'Certification Specifications (CS) and Guidance Material (GM) for Aerodrome Design (CS-ADR-DSN)'

The Annex to ED Decision 202X/0XX/R is amended as follows:

The text of the amendment is arranged to show deleted, new or amended, and unchanged text as follows:

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

Disclaimer

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GM1 ADR-DSN.L.590 Aircraft stand marking

- (a) The distances to be maintained between the stop line and the lead-in line may vary according to different aircraft types, taking into account the pilot's field of view.
- (b) Apron markings are installed to support the safe operation of aircraft on stands and apron areas. Where appropriate procedures are employed, for example the presence of a marshaller, markings may not be required, giving flexibility of operations. Examples would include situations where aircraft marshallers are used or where aircraft are required to self-park on an open apron where different combinations of aircraft preclude dedicated markings. Specific markings/stands are normally more applicable for larger aircraft.

CS ADR-DSN.R.855 Closed runways and taxiways, or parts thereof

(a) Applicability:

A closed marking should be displayed on a runway, or taxiway, or portion thereof which is permanently closed to the use of all aircraft.

- (b) Location of closed markings: On a runway, a closed marking should be placed at each end of the runway, or portion thereof, declared closed, and additional markings should be so placed that the maximum interval between markings does not exceed 300 m. On a taxiway a closed marking should be placed at least at each end of the taxiway or portion thereof closed.
- (c) Characteristics of closed markings: The closed marking should be of the form and proportions as detailed in Figure R-1, Illustration (a), when displayed on a runway, and should be of the form and proportions as detailed in Figure R-1, Illustration (b), when displayed on a taxiway. The marking should be white when displayed on a runway and should be yellow when displayed on a taxiway.
- (d) When a runway, or taxiway, or portion thereof is permanently closed, all normal runway and taxiway markings should be physically removed.
- (e) In addition to closed markings, when the runway, or taxiway, or portion thereof closed is intercepted by a usable runway or taxiway which is used at night, unserviceability lights should be placed across the entrance to the closed area at intervals not exceeding 3 m (see <u>CS ADR-DSN.R.870(c)(2)</u>).







Illustration a) Closed runway marking

Figure R-1. Runway and taxiway closed markings



CS ADR-DSN.R.870 Unserviceable areas

(a) Applicability of unserviceability markers and lights:

Unserviceability markers should be displayed wherever any portion of a taxiway, apron, or holding bay is declared unfit for the movement of aircraft but it is still possible for aircraft to bypass the area safely. On a movement area used at night, unserviceability lights should be used.

(b) Location: Unserviceability markers and lights should be placed at intervals sufficiently close so as to delineate the unserviceable area.

- (ea) Characteristics:
 - (1) Unserviceability markers should consist of conspicuous upstanding devices such as flags, cones, or marker boards.
 - (2) An unserviceability light should consist of a red fixed light. The light should have intensity sufficient to ensure conspicuity considering the intensity of the adjacent lights and the general level of illumination against which it would normally be viewed. In no case should the intensity be less than 10 cd of red light.
 - (3) An unserviceability cone should be at least 0.5 m in height and red, orange, or yellow, or any one of these colours in combination with white.
 - (4) An unserviceability flag should be at least 0.5 m square and red, orange, or yellow, or any one of these colours in combination with white.



(5) An unserviceability marker board should be at least 0.5 m in height and 0.9 m in length, with alternate red and white, or orange and white vertical stripes.

GM1 ADR-DSN.R.870 Unserviceable areas

- (a) Unserviceability markers and lights are used for such purposes as warning pilots of a hole in a taxiway, or apron pavement, or outlining a portion of pavement, such as on an apron, that is under repair. They are not suitable for use when a portion of a runway becomes unserviceable, nor on a taxiway when a major portion of the width becomes unserviceable. In such instances, the runway or taxiway is normally closed.
- (b) The spacing required for marking and lights should take into account visibility conditions, geometric configurations of the area, potential height differences of terrain so that the limits of unserviceable area is readily visible to pilot.
- (c) Where a temporarily unserviceable area exists, it may be marked with fixed-red lights. These lights mark the most potentially dangerous extremities of the area.
- (d) A minimum of four such lights may be used, except where the area is triangular in shape, in which case a minimum of three lights may be used.
- (e) The number of lights may be increased when the area is large or of unusual configuration. At least one light should be installed for each 7.5 m of peripheral distance of the area.
- (f) If the lights are directional, they should be orientated so that as far as possible, their beams are aligned in the direction from which aircraft or vehicles should approach.
- (g) Where aircraft or vehicles should normally approach from several directions, consideration should be given to adding extra lights or using omnidirectional lights to show the area from these directions.
- (h) Unserviceable area lights should be are frangible. Their height should be is sufficiently low to preserve clearance for propellers and for engine pods of jet aircraft.