

Subject: Higher Code Letter Operations

Ref. Publications:

Commission Regulation (EU) [139/2014](#) dated 12 February 2014.

EASA Certification Specifications (CS) [CS-ADR-DSN Issue 4](#) dated 08 December 2017.

Applicability:

Competent authorities, aerodrome operators.

Description:

1. Changes to the aerodrome reference code

The aerodrome reference code (ARC) is a simple method for interrelating the numerous specifications concerning the characteristics of an aerodrome, in order to provide aerodrome facilities that are adequate for the aeroplanes intended to operate at that aerodrome. The ARC is composed of two elements: the code number and the code letter, which are related to the aeroplane performance characteristics and dimensions. The requirements for the ARC are provided in [CS-ADR-DSN Issue 4](#).

The previous issues of CS-ADR-DSN specified the ARC code letter to contain two parameters: the wing span (WS) and the outer main gear wheel span (OMGWS) of the affected aeroplane design. The code letter was determined by selecting the more demanding of these two parameters. This meant that, where the OMGWS was the more demanding parameter, the code letter would be upgraded into the next higher category.

Following the adoption of the new ARC methodology by the International Civil Aviation Organisation, EASA published CS-ADR-DSN Issue 4, on the determination of the ARC code letter by selecting the WS only of the aeroplanes for which the facility is intended. It was observed that the WS is relevant for aerodrome characteristics related to separation distances, for example the taxiway minimum separation distance, or clearance distances on aircraft stands, while the OMGWS parameter is used to determine the required ground-based manoeuvring characteristics, such as the width of runways and taxiways.

Therefore, the aerodrome characteristics relating to separation distances will continue to be defined with regards to the code letter, while ground-based manoeuvring characteristics are defined with regards to the OMGWS and no longer by the code letter. For more information regarding the change to the ARC methodology, please refer to EASA [NPA 2017-04](#).

This is information only. Recommendations are not mandatory.



2. The impact of ARC changes on ADR.OPS.B.090, Use of the aerodrome by higher code letter aircraft

According to point (a) of ADR.OPS.B.090, a prior approval is required from the competent authority for the use of the aerodrome or parts of it by an aeroplane with a higher code letter than the aerodrome design characteristics specified in the terms of the certificate.

Since the OMGWS is referenced directly in the relevant CS and it is no longer a part of the ARC, this parameter cannot be covered by the code letter referred to in point (a) of ADR.OPS.B.090, and therefore it is not checked when assessing a potential higher code letter operation. This might lead to a situation where although the code letter of the aeroplane is identical to the aerodrome's code letter included in the terms of the certificate, the OMGWS of the aeroplane could exceed the certified design characteristics of the aerodrome. In this case, an aeroplane might use the infrastructure or parts of an aerodrome's infrastructure which had not been designed to accommodate that type of aeroplane without a prior approval from the competent authority. An example is provided below to illustrate the issue.

Example:

Up to CS-ADR-DSN, Issue 3 the aeroplane type DHC-8-400 Dash 8 was classified as a 3D code aeroplane due to an OMGWS in the range of up to but not including 14 m. Following the changes to the ARC code letter components in Issue 4 of CS-ADR-DSN, the DHC-8-400 Dash 8 is now classified as a 3C code aeroplane due to a WS in the range of 24 m up to but not including 36 m. An aerodrome is certified as 4C, with all taxiways 15 m wide. If the DHC-8-400 Dash 8 were to operate at this aerodrome, a comparison between the code letter of the aerodrome and the code letter of this aeroplane does not indicate a 'higher code letter' operation, since the code letters are identical. However, a more detailed analysis shows that a 15 m wide taxiway can only accommodate aeroplanes with an OMGWS ranging between 6 m up to but not including 9 m, while the DHC-8-400 Dash 8 has an OMGWS of more than 9 m which requires 23 m wide taxiways. Therefore, by not including the OMGWS in the analysis, it would have meant that the DHC-8-400 Dash 8 could have operated on a taxiway which has not been designed to accommodate this type.

During the next planned regular update of the aerodrome rules, EASA intends to take regulatory action to update ADR.OPS.B.090. In the meantime, until the regulatory update is completed and comes into force, this SIB is issued in order to raise awareness and to ensure the safety of aerodrome operations.

At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant Safety Directive (SD) action under Regulation (EU) [139/2014](#), Annex II, ADR.AR.A.040.

Recommendation(s):

EASA recommends that the aerodrome operator:

1. Checks the dimensions of the WS, **as well as the OMGWS**, of the aeroplane types currently using or expecting to use the aerodrome; if either the WS or the OMGWS, or both, exceed the certified design characteristics of the aerodrome a prior approval from the competent authority is needed;

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2. Assesses the elements listed in AMC1 ADR.OPS.B.090; and
3. Proceeds according to ADR.OR.B.040.

The competent authority should take into account the above recommendations during their oversight activities.

Contact(s):

For further information, contact the EASA Programming and Continued Airworthiness Information Section, Certification Directorate, E-mail: ADs@easa.europa.eu.

For any question concerning the technical content of this SIB, contact EASA Aerodromes Standards & Implementation Section, Flight Standards Directorate, E-mail: aerodromes@easa.europa.eu

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