Annex I to ED Decision 2021/005/R

'GM to Annex I (Definitions) — Issue 1, Amendment 13'

The Annex to Decision 2012/015/R of 24 October 2012 is hereby amended as follows:

The text of the amendment is arranged to show deleted, new or amended text as shown below:

- deleted text is marked with struck through;
- new or amended text is highlighted in blue;
- an ellipsis '[...]' indicates that the rest of the text is unchanged.

GM1 Annex I Definitions

DEFINITIONS FOR TERMS USED IN ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL

For the purpose of Acceptable Means of Compliance and Guidance Material to Regulation (EU) No 965/2012, the following definitions should apply:

[...]

- (za) 'Runway condition assessment matrix (RCAM)' means a matrix that allows the assessment of the runway condition code (RWYCC), using associated procedures, from a set of observed runway surface condition(s) and pilot report of braking action.
- (zb) '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.
- (zc) '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.
- (zd) 'Runway surface condition descriptors' means one of the following elements on the surface of the runway:
 - (1) '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;
 - (2) 'dry snow': snow from which a snowball cannot readily be made;
 - (3) 'frost': ice crystals formed from airborne moisture on a surface whose temperature is at or below freezing; frost differs from ice in that the frost crystals grow independently and, therefore, have a more granular texture;

- (4) 'ice': water that has frozen or compacted snow that has transitioned into ice in cold and dry conditions;
- (5) '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;
- (6) 'standing water': water of depth greater than 3 mm;
- (7) 'Wet ice': ice with water on top of it or ice that is melting.
- (8) 'wet snow': snow that contains enough water to be able to make a well compacted, solid snowball, but water will not squeeze out.

[...]

(aaa) 'Slippery wet runway' means a wet runway where the surface friction characteristics of a significant portion of the runway have been determined to be degraded.

[...]

GM2 Annex I Definitions

ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms are used in the Annexes to this Regulation:

| [] | |
|-------|--|
| AIREP | air-report |
| [] | |
| ALAP | aerodrome landing analysis programme |
| [] | |
| ALD | actual landing distance |
| [] | |
| CSP | communication service provider |
| [] | |
| LDF | landing distance factor |
| [] | |
| LDTA | landing distance at time of arrival |
| [] | |
| PBCS | performance-based communication and surveillance |
| [] | |
| PFC | porous friction course |
| [] | |
| RCAM | runway condition assessment matrix |
| [] | |

| RCP | required communication performance |
|-------|------------------------------------|
| [] | |
| RCR | runway condition report |
| [] | |
| RSP | required surveillance performance |
| [] | |
| RWYCC | runway condition code |
| [] | |

GM19 Annex I Definitions

CONTAMINATED RUNWAY

As the runway condition is reported in runway thirds, a significant portion of the runway surface area is more than 25 % of one third of the runway surface area within the required length and width being used.

The runway length being used in this context is the physical length of runway available, typically from the start of the take-off run available (TORA) in one direction to the start of the TORA in the opposite direction. When the runway is shortened by a notice to airmen (NOTAM) — for example, due to works, or the aerodrome operator is not able to clear the full length of the runway and closes part of it for operations, the length being used is that declared in the NOTAM and the 'reduced runway length' that declared in the RCR.

The runway width being used in this context is the physical width of the runway (between the runway edge lights), or the 'cleared width' if reported in the RCR. It is not intended that 25 % coverage is reported when contaminants affect only the runway edges after runway cleaning. Runway inspectors are instructed to focus on the area around the wheel tracks when reporting the contaminant type, coverage and depth.

GM20 Annex I Definitions DRY RUNWAY/WET RUNWAY

The 'area intended to be used' means the area of the runway that is part of the TORA, accelerate and stop distance available (ASDA) or landing distance available (LDA) declared in the aeronautical information publication (AIP) or by a NOTAM.

GM21 Annex I Definitions RUNWAY CONDITION CODE (RWYCC)

The purpose of the runway condition code (RWYCC) is to permit an operational aeroplane landing performance calculation by the flight crew.

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RUNWAY SURFACE CONDITION(S)

(a) The runway surface conditions used in the RCR establish a common language between the aerodrome operator, the aeroplane manufacturer and the aeroplane operator.

(b) Aircraft de-icing chemicals and other contaminants are also reported but are not included in the list of runway surface condition descriptors because their effect on the runway surface friction characteristics and the RWYCC cannot be evaluated in a standardised manner.

GM23 Annex I Definitions

RUNWAY SURFACE CONDITION DESCRIPTORS — GENERAL

The runway surface condition descriptors are used solely in the context of the RCR and are not intended to supersede or replace any existing World Meteorological Organization (WMO) definitions.

RUNWAY SURFACE CONDITION DESCRIPTORS — FROST

- (a) Freezing refers to the freezing point of water (0 °C).
- (b) Under certain conditions, frost can cause the surface to become very slippery, and it is then reported appropriately as downgraded RWYCC.

RUNWAY SURFACE CONDITION DESCRIPTORS — STANDING WATER

Running water of depth greater than 3 mm is reported as 'standing water' by convention.

RUNWAY SURFACE CONDITION DESCRIPTORS – WET ICE

Freezing precipitation can lead to runway conditions associated with wet ice from an aeroplane performance point of view. Wet ice can cause the surface to become very slippery. It is then reported appropriately as downgraded RWYCC.

GM24 Annex I Definitions

LANDING DISTANCE AT TIME OF ARRIVAL

The landing distance data to be used for a landing performance assessment at time of arrival allow to establish an operationally achievable landing distance from 50ft above runway threshold to full stop that takes into account AFM procedures for final approach and landing and is provided as a function of the main influence parameters such as aeroplane mass and configuration, pressure altitude, wind, outside air temperature, runway slope and approach speed increments. It may be provided for use of automation such as autobrakes and autoland and may account for reverse thrust use. As the landing distance at time of arrival is the unfactored minimum landing distance achievable for the assumed conditions, an appropriate margin should be applied to this distance to determine the minimum LDA necessary for a safe stop.

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- (a) The surface friction characteristics of the runway a
- (a) The surface friction characteristics of the runway are considered degraded when below the minimum standards.
- (b) A portion of runway in the order of 100 m long may be considered significant.

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A flight recorder may be crash-protected or lightweight and may be deployable or not. Crash-protected flight recorders are capable of withstanding very severe crash conditions such as those encountered during some accidents of large aeroplanes and large helicopters. Crash-protected flight recorders comprise one or more of the following systems: a flight data recorder (FDR), a cockpit voice recorder (CVR), an airborne image recorder (AIR), or a data link recorder (DLR). Lightweight flight recorders are usually designed to meet less demanding requirements than crash-protected flight recorders, which allows them to be lighter. A non-deployable flight recorder is permanently attached to the aircraft. A deployable flight recorder includes a part that is capable of automatically deploying from the aircraft.