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Annex to EASA Opinion No 01/2025

COMMISSION IMPLEMENTING REGULATION (EU) .../... of XXX

amending Regulations (EU) No 1178/2011 and (EU) No 965/2012 as regards the update of flight simulation training device (FSTD) requirements and the use of FSTDs for pilot training, testing and checking

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COMMISSION IMPLEMENTING REGULATION (EU) xxxx/xx

of XXX

amending Regulations (EU) No 1178/2011 and (EU) No 965/2012 as regards the update of flight simulation training device (FSTD) requirements and the use of FSTDs for pilot training, testing and checking

THE EUROPEAN COMMISSION.

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (1), and in particular Articles 23, 24, 25, 27 and 31 thereof,

Whereas:

- (1) Commission Regulation (EU) No 1178/2011 (2) lays down the requirements for the use of flight simulation training devices (FSTDs) in pilot type training, testing and checking.
- Commission Regulation (EU) No 965/2012 (3) lays down technical requirements and (2) administrative procedures related to air operations and, in particular, the requirements for the use of FSTDs in operator recurrent training.
- (3) Since the application of Regulation (EU) No 1178/2011, the formal FSTD qualification, in terms of FSTD types and levels, has determined the extent to which an FSTD can be used for pilot training, testing and checking. Considering the evolution of and innovations in FSTD technology, the provisions on the use of FSTDs for type rating and operator recurrent training, as applicable, should be revised to allow for, for a particular training task, the use of the most suitable FSTD, based on its technical capabilities, referred to as an 'FSTD capability signature' (FCS).
- (4) The provisions on the use of FSTDs in type rating and operator recurrent training in both Regulations (EU) No 1178/2011 and (EU) No 965/2012 should be revised to

⁽¹⁾ OJ L 212, 22.8.2018, p. 1, ELI: http://data.europa.eu/eli/reg/2018/1139/oj.

⁽²⁾ Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the 25.11.2011, Parliament (OJL 311. European and of the Council ELI: http://data.europa.eu/eli/reg/2011/1178/oj).

⁽³⁾ Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1, ELI: http://data.europa.eu/eli/reg/2012/965/oj).

establish the necessary simulation features and fidelity levels required to support training tasks and to allow for more flexibility when determining the suitable FSTDs for these tasks. These amendments should consider guidance material published by the International Civil Aviation Organization, which recommends basing FSTD qualification on criteria related to simulation features and fidelity levels.

- (5) When introducing the FCS for qualified FSTDs, appropriate transitional provisions should be put in place to ensure a smooth transition from the current to the future applicable requirements for existing FSTDs, while at the same time supporting the implementation of the FCS by industry as soon as possible.
- (6) The amendments introducing the FCS should apply with deferral, to give Member States' competent authorities the time required to prepare for their implementation.
- (7) Since the requirements of Regulations (EU) No 1178/2011 and (EU) No 965/2012 on training other than type rating training will continue to refer to particular FSTD types and levels, requirements should be put in place to determine the equivalence between FSTDs qualified with types and levels and FSTDs qualified with FCSs.
- (8) The European Union Aviation Safety Agency has prepared draft implementing rules and submitted them to the Commission with Opinion No 01/2025 in accordance with Article 75(2), points (b) and (c), and Article 76(1) of Regulation (EU) 2018/1139.
- (9) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 127(1) of Regulation (EU) 2018/1139,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) No 1178/2011 is amended as follows:

- (1) Article 2 is amended as follows:
 - (a) point 20 is replaced by the following:
 - '(20) 'Flight simulation training device (FSTD)' means a device for pilot training, testing and checking whose qualification certificate includes an FSTD capability signature (FCS) or, in the case of a legacy FSTD:
 - (a) for aeroplanes, is a full flight simulator (FFS), a flight training device (FTD), a flight and navigation procedures trainer (FNPT) or a basic instrument training device (BITD; or
 - (b) for helicopters, is a full flight simulator (FFS), a flight training device (FTD) or a flight and navigation procedures trainer (FNPT);';
 - (b) point 23 is replaced by the following:
 - '(23) 'Qualification test guide (QTG)' means a document established to demonstrate that the FSTD complies with the prescribed tolerances and applicable requirements of the primary reference document(s) for the simulated aircraft type or group of aircraft;';

- (c) the following points (26), (27), (28), (29), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43) are added after point (25):
 - '(26) 'CS-FSTD' means the certification specifications for FSTDs issued by the Agency in accordance with point ORA.FSTD.205 of Annex VII (Part-ORA) to this Regulation;
 - (27) 'FSTD capability signature (FCS)' means the information that is endorsed on an FSTD qualification certificate, indicating the features and their fidelity levels as well as the aircraft simulated by that FSTD in accordance with CSFSTD Issue 1 or later;
 - (28) 'Assigned FSTD capability signature (assigned FCS)' means the information that is endorsed on the FSTD qualification certificate, indicating the features and the fidelity levels as well as the aircraft simulated by that FSTD, where that FSTD has not been qualified in accordance with CS-FSTD Issue 1;
 - (29) 'Equipment specification list (ESL)' means a list that is part of the FSTD qualification and provides accurate and comprehensive information regarding the device qualification and its qualification basis, installed equipment, capabilities and specifications;
 - (30) 'Primary reference document (PRD)' means the technical specification or set of technical specifications used to establish the qualification basis for an FSTD:
 - (31) 'Initial evaluation' means the first assessment by the competent authority to determine whether an FSTD performs to the standard of the relevant qualification basis;
 - (32) 'Validation data' means the ground and flight test data, engineering data and other applicable sources used to objectively confirm that the FSTD reflects the static as well as the dynamic handling and performance characteristics of the simulated aircraft and its relevant systems;
 - (33) 'Verification', in the context of FSTDs, means the process to ensure that an FSTD meets the applicable technical qualification requirements;
 - (34) 'Recurrent evaluation' means the periodic assessment by the competent authority subsequent to the initial evaluation to establish whether an FSTD continues to perform to the standard of the relevant qualification basis;
 - (35) 'Special evaluation' means any assessment by the competent authority of an FSTD other than the initial and recurrent evaluations;
 - (36) 'Item', in the context of FSTDs, means non-compliance of an FSTD with respect to the applicable requirements of its qualification basis.
 - (37) 'Modification' means a change to an FSTD;
 - (38) 'Validation', in the context of FSTDs, means the process of assessing the capabilities of an FSTD for training, testing and checking;

- (39) 'Legacy FSTD' means an FSTD whose qualification certificate does not include an FCS or assigned FCS;
- (40) 'Group of aircraft', in the context of FSTDs, means aircraft that have similar handling and operational characteristics;
- (41) 'Validation data roadmap' means a document that identifies, in a matrix format, the source or sources of data for all required objective tests of an FSTD together with the applicable rationales or explanations;
- (42) 'Engineering report' means a document produced by the FSTD manufacturer to describe the data and methods used to design and verify an FSTD against the applicable qualification basis;
- (43) 'Fly-out' means a simulated flight performed during the conduct of the function and subjective tests of an FSTD contained in the master QTG (MQTG) by a suitably qualified pilot.';

Rationale

The proposed amendments to the definitions contained in Article 2 aim to define all the terminology that is referred to in the applicable Annexes to Regulation (EU) No 1178/2011.

In point (20), the definition of FSTD is expanded to include FSTDs with an FCS on the qualification certificate. Under the new regulatory framework, there will no longer be type and level qualification for FSTDs. The capability of an FSTD will be expressed by the FCS, the definition of which is provided. The qualification basis for new devices will be CS-FSTD Issue 1, providing the qualification requirements for both aeroplanes and helicopters.

The FSTD capabilities will be described in the FSTD qualification certificate and the ESL. The qualification certificate of an FSTD will include its FCS. The definition of ESL is provided. For further information, please refer to the amendments to Annex VI (Part-ARA) and Annex VII (Part-ORA).

The need to introduce definitions of assigned FCS and legacy FSTD is related to the transitional arrangements. For further information, please refer to Article 10b and to Appendix IX to Annex VI (Part-ARA).

Definitions of initial, recurrent and special evaluations are introduced, as these terms are used in Annex VI (Part-ARA) and Annex VII (Part-ORA).

Definitions of validation and verification are introduced specifically for the FSTD domain, and these terms are used in Subpart ARA.FSTD and Subpart ORA.FSTD.

Definitions of PRD, engineering report, validation data roadmap, validation data, group of aircraft, item and fly-out are added, as these terms are used in Annex VI (Part-ARA) and Annex VII (Part-ORA).

The existing definition of QTG (point (23)) is modified to accommodate the FCS framework.

- (2) in Article 10b, the following paragraphs are added:
 - '2. From [reference to the date of entry into force of this Regulation + 24 months], Member States and EASA shall, when reissuing FSTD qualification certificates in accordance with the requirements of Annex VI (Part-ARA) for FSTDs that were qualified in accordance with certification specifications applicable before

[reference to the date of entry into force of this Regulation + 24 months], do the following:

- (a) upon application by the certificate holder, complete the section 'FSTD capability signature (FCS)' of the certificate with:
 - (i) in the case of FFSs that were qualified in accordance with JAR-STD 1A amendment 3 or the JAR-STD 1H initial issue or later, the case of FTDs level 2 (FTD 2) and level 3 (FTD 3) that were qualified in accordance with the JAR-STD 2A initial issue or the JAR-STD 2H initial issue or later and the case of FNPTs that were qualified in accordance with JAR-STD 3A change 1 or the JAR-STD 3H initial issue or later:
 - (A) an assigned FCS in accordance with Appendix IX to Annex VI (Part-ARA); or
 - (B) the FCS, after an evaluation of the FSTD in accordance with the CS-FSTD applicable as of [reference to the date of entry into force of this Regulation + 24 months]; or
 - (ii) in the case of FFSs, FTD 2, FTD 3 and FNPTs other than those specified in point (a)(i):
 - (A) an assigned FCS in accordance with Appendix IX to Annex VI (Part-ARA), after an evaluation of the FSTD in accordance with the certification specifications referred to in point (a)(i), as applicable; or
 - (B) the FCS, after an evaluation of the FSTD in accordance with the CS-FSTD applicable as of [reference to the date of entry into force of this Regulation + 24 months]; or
 - (iii) in the case of FTD 1, the FCS, after an evaluation of the FSTD in accordance with the CS-FSTD applicable as of [reference to the date of entry into force of this Regulation + 24 months]; or
 - (iv) in any case where an FSTD has been qualified using special conditions in accordance with point ARA.FSTD.100(h)(1) of Annex VI (Part-ARA), the FCS, after an evaluation of the FSTD in accordance with the CS-FSTD applicable as of [reference to the date of entry into force of this Regulation + 24 months]; or
- (b) in all other cases:
 - (i) reissue the FSTD qualification certificate without completing the section 'FSTD capability signature (FCS)';
 - (ii) when reissuing FSTD qualification certificates for BITDs, include the FSTD specifications set out in Appendix IV to Annex VI (Part-ARA), as applicable until [reference to the day before the applicability of this Regulation].

- (c) before reissuing an FSTD qualification certificate with an FCS in accordance with point (a), inform the applicant of the result of the re-evaluation.
- 3. When acting in accordance with point 2(a) in cases where an FSTD is qualified to multiple FSTD qualification types and levels that simulate the same aircraft type, Member States and EASA shall merge those FSTD qualification certificates into a single FSTD qualification certificate with one FCS. In such cases, Member States and EASA shall do the following:
 - (a) if an FSTD meets the qualification basis as referred to in point 2(a)(i), the Member State and EASA shall:
 - (i) take the highest fidelity level for each feature, resulting from a comparison of the assigned FCS for each qualification; or
 - (ii) if the FSTD certificate holder applies for an FCS, determine the FCS after an evaluation of the FSTD;
 - (b) if an FSTD does not meet the qualification basis as referred to in point 2(a)(i) for each qualification certificate, the Member State and EASA shall issue the FSTD qualification certificate with an FCS that is determined in accordance with points (ii) to (iv) of point 2(a), as applicable.
- 4. Member States and EASA shall replace, no later than [reference to the date of entry into force of this Regulation + 42 months], the existing FSTD qualification certificates with certificates complying with the format laid down in Appendix IV to Annex VI (Part-ARA) after having received and reviewed:
 - (a) the ESL and
 - (b) a statement confirming that the organisation has established compliance with Part-ORA, Subpart FSTD, as amended by [reference to this Regulation].

When replacing the existing FSTD qualification certificates in accordance with this point, Member States and EASA shall act in accordance with point 2. When the Member States and EASA issue the FSTD qualification certificate in accordance with the format laid down in Appendix IV to Annex VI (Part-ARA), the ESL developed for that FSTD certificate shall become part of the FSTD qualification.

- 5. From [reference to the date of entry into force of this Regulation + 24 months], holders of FSTD qualification certificates shall, for each FSTD qualification certificate other than those for BITDs, develop an ESL and submit it to the competent authority, together with a statement confirming that the organisation has established compliance with Part-ORA, Subpart FSTD, as amended by [reference to this Regulation], in any of the following cases:
 - (a) when applying for the reissuance of the certificate in accordance with the requirements of Annex VII (Part-ORA);
 - (b) when the FSTD is intended to be used for the conduct of training in accordance with Annex I (Part-FCL) or the requirements of Commission

Regulation (EU) No 965/2012, in accordance with a new or amended training programme;

- (c) no later than [reference to the date of entry into force of this Regulation + 36 months].
- 6. A BITD qualification certificate shall remain valid subject to recurrent evaluations, which shall be conducted by the competent authority every 3 years.'.

Rationale

Article 10b is amended to include the transitional measures applicable to FSTDs qualified under the existing legal framework.

Point 2 details the measures for FFSs, FTDs, FNPTs and BITDs.

As a general rule, organisations operating the FSTD may decide to either remain in the current legal framework with FSTD types and levels as allowed for legacy FSTDs or move to the new FCS-based legal framework by submitting an application to the competent authority.

If the organisation operating the FSTD would like to stay in the current legal framework and maintain FSTD types and levels, it would be considered a legacy FSTD and would not have an FCS. The use of the FSTD would stay the same as currently.

If the organisation operating the FSTD would like to move to the new FCS framework, for any FSTD apart from FTD 1, one of the following options may be applicable.

- Assign, without any evaluation, an FCS to the FSTD based on the FSTD type/level and its PRD. The FCS is assigned in accordance with the provisions of Appendix IX to Annex VI (Part-ARA). This path is applicable to FSTDs with a PRD determined in point 2(a)(i). Where the PRD of the FSTD does not follow the PRD determined in point 2(a)(i), the FSTD may either remain a legacy FSTD or be evaluated for a (true) FCS (point 2(a)(i)(B)). In the latter case, the FSTD follows the path explained below.
- Carry out an evaluation during which the FSTD is evaluated with respect to the requirements
 of the new CS-FSTD. In this case, the FSTD receives an FCS that expresses the real capability
 of the training device (point 2(a)(i)(B)).

For FFSs, FTD 2, FTD 3 and FNPTs other than those specified in point 2(a)(i) (e.g. those for which the PRD of the FSTD is different from the PRD determined in point 2(a)(i)), the organisation operating the FSTD may decide to modify the FSTD in order to obtain an assigned FCS. In this case, the evaluation of the FSTD is performed in accordance with the certification specification referred to in point 2(a)(i), as applicable. The outcome of this option is that the FSTD may obtain an FCS (e.g. an assigned FCS) and be used to obtain training credits under the FCS framework.

In the case of FTD 1, it is not possible to assign an FCS due to the general requirements of the existing qualification basis. By definition, an FTD 1 is only required to have at least one system, instrument or piece of equipment specific to the aircraft it simulates. Consequently, a unique FCS assigned to an FTD 1 is not possible, as it would not reflect the correct fidelity level for certain aircraft features. Therefore, should an FSTD operator decide to move to the new regulatory framework, the only option would be to perform an evaluation (point 2(a)(iii)).

For a specific FSTD type/level (e.g. FFS level A), the 'threshold' PRD in point 2(a)(i) is determined based on the common general requirements of the subsequent qualification basis issued after the 'threshold' PRD.

When competent authorities receive an application from an organisation operating the FSTD, they must issue qualification certificates in accordance with the new format established in Appendix IV to Annex VI.

If the organisation operating the FSTD does not want to apply for an FCS and the FSTD is considered a legacy FSTD, the competent authority must issue the new qualification certificate without completing the section 'FSTD capability signature' (point 2(b)(i)).

For BITDs, a transitional provision is included to ensure that, when reissuing an FSTD qualification certificate in accordance with the new template (Appendix IV to Annex VI (Part-ARA)), it contains the FSTD specifications set out in Appendix IV to Annex VI (Part-ARA), as applicable before the FCS framework becomes applicable. The reason for this is that BITDs will not be required to develop ESLs and therefore they would be allowed to keep the information in the format established before the new framework becomes applicable. The rationale for excluding BITDs from the obligation to develop ESLs is that such devices are no longer within the scope of CS-FSTD for initial qualification and there are very few BITDs (eight devices) qualified in EASA Member States.

FSTDs that are qualified as special category may follow the path of legacy FSTDs (point 2(b)(i)) or get an assigned FCS or FCS in accordance with point 2(a).

Point 3 is introduced as a result of the comments from the Advisory Bodies (March 2024) that the rules are not clear regarding how to treat FSTDs qualified to multiple FSTD qualification types and levels in the context of the FCS framework. For such FSTDs (e.g. FNPT II MCC/FTD 2), there are two possible options.

- Option 1. It can be kept as a legacy FSTD with both qualification certificates and continue business as usual without any changes to its current use and credits.
- Option 2. On a voluntary basis, such FSTDs can be moved to the FCS framework, while having a single FCS. The FCS is determined based on the PRD. If the FSTD meets the qualification basis, as referred to in point 2(a)(i) (threshold PRD), it can get an assigned FCS by merging the assigned FCS for each qualification and taking the highest fidelity level for each feature. If the FSTD does not meet the threshold PRD, it can be evaluated to get an FCS or assigned FCS if the FSTD is modified to meet the threshold PRD. It is also possible for the FSTD to get an assigned FCS; however, the organisation operating the FSTD must request an evaluation and then the FSTD gets an FCS.

In point 4, amendments are proposed because of the comments from Member States that the rules should clarify when the competent authorities are expected to exchange the FSTD certificates for certificates in the new format, laid down in Appendix IV to Annex VI (Part-ARA). This amendment is introduced based on the comments noting that, after a certain time, all Member States must exchange the FSTD certificates in order to enable harmonisation and better standardisation. The proposal is for all existing FSTD certificates to be replaced with the certificates in the new format no later than 18 months after the rule becomes applicable.

The rationale is that the competent authorities would not be required to maintain two qualification templates (the new one and the former one) for an indefinite time. The timing is determined based on the latest deadline for the organisations to provide the ESLs (12 months after the rules become applicable) plus an extra 6 months for the competent authorities to reissue the FSTD certificates in the new format.

Furthermore, it is proposed that Member States replace the existing FSTD qualification certificates with certificates complying with the new format only after receiving and reviewing the ESL for each FSTD certificate and a statement that the organisation has established compliance with the relevant changes in Subpart ORA.FSTD. The ESL will become part of the FSTD qualification only after the Member State reissues the FSTD qualification certificate in the new format. This provision clarifies that it is not considered acceptable to have an old FSTD qualification certificate and an ESL. The ESL will

be 'activated' as part of the FSTD qualification once the authority issues the FSTD qualification certificate in the new format, as both documents form the FSTD qualification.

Point 5 introduces the requirement for the organisation operating the FSTD to develop an ESL for each FSTD qualification certificate and submit it to the competent authority, together with a statement confirming that the organisation has established compliance with the amended rules in Subpart ORA.FSTD. This is a key requirement with regard to the existing FSTD, as the ESL is considered an integral part of the FSTD qualification. All cases in which the organisation operating the FSTD needs to submit the ESL are exhaustively covered in points 5(a)–(c).

- In scenario 5(a), the operator must submit the ESL when it applies for the reissuance of the qualification certificate;
- In scenario 5(b), the operator submits the ESL to substantiate the suitability of the FSTD for the new/amended training programme;
- Scenario 5(c) covers all other cases, as the operator must provide the ESL within an administrative deadline. The rationale is that within a certain period all FSTDs, except BITDs, must have ESLs.

Finally, point 6 introduces in Article 10b an existing requirement, currently specified in point ARA.FSTD.120(b)(2), to perform a recurrent evaluation every 3 years for BITDs. It has been moved to the transitional provisions, as there are no longer BITDs within the scope of CS-FSTD for initial qualification. Hence, this requirement remains valid only for already qualified BITDs.

- (3) Annex I is amended in accordance with Annex I to this Regulation;
- (4) Annex VI is amended in accordance with Annex II to this Regulation;
- (5) Annex VII is amended in accordance with Annex III to this Regulation;
- (6) Annex VIII is amended in accordance with Annex IV to this Regulation.

Article 2

Commission Regulation (EU) No 965/2012 is amended as follows:

- (1) Annex I is amended in accordance with Annex V to this Regulation;
- (2) Annex III is amended in accordance with Annex VI to this Regulation.

Article 3

- 1. This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.
- 2. It shall apply from [24 months after entry into force].
- 3. By way of derogation from paragraph 2, points (5) [FCL.740.H], (6) [point FCL.930.TRI] and (7) [point FCL.935.TRI] of Annex I shall apply from the entry into force of this Regulation.

Rationale

The introduction of the FCS concept with the proposed amendments is expected to require time for the stakeholders to prepare for the implementation of the changes. For this reason and in order to allow sufficient time for effective implementation support by EASA, a deferred applicability period of 2 years after the entry into force is proposed.

The amendments to FCL.740.H, point FCL.930.TRI and point FCL.935.TRI of Annex I (Part-FCL) to Commission Regulation (EU) No 1178/2011 are editorial corrections and are not linked with the FCS framework. Therefore, they become applicable with the entry into force of this amending Regulation.

This Regulation shall be binding in its entirety and directly applicable in all Member States in accordance with the Treaties.

Done at Brussels,

For the Commission The President