
STATUTORY INSTRUMENTS

2021 No. 1203

The Aviation Safety (Amendment) (No. 3) Regulations 2021

PART 3

Amendment of retained direct minor EU legislation

CHAPTER 3

Amendment of [Commission Regulation \(EU\) No 139/2014](#)

Commission Regulation (EU) No 139/2014 (aerodromes)

12. [Commission Regulation \(EU\) No 139/2014](#) of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation [\(EC\) No 216/2008](#) of the European Parliament and of the Council⁽¹⁾ is amended in accordance with regulations 13 to 15.

Amendment of Annex 1 to [Commission Regulation \(EU\) No 139/2014](#)

13.—(1) Annex 1 (definitions for terms used in Annexes 2 to 4) is amended as follows.

(2) After point (6) (definition of “aeronautical information service”), insert—

“(6a) “Aeronautical Information Circular (AIC)” means a notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters;

(6b) “aeronautical information product” means aeronautical data and aeronautical information provided either as digital data sets or as a standardised presentation in paper or electronic media. Aeronautical information products include the following:

- AIP, including amendments and supplements,
- AIC,
- aeronautical charts,
- NOTAM,
- digital data sets;

(6c) “Aeronautical Information Publication (AIP)” means a publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation;”.

(3) After point (15) (definition of “clearway”), insert—

“(15a) “contaminated” in relation to a runway, means where its surface area (whether in isolated areas or not) within the length and width being used is covered in significant part by one or more of the substances listed under the runway surface condition descriptors;”.

(4) After point (17) (definition of “data quality”), insert—

⁽¹⁾ EUR 2014/139, amended by [S.I. 2019/645](#).

“(17a) “data set” means an identifiable collection of data;”.

(5) After point (18) (definition of “declared distances”), insert—

“(18a) “dry”, in respect of runway conditions, means that the surface of the runway is free of visible moisture and not contaminated within the area intended to be used;”.

(6) After point (24) (definition of “landing distance available (LDA)”), insert—

“(24a) “Location Indicators” means the “Location Indicators” (Doc 7910), approved and published by the International Civil Aviation Organization;”.

(7) After point (34) (definition of “non-instrument runway”), insert—

“(34a) “NOTAM” means a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations;

(34b) “NOTAM code” means the code contained in the “Procedures for Air Navigation Services – ICAO Abbreviations and Codes” (PANS ABC – Doc 8400), approved and published by the International Civil Aviation Organization;”.

(8) After point (38) (definition of “runway”), insert—

“(38a) “runway condition code (RWYCC)” means a number, to be used in the runway condition report (RCR), that describes the effect of the runway surface condition on aeroplane deceleration performance and lateral control;

(38b) “runway condition report (RCR)” means a comprehensive standardised report relating to the conditions of the runway surface and their effects on the aeroplane landing and take-off performance, described by means of a runway condition code;

(38c) “runway strip” means a defined area including the runway and stopway, if provided, intended to:

- reduce the risk of damage to aircraft running off a runway;
- protect aircraft flying over it during take-off or landing operations;

(38d) “runway surface condition” means a description of the condition of the runway surface used in the RCR which establishes the basis for the determination of the RWYCC for aeroplane performance purposes;

(38e) “runway surface condition descriptors” means one of the following substances on the surface of the runway:

- compacted snow: snow that has been compacted into a solid mass such that aeroplane tyres, at operating pressures and loadings, will run on the surface without significant further compaction or rutting of the surface;
- dry snow: snow from which a snowball cannot readily be made;
- frost: ice crystals formed from airborne moisture on a surface whose temperature is at or below freezing; frost differs from ice in that frost crystals grow independently and therefore, have a more granular texture;
- ice: water that has frozen or compacted snow that has transitioned into ice in cold and dry conditions;
- slush: snow that is so water-saturated that water will drain from it when a handful is picked up or will splatter if stepped on forcefully;
- standing water: water of depth greater than 3 mm;
- wet ice: ice with water on top of it or ice that is melting;

- wet snow: snow that contains enough water to be able to make a well compacted, solid snowball, but water will not squeeze out?;”.
- (9) After point (41) (“definition of “safety management system”), insert—
 - “(41a) “slippery wet”, in respect of runway conditions, means that the surface friction characteristics of a wet runway or a significant portion of it have been determined to be degraded;
 - (41b) “SNOWTAM” means a special series NOTAM given in a standard format, which provides a surface condition report notifying the presence or cessation of conditions due to snow, ice, slush, frost or water associated with snow, slush, ice, or frost on the movement area;”.
- (10) For point (47) (“definition of terms of the certificate”) substitute—
 - “(47) “terms of the certificate” means the following:
 - ICAO Location Indicators,
 - conditions to operate (VFR/IFR, day/night),
 - runway,
 - declared distances,
 - runway types and approaches provided,
 - aerodrome reference code,
 - scope of aircraft operations with higher aerodrome reference code letter,
 - provision of apron management services (yes/no),
 - rescue and firefighting level of protection;”.
- (11) For point (48) (“definition of visual aids”) substitute—
 - “(48) “visual aids” means indicators and signalling devices, markings, lights, signs and markers or combinations of these;”.
- (12) After point (48), insert—
 - “(49) “wet” in respect of runway conditions, means that the surface is covered by any visible dampness or water up to and including 3 mm deep within the area intended to be used.”.

Amendment of Annex 3 to Commission Regulation (EU) No 139/2014

14.—(1) Annex 3 (Part-ADR.OR) is amended as follows.

(2) For point ADR.OR.D.007, substitute—

“ADR.OR.D.007 Management of aeronautical data and aeronautical information

- (a) As part of its management system, the aerodrome operator shall implement and maintain a quality management system covering the following activities:
 - (1) its aeronautical data activities;
 - (2) its aeronautical information provision activities.
- (b) The aerodrome operator shall, as part of its management system, establish a security management system to ensure the security of operational data it receives, or produces, or otherwise employs, so that access to that operational data is restricted only to those authorised.
- (c) The security management system of the aerodrome operator shall define the following elements:

- (1) the procedures relating to data security risk assessment and mitigation, security monitoring and improvement, security reviews and lesson dissemination;
 - (2) the means designed to detect security breaches and to alert personnel with appropriate security warnings;
 - (3) the means of controlling the effects of security breaches and of identifying recovery action and mitigation procedures to prevent reoccurrence.
- (d) The aerodrome operator shall ensure the security clearance of its personnel with respect to aeronautical data security.
 - (e) The aerodrome operator shall take the necessary measures to protect its aeronautical data against cyber security threats.”.

Amendment of Annex 4 to Commission Regulation (EU) No 139/2014

15.—(1) Annex 4 (Part-ADR.OPS) is amended as follows.

(2) For point ADR.OPS.A.010, substitute—

“ADR.OPS.A.010 Data quality requirements

The aerodrome operator shall have formal arrangements with the organisations with which it exchanges aeronautical data or aeronautical information and shall ensure the following:

- (a) all data relevant to the aerodrome and available services is provided with the required quality;
 - (b) data quality requirements (DQRs) are complied with at data origination and maintained during data transmission;
 - (c) the accuracy of aeronautical data is as specified in the aeronautical data catalogue;
 - (d) the integrity of aeronautical data is maintained throughout the data process from origination to transmission, based on the integrity classification specified in the aeronautical data catalogue;
 - (e) procedures are put in place so that:
 - (1) for routine data as defined in ICAO PANS-AIM (Doc 10066), corruption is avoided throughout the processing of the data;
 - (2) for essential data as defined in ICAO PANS-AIM, corruption does not occur at any stage of the entire process and additional processes are included, as needed, to address potential risks in the overall system architecture to ensure data integrity at that level;
 - (3) for critical data as defined in ICAO PANS-AIM, corruption does not occur at any stage of the entire process and additional integrity assurance processes are included to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks;
 - (f) the resolution of the aeronautical data is commensurate with the actual data accuracy;
 - (g) the traceability of the aeronautical data;
 - (h) the timeliness of the aeronautical data, including any limits on the effective period;
 - (i) the completeness of the aeronautical data;
 - (j) the format of the delivered data meets the specified requirements.”.
- (3) After point ADR.OPS.A.015, insert—

“ADR.OPS.A.020 Common reference systems

For the purpose of air navigation, the aerodrome operator shall use:

- (a) the World Geodetic System – 1984 (WGS-84) as the horizontal reference system;
- (b) the mean sea level (MSL) datum as the vertical reference system;
- (c) the Gregorian calendar and coordinated universal time (UTC) as the temporal reference systems.

ADR.OPS.A.025 Data error detection and authentication

When originating, processing or transmitting data to the aeronautical information service (AIS) provider, the aerodrome operator shall:

- (a) ensure that digital data error detection techniques are used during the transmission and storage of aeronautical data, in order to support the applicable data integrity levels;
- (b) ensure that the transfer of aeronautical data is subject to a suitable authentication process such that recipients are able to confirm that the data or information has been transmitted by an authorised source.

ADR.OPS.A.030 Aeronautical data catalogue

When originating, processing or transmitting data to the AIS provider, the aerodrome operator shall ensure that the aeronautical data conforms with the ‘Aeronautical Data Catalogue’ referred to in ICAO PANS-AIM (Doc 10066).

ADR.OPS.A.035 Data validation and verification

When originating, processing or transmitting data to the AIS provider, the aerodrome operator shall ensure that validation and verification techniques are employed so that the aeronautical data meets the associated DQRs. In addition:

- (a) the verification shall ensure that the aeronautical data is received without corruption and that the aeronautical data process does not introduce corruption;
- (b) aeronautical data and aeronautical information entered manually shall be subject to independent verification to detect any errors that may have been introduced;
- (c) when using aeronautical data to obtain or calculate new aeronautical data, the initial data shall be verified and validated, except when provided by an authoritative source.

ADR.OPS.A.040 Error handling requirements

The aerodrome operator shall ensure that:

- (a) errors identified during data origination and after data delivery are addressed, corrected or resolved;
- (b) priority is given to managing errors in critical and essential aeronautical data.

ADR.OPS.A.045 Metadata

The aerodrome operator shall ensure that metadata include, as a minimum:

- (a) the identification of the organisations or entities performing any action of originating, transmitting or manipulating the aeronautical data;
- (b) the action performed;
- (c) the date and time the action was performed.

ADR.OPS.A.050 Data transmission

The aerodrome operator shall ensure that aeronautical data is transmitted by electronic means.

ADR.OPS.A.055 Tools and software

When originating, processing or transmitting aeronautical data to the AIS provider, the aerodrome operator shall ensure that tools and software used to support or automate aeronautical data processes perform their functions without adversely impacting the quality of the aeronautical data.”.

(4) Before Subpart B, insert—

“ADR.OPS.A.057 Origination of NOTAM

(a) The aerodrome operator shall:

(1) establish and implement procedures in accordance with which it originates a NOTAM issued by the relevant aeronautical information services provider that contains either or both of the following:

(i) information on the establishment, condition, or change of any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel involved with flight operations;

(ii) information of a temporary nature and of short duration or that concerns operationally significant permanent changes or temporary changes of long duration (three months or longer) that are made at short notice, except for extensive text or graphics;

(2) designate aerodrome personnel, who have successfully completed relevant training and demonstrated their competence, to originate NOTAM and provide relevant information to the aeronautical information service providers with which it has arrangements;

(3) ensure that all other aerodrome personnel whose duties involve the use of NOTAM have successfully completed relevant training and demonstrated their competence to do so.

(b) The aerodrome operator shall originate a NOTAM when it is necessary to provide the following information:

(1) establishment of, closure of, or significant changes in the operation of aerodromes or heliports or runways;

(2) establishment of, withdrawal of, or significant changes in the operation of the aerodrome services;

(3) establishment of, withdrawal of, or significant changes in the operational capability of radio navigation and air-ground communication services for which the aerodrome operator is responsible;

(4) unavailability of backup and secondary systems, having a direct operational impact;

(5) establishment of, withdrawal of, or significant changes to visual aids;

(6) interruption of, or return to operation of, major components of aerodrome lighting systems;

(7) establishment of, withdrawal of, or significant changes to procedures for air navigation services for which the aerodrome operator is responsible;

(8) occurrence or correction of major defects or impediments in the manoeuvring area;

(9) changes to, and limitations on, the availability of fuel, oil and oxygen;

- (10) establishment of, withdrawal of, or return to, operation of hazard beacons marking obstacles to air navigation;
 - (11) planned laser emissions, laser displays and search lights in the aerodrome surroundings, if pilots' night vision is likely to be impaired;
 - (12) erecting or removal of, or changes to, obstacles to air navigation in the take-off, climb, missed approach, approach areas, as well as on the runway strip;
 - (13) changes in aerodrome or heliport rescue and firefighting category;
 - (14) presence of, removal of, or significant changes in, hazardous conditions due to snow, slush, ice, radioactive material, toxic chemicals, volcanic ash deposition or water on the movement area;
 - (15) presence of a runway or portion of a runway which is slippery wet;
 - (16) presence of a runway which is not available due to runway marking works; or information about the time lag required for making the runway available, if the equipment used for such works can be removed, when necessary;
 - (17) presence of hazards that affect air navigation, including presence of wildlife, obstacles, displays and major events.
- (c) For the purposes of point (b), the aerodrome operator shall ensure that:
- (1) a NOTAM is originated with sufficient lead time for the affected parties to take any required action, except in the case of unserviceability, release of radioactive material, toxic chemicals and other events that cannot be foreseen;
 - (2) a NOTAM notifying unserviceability of associated facilities, services and navigation aids at the aerodrome, provides an estimate of the unserviceability period or of the time at which restoration of service is expected;
 - (3) within three months from the issuance of a permanent NOTAM, the information contained in the NOTAM is included in the aeronautical information products affected;
 - (4) within three months from the issuance of a temporary NOTAM of long duration (three months or longer), the information contained in the NOTAM is included in an AIP supplement;
 - (5) when a NOTAM with an estimated end of validity unexpectedly exceeds the three-month period, a replacement NOTAM is originated unless the condition is expected to last for a further period of more than three months; in that case, the aerodrome operator shall ensure that the information is published in an AIP supplement.
- (d) In addition, the aerodrome operator shall ensure that:
- (1) except as provided for in point (d)(4), each NOTAM it originates contains the applicable information in the order shown in the NOTAM format set out in ICAO PANS-AIM (Doc 10066);
 - (2) NOTAM text is composed of the significations or uniform abbreviated phraseology assigned to the ICAO NOTAM Code, complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language;
 - (3) NOTAM is originated in the English language or the national language, as agreed with the relevant aeronautical information services provider;
 - (4) information concerning snow, slush, ice, frost, standing water or water associated with snow, slush, ice or frost on the movement area is disseminated by means of

SNOWTAM and contains the information in the order shown in the SNOWTAM format in ICAO PANS-AIM (Doc 10066);

(5) when an error has occurred in a NOTAM, a NOTAM with a new number is originated to replace the erroneous NOTAM or the erroneous NOTAM is cancelled and a new NOTAM is originated;

(6) when a NOTAM is originated to cancel or replace a previous NOTAM:

(i) the series and number/year of the previous NOTAM are indicated;

(ii) the Location Indicators and subject of both NOTAM are the same;

(7) only one NOTAM is cancelled or replaced by a new NOTAM;

(8) each originated NOTAM deals with only one subject and one condition of the subject;

(9) each originated NOTAM is as brief as possible and compiled so that its meaning is clear without the need to refer to another document;

(10) an originated NOTAM containing permanent or temporary information of long duration (three months or longer) includes appropriate references to the AIP or AIP supplement;

(11) the ICAO Location Indicator included in the text of an originated NOTAM for the aerodrome is the one contained in the Location Indicators. A curtailed form of such indicators shall not be used.

(e) The aerodrome operator shall, following the publication of a NOTAM that it has originated, review its content to ensure its accuracy, and ensure the dissemination of the information to all relevant aerodrome personnel and organisations at the aerodrome.

(f) The aerodrome operator shall maintain records:

(1) of the NOTAM it originated and those that were issued;

(2) regarding the implementation of points (a)(2) and (3).

ADR.OPS.A.060 Reporting of surface contaminants

The aerodrome operator shall report to the aeronautical information services and air traffic services units on matters of operational significance affecting aircraft and aerodrome operations on the movement area, particularly in respect of the presence of the following:

(a) water;

(b) snow;

(c) slush;

(d) ice;

(e) frost;

(f) anti-icing or de-icing liquid chemicals or other contaminants;

(g) snowbanks or drifts.

ADR.OPS.A.065 Reporting of the runway surface condition

(a) The aerodrome operator shall report the runway surface condition over each third of the runway using a runway condition report (RCR). The report shall include a runway condition code (RWYCC) using numbers 0 to 6, the contaminant coverage and depth, and a description using the following terms:

— COMPACTED SNOW;

— DRY;

- DRY SNOW;
 - DRY SNOW ON TOP OF COMPACTED SNOW;
 - DRY SNOW ON TOP OF ICE;
 - FROST;
 - ICE;
 - SLUSH;
 - STANDING WATER;
 - WATER ON TOP OF COMPACTED SNOW;
 - WET;
 - WET ICE;
 - WET SNOW;
 - WET SNOW ON TOP OF COMPACTED SNOW;
 - WET SNOW ON TOP OF ICE.
- (b) Reporting shall commence when a significant change in runway surface condition occurs due to water, snow, slush, ice or frost.
- (c) Reporting of the runway surface condition shall continue to reflect significant changes until the runway is no longer contaminated. When that situation occurs, the aerodrome operator shall issue an RCR that states that the runway is wet or dry as appropriate.
- (d) Friction measurements shall not be reported.
- (e) When a paved runway or portion of a paved runway is slippery wet, the aerodrome operator shall make such information available to the relevant aerodrome users. That shall be done by originating a NOTAM and shall describe the location of the affected portion.”.
- (5) After point ADR.OPS.B.035, insert—

“ADR.OPS.B.037 Assessment of runway surface condition and assignment of runway condition code

Whenever the contaminants listed in points ADR.OPS.A.060(a) to (e) are present on the surface of a runway, the aerodrome operator shall:

- (a) assign a RWYCC based on the type and depth of the contaminant and temperature;
- (b) inspect the runway whenever the runway surface condition may have changed due to meteorological conditions, assess the runway surface condition and assign a new RWYCC;
- (c) use special air-reports to trigger reassessment of RWYCC.”.