. Meteorological offices preparing forecasts for take off should keep the forecasts under continuous review and, when necessary, should issue amendments promptly.	This objective of this Recommendation is already contained in 6.2.4 and now contained in MET.OR.215(c).	N/A	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
6.5 Area forecasts for low-level flights	This section is covered by MET.OR.230 (chapter 2 section 2).	MET.OR.230 Area forecasts for low-level flights	MET.OR
(a) provide area forecast for low-level flights, Wwhen 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, the frequency of issue, the form and the fixed time or period of validity of those forecasts and the criteria for amendments thereto shall be determined by the meteorological authority in consultation withif agreed between the Member State and the users.	The deleted text is now contained in a separate requirement covered under (b) below.	The aerodrome meteorological 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, if agreed between the Member State and the users.	MET.OR
(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 based on the agreement in (a); and:	Editorial change. This paragraph is based on the deleted text in 6.5.1 above.	(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 based on the agreement in (a); and	MET.OR
6.5.2 When the density of traffic operating below flight level 100 warrants the issuance of AIRMET information in accordance with 7.2.1, area forecasts for such operations shall be prepared	This paragraph is considered to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
in a format agreed upon between the meteorological authorities concerned. When abbreviated plain language is used, the forecast shall be prepared as a GAMET area forecast, employing approved ICAO abbreviations and numerical values; when chart form is used, the forecast shall be prepared as a combination of forecasts of upper wind and upper-air temperature, and of SIGWX phenomena. The area forecasts shall be issued to cover the layer between the ground and flight level 100 (or up to flight level 150 in mountainous areas, or higher, where necessary) and shall contain information on en-route weather phenomena hazardous to low level flights, in support of the issuance of AIRMET information, and additional information required by low level flights.			
6.5.3 (c) ensure that Aarea forecasts for low-level flights prepared in support of the issuance of AIRMET information shall be issued every 6 hours for a period of validity of 6 hours and transmitted to meteorological watch offices concerned not later than one hour prior to the beginning of their validity period.	This paragraph is amended to fit in MET.OR.230. No change to the content.	(c) ensure that area forecasts for low-level flights prepared in support of the issuance of AIRMET information shall be issued every 6 hours for a period of validity of 6 hours and transmitted to meteorological watch offices concerned not later than one hour prior to the beginning of their validity period.	MET.OR
CHAPTER 7. Sigmet and airmet information, aerodrome warnings and wind shear warnings and alerts	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
7.1 SIGMET information	This section is covered by MET.OR.205 (chapter 1 section 2).	MET.OR.205 SIGMET	MET.OR
TheA meteorological watch office shall: (a) provide and disseminate SIGMET messages;	This requirement is moved from 3.4.2 (b and d).	The meteorological watch office shall: (a) provide and disseminate SIGMET messages;	MET.OR
7.1.1 SIGMET information shall be issued by a meteorological watch office and shall (b) 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 aircraft operations, and of the development of those phenomena in time and space.	No change.	(b) 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 aircraft operations, and of the development of those phenomena in time and space.	MET.OR
7.1.2 (c) ensure that SIGMET information shall beis cancelled when the phenomena are no longer occurring or are no longer expected to occur in the area covered by the SIGMET.	Only editorial changes.	(c) ensure that SIGMET information are cancelled when the phenomena are no longer occurring or are no longer expected to occur in the area covered by the SIGMET.	MET.OR
7.1.3 (d) ensure that Tthe period of validity of a SIGMET message shall be so not more than 4 hours. In the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, the period of validity shall be extended up to 6 hours; and.	Only editorial changes.	(d) ensure that the period of validity of a SIGMET message is not more than 4 hours. In the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, the period of validity shall be extended up to 6 hours; and	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
7.1.4 Recommendation. —SIGMET messages concerning volcanic ash cloud and tropical cyclones should be based on advisory information provided by VAACs and Tropical Cyclone Advisory Centres (TCACs), respectively.7 designated by regional air navigation agreement.	This recommendation is now contained in an AMC to MET.OR.205(d). No change to the content.	AMC1 MET.OR.205(d) SOURCE OF SIGMET MESSAGE SIGMET messages concerning volcanic ash cloud and tropical cyclones should be based on advisory information provided by VAACs and Tropical Cyclone Advisory Centres (TCACs), respectively.	MET.OR
7.1.5 Close coordination shall be maintained between the meteorological watch office shall coordinate with and the organisation responsible for the provision of NOTAM and/or ASHTAM associated area control centre/flight information centre to ensure that information on volcanic ash included in SIGMET and NOTAM and/or ASHTAM messages is consistent;.	This paragraph is amended to include ASHTAM and provide a generic term to identify entities that need to be involved in the coordination (it might be more than the two listed). This paragraph is now contained in MET.OR.200.	MET.OR.200 Watch and other meteorological information [] (b) coordinate with the organisation responsible for the provision of NOTAM and/or ASHTAM to ensure that information on volcanic ash included in SIGMET and NOTAM and/or ASHTAM messages is consistent;	MET.OR
7.1.6 ensure that SIGMET messages shall beis issued not more than 4 hours before the commencement of the period of validity. In the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, these messages shall be issued as soon as practicable but not more than 12 hours before the commencement of the period of validity validity. and be SIGMET messages for volcanic ash and tropical cyclones shall be updated at least every 6 hours.	Editorial changes only. This paragraph is now contained in MET.OR.205(e).	MET.OR.205 SIGMET (e) ensure that SIGMET messages are issued not more than 4 hours before the commencement of the period of validity. In the special case of SIGMET messages for volcanic ash cloud and tropical cyclones, these messages shall be issued as soon as practicable but not more than 12 hours before the commencement of the period of validity and be updated at	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		least every 6 hours.	
7.2 AIRMET information	This section is covered by MET.OR.210 (chapter 2 section 2).	MET.OR.210 AIRMET The meteorological watch office shall:	MET.OR
7.2.1 (a) provide and disseminate AIRMET information shall be issued by a meteorological watch office in accordance with regional air navigation agreement, to associated air traffic services units if agreed between users and the Member States, taking into account the density of air traffic operating below flight level 100;	This paragraph is amended to specify to whom AIRMET information is provided. This paragraph is based on 3.4.2. e)	(a) provide and disseminate AIRMET information to associated air traffic services units if agreed between users and the Member States, taking into account the density of air traffic operating below flight level 100;	MET.OR
AIRMET information shall (be) give a concise description in abbreviated plain language concerning the occurrence and/or expected occurrence of specified en-route weather phenomena, which have not been included in MET.OR.230 Section I of the area forecast for low-level flights issued in accordance with Chapter 6, Section 6.5 and which may affect the safety of low-level flights, and of the development of those phenomena in time and space.	This paragraph is amended to align the reference in the text.	(b) give a concise description in abbreviated plain language concerning the occurrence and/or expected occurrence of specified en route weather phenomena, which have not been included in MET.OR.230 and which may affect the safety of low-level flights, and of the development of those phenomena in time and space.	MET.OR
7.2.2(c) cancel AIRMET information shall be cancelled when the phenomena are no longer occurring or are no longer expected to occur in	Editorial amendment only.	(c) cancel AIRMET information when the phenomena are no longer occurring or are no longer expected to occur in the	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
the area; and-		area; and	
7.2.3(d) ensure that The period of validity of an AIRMET message shall beis not more than 4 hours.	Editorial amendment only.	(d) ensure that the period of validity of an AIRMET message is not more than 4 hours.	MET.OR
7.3 Aerodrome wWarnings and alerts AnThe aerodrome meteorological offices shall:	This paragraph is covered by MET.OR.235 (chapter 2 section 2)	MET.OR.235 Warnings and alerts The aerodrome meteorological office shall:	MET.OR
7.3.1 Aerodrome warnings shall be issued by the meteorological office designated by the meteorological authority concerned and shall (a) give concise aerodrome warnings information of meteorological conditions which could adversely affect aircraft on the ground, including parked aircraft, and the aerodrome facilities and services.	The deleted text is not relevant to the context of EU rules, only the objective of the requirement is taken into account.	(a) give concise aerodrome warnings information of meteorological conditions which could adversely affect aircraft on the ground, including parked aircraft, and the aerodrome facilities and services.	MET.OR
7.3.2 Recommendation. — (e) cancel Aerodrome warnings should be cancelled when the conditions are no longer occurring and/or no longer expected to occur at the aerodrome.	This Recommendation is now upgraded to IR. Warnings that are not cancelled and no longer occurring can have detrimental effect on safety as the information can be misleading. This paragraph is contained in MET.OR.235. Editorial amendment only.	(e) cancel warnings when the conditions are no longer occurring and/or no longer expected to occur at the aerodrome.	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
7.4 Wind shear warnings and alerts	N/A	N/A	N/A
Note. Guidance on the subject is contained in the Manual on Low-level Wind Shear (Doc 9817). Wind shear alerts are expected to complement wind shear warnings and together are intended to enhance situational awareness of wind shear.	This Note is not considered relevant for this Part.	N/A	N/A
7.4.1(b) prepare Wwind shear warnings shall be prepared by the meteorological office designated by the meteorological authority concerned for aerodromes where wind shear is considered a factor, in accordance with local arrangements with the appropriate air traffic services ATS unit and operators concerned.	The deleted text is not relevant. The paragraph is contained in MET.OR.235.	(b) prepare wind shear warnings for aerodromes where wind shear is considered a factor, in accordance with local arrangements with the appropriate air traffic services unit and operators concerned.	MET.OR
(c) Wind shear warnings shall give concise information on the observed or expected existence of wind shear which could adversely affect aircraft on the approach path or take-off path or during circling approach between runway level and 500 m (1 600 ft) above that level and aircraft on the runway during the landing roll or take-off run. Where local topography has been shown to produce significant wind shears at heights in excess of 500 m (1 600 ft) above runway level, then 500 m (1 600 ft) shall not be considered restrictive.	The paragraph is contained in MET.OR.235. No change.	(c) give concise information on the observed or expected existence of wind shear which could adversely affect aircraft on the approach path or take-off path or during circling approach between runway level and 500 m (1 600 ft) above that level and aircraft on the runway during the landing roll or take-off run. Where local topography has been shown to produce significant wind shears at heights in excess of 500 m (1 600 ft) above runway level, then 500 m (1 600 ft) shall not be considered	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
		restrictive.	
7.4.2 Recommendation. Wind shear warnings for arriving aircraft and/or departing aircraft should be cancelled when aircraft reports indicate that wind shear no longer exists or, alternatively, after an agreed elapsed time. The criteria for the cancellation of a wind shear warning should be defined locally for each aerodrome, as agreed between the meteorological authority office, the appropriate ATS authority units and the operators concerned.	The deleted text is covered in IR. Only editorial changes are made.	GM1 MET.OR.235(e) Warnings CANCELLATION OF WARNINGS The criteria for the cancellation of a wind shear warning are to be defined locally for each aerodrome, as agreed between the aerodrome meteorological office, the appropriate ATS units and the operators concerned.	MET.OR
7.4.3 (d)issue, Aat aerodromes where windshear is detected, wind shear alerts generated by by automated, ground-based, wind shear remote-sensing or detection equipment, wind shear alerts generated by these systems; and. shall be issued. Wind shear alerts shall give concise, up-to-date information related to the observed existence of wind shear involving a headwind/tailwind change of 7.5 m/s (15 kt) or more which could adversely affect aircraft on the final approach path or initial take off path and aircraft on the runway during the landing roll or take off run.	The deleted text is not relevant. The paragraph is contained in MET.OR.235. Editorial changes only.	[](d) issue at aerodromes where wind shear is detected, issue wind shear alerts generated by automated, ground-based, wind shear remote-sensing or detection equipment, wind shear alerts generated by these systems; and Deleted part to be moved to TR	MET.TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
7.4.4 Recommendation. Wind shear alerts should be updated at least every minute. They wind shear alert should be cancelled as soon as the headwind/tailwind change falls below 7.5 m/s (15 kt).	This Recommendation is now contained in AMC to MET.OR.235(b). No changes to the text.	AMC1 MET.OR.235(b) 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 7.5 m/s (15 kt).	MET.OR
Chapter 8. Aeronautical climatological information	N/A	N/A	Part-TR
8.1 General provisions	N/A	N/A	N/A
Note. In cases where it is impracticable to meet the requirements for aeronautical climatological information on a national basis, the collection, processing and storage of observational data may be effected through computer facilities available for international use, and the responsibility for the preparation of the required aeronautical climatological information may be delegated by agreement between the meteorological authorities concerned.	This Note is considered to be covered under the technical requirements part.	N/A	Part-TR
8.1.1 Aeronautical climatological information required for the planning of flight operations shall be prepared in the form of aerodrome	This paragraph is considered to be covered under the technical	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
climatological tables and aerodrome climatological summaries. Such information shall be supplied to aeronautical users as agreed between the meteorological authority and those users.	requirements part.		
Note. Climatological data required for aerodrome planning purposes are set out in Annex 14, Volume I, 3.1.4 and Attachment A.	This Note is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
8.1.2 Recommendation. Aeronautical climatological information should normally be based on observations made over a period of at least five years and the period should be indicated in the information supplied.	This Recommendation is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
8.1.3 Recommendation. Climatological data related to sites for new aerodromes and to additional runways at existing aerodromes should be collected starting as early as possible before the commissioning of those aerodromes or runways.	This Recommendation is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
8.2. Aerodrome climatological tables	N/A	N/A	N/A
Recommendation. Each Contracting State should make arrangements for collecting and retaining the necessary observational data and	This paragraph is not transposed as it is considered to be covered under the technical requirements	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
have the capability:	part.		
a) to prepare aerodrome climatological tables for each regular and alternate international aerodrome within its territory; and			
b) to make available such climatological tables to an aeronautical user within a time period as agreed between the meteorological authority and that user.			
8.3. Aerodrome climatological summaries	N/A	N/A	N/A
Aerodrome climatological summaries should follow the procedures prescribed by the World Meteorological Organization. Where computer facilities are available to store, process and retrieve the information, the summaries should be published or otherwise made available to aeronautical users on request. Where such computer facilities are not available, the summaries should be prepared using the models specified by the World Meteorological Organization and should be published and kept up to date as necessary.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
8.4. Copies of meteorological observational data	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Each meteorological authority, on request and to the extent practicable, shall make available to any other meteorological authority, to operators and to others concerned with the application of meteorology to international air navigation, meteorological observational data required for research, investigation or operational analysis.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
Chapter 9. Service for operators and flight crew members	N/A	N/A	N/A
9.1 General provisions	N/A	N/A	N/A
9.1.1 Meteorological information shall be supplied to operators and flight crew members for:	This paragraph is not transposed as it is considered to be duplicate of MET.OR.105.	N/A	N/A
a) pre-flight planning by operators;			
b) in flight re-planning by operators using centralized operational control of flight operations;			
c) use by flight crew members before departure; and			
d) aircraft in flight.			
Meteorological information supplied to operators and flight crew members shall cover the flight in respect of time, altitude and geographical	This paragraph is not transposed as it is considered to be covered under the technical requirements	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
extent. Accordingly, the information shall relate to appropriate fixed times, or periods of time, and shall extend to the aerodrome of intended landing, also covering the meteorological conditions expected between the aerodrome of intended landing and alternate aerodromes designated by the operator.	part.		
9.1.3 Meteorological information supplied to operators and flight crew members shall be up to date and include the following information, as established by meteorological authority in consultation with operators concerned:	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
a) forecasts of			
 upper wind and upper-air temperature; 			
2) upper-air humidity;			
3) geopotential altitude of flight levels;			
4) flight level and temperature of tropopause;			
5) direction, speed and flight level of maximum wind; and			
6) SIGWX phenomena;			
Note .— Forecasts of upper-air humidity and geopotential altitude of flight levels are used only in automatic flight planning and need not be			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
displayed.			
b) METAR or SPECI (including trend forecasts as issued in accordance with regional air navigation agreement) for the aerodromes of departure and intended landing, and for take-off, en-route and destination alternate aerodromes;			
c) TAF or amended TAF for the aerodromes of departure and intended landing, and for take-off, en-route and destination alternate aerodromes;			
d) forecasts for take-off;			
e) SIGMET information and appropriate special air reports relevant to the whole route;			
Note. — Appropriate special air-reports will be those not already used in the preparation of SIGMET.			
f) volcanic ash and tropical cyclone advisory information relevant to the whole route;			
g) subject to regional air navigation agreement, GAMET area forecast and/or area forecasts for low-level flights in chart form prepared in support of the issuance of AIRMET information, and AIRMET information for low-level flights relevant to the whole route;			
h) aerodrome warnings for the local aerodrome;			
i) meteorological satellite images; and			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
j) ground-based weather radar information.			
9.1.4 Forecasts listed under 9.1.3 a) shall be generated from the digital forecasts provided by the WAFCs whenever these forecasts cover the intended flight path in respect of time, altitude and geographical extent, unless otherwise agreed between the meteorological authority and the operator concerned.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.1.5 When forecasts are identified as being originated by the WAFCs, no modifications shall be made to their meteorological content.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.1.6 Charts generated from the digital forecasts provided by the WAFCs shall be made available, as required by operators, for fixed areas of coverage as shown in Appendix 8, Figures A8-1, A8-2 and A8-3.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.1.7 When forecasts of upper wind and upper-air temperature listed under 9.1.3 a) 1) are supplied in chart form, they shall be fixed time prognostic charts for flight levels as specified in Appendix 2, 1.2.2 a). When forecasts of SIGWX phenomena listed under 9.1.3 a) 6) are supplied in chart form, they shall be fixed time prognostic charts for an atmospheric layer limited by flight	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
levels as specified in Appendix 2, 1.3.2 and Appendix 5, 4.3.2.			
9.1.8 The forecasts of upper wind and upper-air temperature and of SIGWX phenomena above flight level 100 requested for pre-flight planning and in flight re-planning by the operator shall be supplied as soon as they become available, but not later than 3 hours before departure. Other meteorological information requested for pre-flight planning and in flight re-planning by the operator shall be supplied as soon as is practicable.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.1.9 When necessary, the meteorological authority of the State providing service for operators and flight crew members shall initiate coordinating action with the meteorological authorities of other States with a view to obtaining from them the reports and/or forecasts required.	This paragraph is not transposed as it is considered covered already in the responsibilities of each meteorological provider identified in the proposed NPA.	N/A	MET.OR
9.1.10 Meteorological information shall be supplied to operators and flight crew members at the location to be determined by the meteorological authority, after consultation with the operators and at the time to be agreed upon between the meteorological office and the operator concerned. The service for pre-flight planning shall should be confined to flights	The deleted text is covered by MET.OR.215(d). Remaining sentence moved to GM to MET.OR.215(d)	GM1 MET.OR.215(d) Forecasts and other meteorological information – General SCOPE OF THE PRE-FLIGHT PLANNING The service for pre-flight planning should be confined to flights originating within	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
originating within the territory of the State concerned. At an aerodrome without a meteorological office, arrangements for the supply of meteorological information shall be as agreed upon between the meteorological authority and the operator concerned.		the territory of the State concerned.	
9.2 Briefing, consultation and display	N/A	N/A	Part-TR
Note. — The requirements for the use of automated pre-flight information systems in providing briefing, consultation and display are given in 9.4.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.2.1 Briefing and/or consultation shall be provided, on request, to flight crew members and/or other flight operations personnel. Its purpose shall be to supply the latest available information on existing and expected meteorological conditions along the route to be flown, at the aerodrome of intended landing, alternate aerodromes and other aerodromes as relevant. either to explain and amplify the information contained in the flight documentation or, if so agreed between the meteorological authority and the operator, in lieu of flight documentation.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
9.2.2 Meteorological information used for briefing, consultation and display shall include any or all of the information listed in 9.1.3.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.2.3 If the meteorological office expresses an opinion on the development of the meteorological conditions at an aerodrome which differs appreciably from the aerodrome forecast included in the flight documentation, the attention of flight crew members shall be drawn to the divergence. The portion of the briefing dealing with the divergence shall be recorded at the time of briefing and this record shall be made available to the operator.	This paragraph is not transposed as it does not reflect a specific obligation on a meteorological office.	N/A	N/A
9.2.4 The required briefing, consultation, display and/or flight documentation shall normally be provided by the meteorological office associated with the aerodrome of departure. At an aerodrome where these services are not available, arrangements to meet the requirements of flight crew members shall be as agreed upon between the meteorological authority and the operator concerned. In exceptional circumstances, such as an undue delay, the meteorological office associated with the aerodrome shall provide or, if that is not practicable, arrange for the provision of a new briefing, consultation and/or flight	This paragraph is not transposed as it does not reflect the current practice today.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
documentation as necessary.			
9.2.5 Recommendation. The flight crew member or other flight operations personnel for whom briefing, consultation and/or flight documentation has been requested should visit the meteorological office at the time agreed upon between the meteorological office and the operator concerned. Where local circumstances at an aerodrome make personal briefing or consultation impracticable, the meteorological office should provide those services by telephone or other suitable telecommunications facilities.	This Recommendation is not transposed as it is not considered being in the scope of the rules.	N/A	N/A
9.3 Flight documentation	N/A	N/A	Part-TR
Note. — The requirements for the use of automated pre-flight information systems in providing flight documentation are given in 9.4.	This Note is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.3.1 Flight documentation to be made available shall comprise information listed under 9.1.3 a) 1) and 6), b), c), e), f) and, if appropriate, g). However, when agreed between the meteorological authority and operator concerned, flight documentation for flights of two hours' duration or less, after a short stop or turnaround, shall be limited to the information	This paragraph is considered to be covered under the technical requirements part.	N/A	Part-TR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
operationally needed, but in all cases the flight documentation shall at least comprise information on 9.1.3 b), c), e), f) and, if appropriate, g).			
9.3.2 W(b) whenever it becomes apparent that the meteorological information to be included in the flight documentation will differ materially from that made available for pre-flight planning, the meteorological office shall: and in flight replanning, the operator shall be (1) advised immediately the operator or flight crew concerned; and, (2) if practicable, be supplied provide with the revised information as agreed between the operator and the meteorological office concerned. in agreement with the operator	Editorial amendment only and addition of flight crew for clarity.	MET.OR.240 Information for use by operator or flight crew [](b) whenever the meteorological information to be included in the flight documentation will differ materially from that made available for flight planning, the meteorological office shall: (1) advise immediately the operator or flight crew concerned; and (2) if practicable, provide with the revised information in agreement with the operator	MET.OR
9.3.3 Recommendation. In cases where a need for amendment arises after the flight documentation has been supplied, and before take off of the aircraft, the meteorological office should, as agreed locally, issue the necessary amendment or updated information to the operator or to the local air traffic services unit, for transmission to the aircraft.	This provision is not relevant today – the amendments are automatically fed into systems.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
9.3.4(a) Providers of meteorological services shall The meteorological authority shall retain information supplied to flight crew members, either as printed copies or in computer files, issued for a period of at least 30 days from the date of issue. (b) This 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.	This paragraph is now contained in MET.OR.105 (in Section 1).The text is amended to avoid specifying in what kind of form the information should be supplied and to whom, as it could be other than just flight crew members.	MET.OR.105 Retention of information (a) Providers of meteorological services shall retain information issued for a period of at least 30 days from the date of issue. (b) This 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.	MET.OR
9.4 Automated pre-flight information systems for briefing, consultation, flight planning and flight documentation			
9.4.1 Where the meteorological authority uses automated pre-flight information systems to supply and display meteorological information to operators and flight crew members for self-briefing, flight planning and flight documentation purposes, the information supplied and displayed shall comply with the relevant provisions in 9.1 to 9.3 inclusive.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
9.4.2 Recommendation. —Automated pre-flight information systems providing for a harmonized, common point of access to meteorological information and aeronautical information services information by operators, flight crew	This recommendation is not transposed as it is considered not reflecting the current practice today.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
members and other aeronautical personnel concerned should be established by an agreement between themeteorological authority and the relevant civil aviation authority or the agency to which the authority to provide service has been delegated in accordance with Annex 15, 3.1.1 c).			
Note. The meteorological and aeronautical information services information concerned is specified in 9.1 to 9.3 and Appendix 8 and in Annex 15, 8.1 and 8.2, respectively.	This note is not transposed as it is not considered as necessary.	N/A	N/A
9.4.3 Where automated pre-flight information systems are used to provide for a harmonized, common point of access to meteorological information and aeronautical information services information by operators, flight crew members and other aeronautical personnel concerned, the meteorological authority concerned shall remain responsible for the quality control and quality management of meteorological information provided by means of such systems in accordance with Chapter 2, 2.2.2.	This responsibility for the quality control and quality management of meteorological information is already covered under the overall managements system established under Annex II to this NPA.	N/A	N/A
Note. — The responsibilities relating to aeronautical information services information and the quality assurance of the information are given in Annex 15, Chapter 3.	This Note is linked to the requirement above and is, therefore, not relevant.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
9.5 Information for aircraft in flight			
9.5.1 Meteorological information for use by aircraft in flight shall be supplied by aAnThe	The deleted text is now covered in MET.OR.240(a)	MET.OR.240(a) Information for use by operator or flight crew in flight	MET.OR
aerodrome meteorological office shall provide meteorological information:	(2) is added because considered necessary to specify this specific	The aerodrome meteorological office shall provide meteorological information:	
(1) to its associated air traffic services unit for use in their flight information service;	situation.	(1) to its associated air traffic services unit for use in their flight information service;	
(2) to operators for in-flight re-planning on request. to its associated air traffic services unit and through D-VOLMET or VOLMET broadcasts as determined by regional air navigation agreement. Meteorological information for planning by the operator for aircraft in flight shall be supplied on request, as agreed between the meteorological authority or authorities and the operator concerned.	The second sentence is not necessary as it is ICAO specific and not considered relevant to the EU context.	(2) to operators for in-flight re-planning on request.	
9.5.2 Meteorological information for use by aircraft in flight shall be supplied to air traffic services units in accordance with the specifications of Chapter 10.	This paragraph is not transposed. It is reflected in MET.OR.215.	N/A	N/A
9.5.3 Meteorological information shall be supplied through D-VOLMET or VOLMET broadcasts in accordance with the specifications	This paragraph is not transposed because it is an ATS responsibility.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
of Chapter 11.			
Chapter 10. Information for air traffic services, search and rescue services and aeronautical information services	N/A	N/A	N/A
10.1 Information for air traffic services units	N/A	N/A	N/A
10.1.1 The meteorological authority shall designate a meteorological office to be associated with each air traffic services unit. The associated meteorological office shall, after coordination with the air traffic services unit, supply, or arrange for the supply of, up to date meteorological information to the unit as necessary for the conduct of its functions.	Deleted text considered to be covered by the SES legislation	N/A	N/A
10.1.2 Recommendation. The associated meteorological office for an aerodrome control tower or approach control unit should be an aerodrome meteorological office.	Deleted text considered to be covered by the SES legislation	N/A	N/A
10.1.3 The associated meteorological office for a flight information centre or an area control centre shall be a meteorological watch office.	Deleted text considered to be covered by the SES legislation.	N/A	N/A
10.1.4 Recommendation. Where, owing to local circumstances, it is convenient for the	This paragraph is not transposed as it is considered as being a mean	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
duties of an associated meteorological office to be shared between two or more meteorological offices, the division of responsibility should be determined by the meteorological authority in consultation with the appropriate ATS authority.	by which the offices organise themselves to provide meteorological information, and not an objective per se.		
10.1.5 Any meteorological information requested by an air traffic services unit in connection with an aircraft emergency shall be supplied as rapidly as possible.	Already covered in MET.OR.110 where the information needs to be provided in a timely manner.	N/A	N/A
10.2.Information for search and rescue services units	N/A	N/A	N/A
Meteorological offices designated by the meteorological authority in accordance with regional air navigation agreement shall supply search and rescue services units with the meteorological information they require in a form established by mutual agreement. For that purpose, the designated meteorological offices shall maintain liaison with the search and rescue services unit throughout a search and rescue operation.	This paragraph is amended to better reflect the responsibilities of aerodrome meteorological offices. The addition of 'if applicable' reflects the flexibility given to providers who are not providing or are not responsible to provide such information. This paragraph is inserted in (g) to MET.OR.215.	MET.OR.215 Forecasts and other meteorological information - General (g) provide, if applicable, meteorological information to search and rescue services units and shall maintain liaison with the search and rescue services unit throughout a search and rescue operation; and	MET.OR
10.3. Information for aeronautical information services units	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
(g) Meteorological offices designated by the meteorological authority in accordance with regional air navigation agreement shall supplyprovide, if applicable, meteorological information to search and rescue services units and with the meteorological information they require in a form established by mutual agreement. For that purpose, the designated meteorological offices shall maintain liaison with the search and rescue services unit throughout a search and rescue operation; and:	Editorial change only to fit in the rule. This paragraph is inserted in (g) to MET.OR.215	MET.OR.215 Forecasts and other meteorological information - General (h) provide meteorological information to relevant aeronautical information services units, as necessary, for the conduct of their functions.	MET.OR
Chapter 11. Requirements for and use of communications	N/A	N/A	N/A
Note 1 Technical specifications and detailed criteria related to this chapter are given in Appendix 10la.	This note is not transposed as it considered not necessary in the context of EU rules.	N/A	N/A
Note 2 1t is recognized that it is for each Contracting State to decide upon its own internal organization and responsibility for implementing the telecommunications facilities referred to in this chapter.	This note is not transposed as it considered not necessary in the context of EU rules.	N/A	N/A
11.1 Requirements for communications	N/A	N/A	N/A
11.1.1 Suitable telecommunications facilities shall be made available to permit aerodrome meteorological offices and, as necessary,	This paragraph is not transposed as it is combined with the proposed text below.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
aeronautical meteorological stations to supply the required meteorological information to air traffic services units on the aerodromes for which those offices and stations are responsible, and in particular to aerodrome control towers, approach control units and the aeronautical telecommunications stations serving these aerodromes.			
11.1.2 Providers of meteorological services shall ensure that they have systems and processes in place, as well as access to Ssuitable telecommunications facilities to: shall be made available to permit meteorological watch offices to supply (b) provide the required meteorological information to the users in a timely manner. air traffic services and search and rescue services units in respect of the flight information regions, control areas and search and rescue regions for which those offices are responsible, and in particular to flight information centres, area control centres and rescue coordination centres and the associated aeronautical telecommunications stations.	The proposed text is a combination of 11.1.1. above and 11.1.2 and contained in MET.OR.115. The list of the users is deleted as they are already identified in MET.OR.005.	MET.OR.110 Information exchange requirements Providers of meteorological services shall ensure that they have systems and processes in place, as well as access to suitable telecommunications facilities to: [(a)] (see 11.1.8 below)(b) provide the required meteorological information to the users in a timely manner. (mix between 11.1.1/11.1.2)	MET.OR
11.1.3 Suitable telecommunications facilities shall be made available to permit world area forecast centres to supply the required world area forecast system products to meteorological offices, meteorological authorities and other	The users are included in the new MET.OR.120 above.	N/A	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
users.			
11.1.4 Telecommunications facilities between meteorological offices and, as necessary, aeronautical meteorological stations and aerodrome control towers or approach control units shall permit communications by direct speech, the speed with which the communications can be established being such that the required points may normally be contacted within approximately 15 seconds.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
11.1.5 Recommendation. Telecommunications facilities between meteorological offices and flight information centres, area control centres, rescue coordination centres and aeronautical telecommunications stations should permit:	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
a) communications by direct speech, the speed with which the communications can be established being such that the required points may normally be contacted within approximately 15 seconds; and			
b) printed communications, when a record is required by the recipients; the message transit time should not exceed 5 minutes.			

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Note. — In 11.1.4 and 11.1.5, "approximately 15 seconds" refers to telephony communications involving switchboard operation and "5 minutes" refers to printed communications involving retransmission.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
11.1.6 Recommendation. The telecommunications facilities required in accordance with 11.1.4 and 11.1.5 should be supplemented, as and where necessary, by other forms of visual or audio communications, for example, closed-circuit television or separate information processing systems.	This recommendation is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
11.1.7 Recommendation. As agreed between the meteorological authority and operators, provision should be made to enable operators to establish suitable telecommunications facilities for obtaining meteorological information from aerodrome meteorological offices or other appropriate sources.	Already 'operators' is already covered in MET.OR.125(b) under 'users' and is in addition to 11.1.1 and 11.1.2 (that are combined).	N/A	N/A
11.1.8 Suitable telecommunications facilities shall be made available to permit meteorological offices to [] enable the exchange operational meteorological information with other meteorological offices.	This paragraph is contained in MET.OR.110(a) and is amended for better clarification of the intent of the rule.	(a) enable the exchange of operational meteorological information with other meteorological offices; and	MET.OR

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
11.1.9 Recommendation. The telecommunications facilities used for the exchange of operational meteorological information should be the aeronautical fixed service or, for the exchange of non-time critical operational meteorological information, the public Internet, subject to availability, satisfactory operation and bilateral/multilateral and/or regional air navigation agreements.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
Note 1. — Three aeronautical fixed service satellite distribution systems providing for global coverage are used to support the global exchanges of operational meteorological information. Provisions relating to the satellite distribution systems are given in Annex 10, Volume III, Part 1, 10.1 and 10.2.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
Note 2. — Guidance material on non-time-critical operational meteorological information and relevant aspects of the public Internet is provided in the Guidelines on the Use of the Public Internet for Aeronautical Applications (Doc 9855).	Not transposed.	N/A	N/A
11.2 Use of aeronautical fixed service communications and the public Internet meteorological bulletins	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
Meteorological bulletins containing operational meteorological information to be transmitted via the aeronautical fixed service or the public Internet shall be originated by the appropriate meteorological office or aeronautical meteorological station.	This paragraph is not transposed as it is considered to be covered under the technical requirements part. It is proposed to move this paragraph to AMC.	N/A	Part-TR
Note. Meteorological bulletins containing operational meteorological information authorized for transmission via the aeronautical fixed service are listed in Annex 10, Volume II, Chapter 4, together with the relevant priorities and priority indicators.	Not transposed.	N/A	N/A
11.3 Use of aeronautical fixed service communications world area forecast system products	N/A	N/A	N/A
Recommendation.— The world area forecast centre shall ensure that Wworld area forecast system products in digital form should beare transmitted using binary data communications techniques. The method and channels used for the dissemination of the products should be as determined by regional air navigation agreement.	This paragraph is moved to MET.OR.265(b) as implementing rule as it is considered to be a requirement to ensure the effectiveness of the information.	MET.OR.265(b) World Area Forecast Centre (WAFC) responsibilities The World Area Forecast Centre shall ensure that world area forecast system products in digital form are transmitted using binary data communications techniques.	MET.OR
11.4 Use of aeronautical mobile service communications	N/A	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
The content and format of meteorological information transmitted to aircraft and by aircraft shall be consistent with the provisions of this Annex.	This paragraph is considered to be covered under the technical requirements part.	N/A	Part-TR
11.5 Use of aeronautical data link service contents of D-VOLMET	N/A	N/A	N/A
D-VOLMET shall contain current METAR and SPECI, together with trend forecasts where available, TAF and SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
Note. The requirement to provide METAR and SPECI may be met by the data link-flight information service (D-FIS) application entitled "Data link aerodrome routine meteorological report (D-METAR) service"; the requirement to provide TAF may be met by the D-FIS application entitled "Data link aerodrome forecast (D-TAF) service"; and the requirement to provide SIGMET and AIRMET messages may be met by the D-FIS application entitled "Data link-SIGMET (D-SIGMET) service". The details of these data link services are specified in the Manual of Air Traffic Services Data Link Applications (Doc 9694).	Not transposed.	N/A	N/A

ICAO Annex 3 Text	Reason for changes/justification	Proposed NPA text	Relevant Part
11.6 Use of aeronautical broadcasting service contents of VOLMET broadcasts	N/A	N/A	N/A
11.6.1 Continuous VOLMET broadcasts, normally on very high frequencies (VHF), shall contain current METAR and SPECI, together with trend forecasts where available.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR
11.6.2 Scheduled VOLMET broadcasts, normally on high frequencies (HF), shall contain current METAR and SPECI, together with trend forecasts where available and, where so determined by regional air navigation agreement, TAF and SIGMET.	This paragraph is not transposed as it is considered to be covered under the technical requirements part.	N/A	Part-TR