European Union Aviation Safety Agency

Opinion No 01/2025

in accordance with Article 76(1) of Regulation (EU) 2018/1139

Update of the flight simulation training device requirements

RMT.0196 – Subtask 2

WHAT THIS OPINION IS ABOUT

This Opinion proposes amendments to Commission Regulation (EU) No 1178/2011 and Commission Regulation (EU) No 965/2012 with the objective of introducing:

— a new regulatory approach for qualification of flight simulation training devices (FSTDs), based on the FSTD capabilities and fidelity levels specified in the FSTD capability signature (FCS); and

— a task-to-tool concept for aeroplane and helicopter type rating training and operator recurrent training.

With the proposed amendments, training providers will be required to identify the device capabilities and fidelity levels that are needed for training based on an analysis of training task objectives. In order to be able to use an FSTD qualified with an FCS, the FCS needs to have, for each FSTD feature, a fidelity level that is equal to or higher than the identified training FCS.

The proposed amendments are not expected to cause any changes to approved type rating training and already qualified FSTDs, which can still be used without any changes. The FCS framework can be applied by the training organisations and organisations operating the FSTD on a voluntary basis for FSTDs qualified before the new qualification basis becomes applicable.

After the new regulatory framework becomes applicable, FSTDs qualified with FCSs can be used in type rating training without any changes to the approved training programme by applying the corresponding equivalence between FSTDs qualified with types and levels and FSTDs qualified with FCSs. The proposed applicability of the new FCS framework is two years after the entry into force of the proposed amendments. During this period, EASA intends to support the stakeholders by organising an implementation support task.

The proposed amendments ensure harmonisation, as appropriate, with the guidance established in Doc 9625, *Manual of criteria for the qualification of flight simulation training devices*, by the International Civil Aviation Organization (ICAO).

REGULATIONS TO BE AMENDED:

— Commission Regulation (EU) No 1178/2011

— Commission Regulation (EU) No 965/2012

ED DECISIONS TO BE AMENDED AFTER THE ADOPTION OF THE REGULATION:

— ED Decision 2011/016/R - AMC & GM to Regulation (EU) No 1178/2011 | EASA (europa.eu)

— ED Decision 2012/006/R - AMC & GM to Part-ARA | EASA (europa.eu)

— ED Decision 2012/007/R - AMC & GM to Part-ORA | EASA (europa.eu)

— ED Decision 2014/017/R - AMC & GM Part-ORO - Issue 2 | EASA (europa.eu)

— ED Decision 2014/008/R - CS-FCD - Initial issue | EASA

— ED Decision 2014/033/R - CS-SIMD - Initial issue | EASA

ED DECISION TO BE ISSUED AFTER THE ADOPTION OF THE REGULATION:

— ED Decision on CS-FSTD, Issue 1

AFFECTED STAKEHOLDERS

Member States and national competent authorities (NCAs), air operators, training organisations, organisations operating FSTDs, training device manufacturers, pilots, instructors, examiners and original equipment manufacturers.

WORKING METHODS

Development	Impact assessment	Consultation
By EASA with external support	Detailed	NPA 2020-15 – Public, NPA 2024-101 – Focused consultation, NPA 2024-102 – Focused consultation, NPA 2024-108 – Focused consultation

RELATED DOCUMENTS/INFORMATION

— ToR RMT.0196 'Update of flight simulation training devices requirements'

— NPA 2020-15 'Update of the flight simulation training device requirements'

— Online information session on RMT.0196 organised by EASA on 30 May 2023

— Online information session on the new draft certification specifications for FSTD (CS-FSTD) organised by EASA on 17 June 2024

— NPA 2024-101, NPA 2024-102, NPA 2024-108

PLANNING MILESTONES: Refer to the latest edition of the EPAS *Volume II*.

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1. About this Opinion

1.1. How this regulatory material was developed

The European Aviation Safety Authority (EASA) developed this Opinion in line with Regulation (EU) 2018/1139[1] (the Basic Regulation) and the Rulemaking Procedure[2], as well as in accordance with the objectives and working methods described in the Terms of Reference (ToR) for this rulemaking task (RMT)[3]. This rulemaking activity is included in the 2025 edition of the *European Plan for Aviation Safety (EPAS)*[4] under RMT.0196. The text of this Opinion was developed by EASA based on the input of the Rulemaking Group for RMT.0196.

The draft regulatory material was the subject of consultations, in accordance with the ToR for this RMT, with all interested parties through Notice Of Proposed Amendment (NPA) 2020-15. As a result of the public consultation, EASA received 1 488 comments via the Comment-Response Tool (CRT).

EASA reviewed all the comments and duly considered them in the preparation of the regulatory material presented here. The regulatory material was significantly revised, considering the comments and the decision taken in the meantime to merge the existing certification specifications for aeroplane flight simulation training devices (CS-FSTD(A) Issue 2) and the certification specifications for helicopter flight simulation training devices (CS-FSTD(H) Initial Issue) into a single CS-FSTD document (see ToR RMT.0196, Issue 4). An overview of the main comments and how they were addressed is presented in Section 2.4.

In 2023–2024, EASA organised a series of focused consultations with interested parties and the EASA Advisory Bodies to present the redrafted concept. As regards the preparation of this Opinion, EASA organised the following focused consultations:

— workshop on 12–15 June 2023 on the proposed amendments to Commission Regulation (EU) No 1178/2011[5] and Commission Regulation (EU) No 965/2012[6];

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

2 EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 01-2022 of 2 May 2022 on the procedure to be applied by EASA for the issuing of opinions, certification specifications and other detailed specifications, acceptable means of compliance and guidance material ('Rulemaking Procedure'), and repealing Management Board Decision No 18-2015 (EASA MB Decision No 01-2022 on the Rulemaking Procedure, repealing MB Decision 18-2015 (by written procedure) | EASA (europa.eu).

3 ToR RMT.0196, 'Update of flight simulation training devices requirements', Issue 4 (ToR RMT.0196 - Update of flight simulation training devices requirements | EASA).

4 European Plan for Aviation Safety (EPAS) 2025 - 14th edition | EASA

5 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 European Parliament and of the Council (OJ L 311, 25.11.2011, p. 1) (http://data.europa.eu/eli/reg/2011/1178/oj).

6 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) (http://data.europa.eu/eli/reg/2012/965/oj).

— workshop on 14 March 2024 on the proposed amendments to Commission Regulation (EU) No 1178/2011 and Commission Regulation (EU) No 965/2012;

— NPA 2024-101 on the latest regulatory amendments to Part-FCL and Part-ORA, Subpart ATO, of Commission Regulation (EU) No 1178/2011 and Part-ORO, Subpart FC, of Commission Regulation (EU) No 965/2012 and associated acceptable means of compliance (AMC) and guidance material (GM), and workshop on 17–19 June 2024;

— NPA 2024-102 on a draft new CS-FSTD Issue 1, and workshop on 18–19 September 2024;

— NPA 2024-108 on the draft AMC and GM associated with the amendments to Commission Regulation (EU) No 1178/2011, Part-ARA, Subparts GEN and FSTD, and Part-ORA, Subpart FSTD, and workshop on 9–11 December 2024.

For information, EASA has published the draft AMC and GM to Commission Regulations (EU) Nos 1178/2011 (the Aircrew Regulation) and 965/2012 (the Air OPS Regulation) and the draft CS-FSTD Issue 1) in Appendices 2 and 3 to this Opinion.

1.2. The next steps

The Opinion is submitted to the European Commission, which, based on the Opinion's content, will decide whether to adopt the amendments to the Aircrew Regulation and the Air OPS Regulation as proposed in the Opinion.

Following the adoption and issuance of the regulation amending the Aircrew Regulation and the Air OPS Regulation, EASA will issue decisions covering the related AMC and GM to support the application of the regulation, the adoption of CS-FSTD Issue 1 and the amendments to the certification specifications and guidance material for operational suitability data (OSD) flight crew data (CS-FCD) as well as the certification specifications and guidance material for simulator data (CS-SIMD). When issuing these decisions, EASA will also provide feedback to the commentators and information to the public on who engaged in the process and/or provided comments during the consultations, which comments were received, how such engagement and/or consultation was used in rulemaking and how the comments were considered.

2. In summary — why and what

2.1. Why we need to act

The rise of new technologies in the pilot training domain makes it possible to reshape and optimise pilot training.

The proposed changes to the rules arise from the need to better identify the technical capabilities of FSTDs, compared with the existing rigid system of FSTD type and level qualification, and to clearly establish a link between such capabilities and the identified training needs. In this way, new types of FSTDs can be qualified to provide training credit and more flexibility can be granted by allowing for a wider use of FSTDs other than a full flight simulator (FFS) during the appropriate stage of training.

For more details, please refer to ToR RMT.0196 and NPA 2020-15.

2.2. What we want to achieve – objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The regulatory material presented here is expected to contribute to achieving these overall objectives by addressing the need described in Section 2.1.

The specific objectives of this proposal are to:

(a) ensure that FSTDs better facilitate current and future training needs by establishing, for each FSTD feature, the minimum simulation fidelity levels required to support training tasks specifically related to initial (flight crew licensing (FCL)) and recurrent (operations) training;

(b) review the technical requirements for FSTDs to reflect their actual technical capabilities and technological advancement in support of introducing the task-to-tool concept for aeroplanes and helicopters;

(c) provide guidance on the evaluation of training tasks in order to determine the FSTD capabilities and fidelity levels required to achieve the training objectives;

(d) allow CS-FSTD Issue 1 to pave the way for new technologies;

(e) harmonise CS-FSTD with elements of the latest revision of ICAO Doc 9625, as appropriate;

(f) ensure consistent application of the relevant FSTD requirements when qualifying FSTDs; and

(g) enable the introduction of new training devices/tools to allow training hours to be credited.

2.3. How we want to achieve it — overview of the proposed amendments

Based on the comments on NPA 2020-15, EASA reconsidered its approach to the introduction of the task-to-tool concept and the FCS framework and proposed significant changes. An overview of the most significant changes covered by this Opinion is provided below. For a detailed description and the rationale for all the proposed amendments, please refer to the rationale text boxes that can be found after each draft amendment in the draft annexes to the draft Regulation that is published as Annex to this Opinion.

2.3.1. Overview of the FCS framework

Introduction of an FCS

The Opinion proposes a paradigm shift in which training providers are required to identify FSTD capabilities and fidelity levels, based on analysing the training task objectives and establishing the fidelity levels required for the FSTD features in order to achieve those objectives. When designing a type rating training course, the training providers should determine the minimum FCS for each training task, taking into consideration the results of the analysis of the training tasks during the training course design process. This identified training FCS must be met or exceeded by the FCS of the FSTD that is used to execute those training tasks.

Application of the FCS framework

The application of the FCS framework is envisaged for initial type rating and training for renewal of type rating (Aircrew Regulation, Part-FCL, Appendix 9) where training matrices are introduced for type rating training programmes designed with FCSs. Such training matrices specify, for each training task, the minimum FCS that an FSTD should have in order to grant training credit.

In addition, where applicable, the FCS framework may be applied in operator recurrent training (Air OPS Regulation, Part-ORO, Subpart FC).

For other pilot training programmes (e.g. licence training, instrument rating training), the FCS framework is currently not applicable, as there are no training matrices developed to support its application. However, in order to allow the use of FSTDs qualified with FCSs in training other than type rating, as well as in existing type rating training programmes or new training programmes that do not benefit from the application of the FCS framework, the proposed regulatory amendments establish an equivalence between FSTD types and levels and FSTDs with FCSs. When reference is made in Part-FCL to an FSTD type and level, FSTDs with FCSs may be used if they meet or exceed, for each of its features, the fidelity level determined using an equivalence table by comparing the general requirements of CS-FSTD Issue 1 and the general requirements of existing certification specifications. In this way, the uninterrupted and continuous use of already qualified or newly qualified FSTDs for training, testing and checking is made possible.

Newly qualified FSTDs possess only FCSs (no type/level)

In comparison with NPA 2020-15, where FSTD types and levels (e.g. flight and navigation procedures trainer (FNPT) II, flight training device (FTD) 2) along with the FCSs were proposed, this Opinion presents a pure application of the FCS framework, eliminating a hybrid regime of old and new frameworks. For FSTDs that will be qualified after the proposed amendments become applicable, CS-FSTD Issue1 will be the only applicable qualification basis. Such FSTDs will be qualified only with an FCS and no longer with an FSTD type and level.

This amendment addressed numerous NPA 2020-15 comments that a former approach of having both an FSTD type/level and FCSs would limit the usability and flexibility offered by the FCS framework. Additionally, all qualified FSTDs can continue to be used with their current qualification (FSTD type/level) for type rating training through use of the equivalence table.

Flexibility in obtaining training credits by using FSTDs other than FFSs

The amendments proposed and the supporting AMC would allow for an alleviation from the current requirement to complete a minimum of 16 hours on an FFS during a multi-pilot aeroplane type rating

training course. Training programmes designed by leveraging the FCS framework may involve less than 16 hours of training time spent on an FSTD whose FCS is equivalent to that of an FFS.

This would be possible through the proper use of instructional system design methodology for training course design, as explained in the supporting AMC and GM, and the application of a robust procedure as regards the use of training matrices.

If FSTDs with type and level qualifications are used in the training programme, the requirement to complete a minimum of 16 hours in an FFS is maintained.

Amendments to the FSTD features

The FSTD features in the Opinion differ significantly from those contained in NPA 2020-15, affecting the entire FCS framework and all the FSTD requirements. The features are now isolated entities with clear requirements for each feature and fidelity level. Previously, in NPA 2020-15, there was considerable overlap, and it was not always clear which feature covered certain requirements. The proposed Opinion and the general requirements of CS-FSTD Issue 1 offer clarity in this regard.

With the proposed amendments, an FSTD possesses 14 features with names that are descriptive and meaningful to the users. 'Environment – ATC' is no longer a feature because of the absence of mandatory training requirements for type rating training. However, a specific section in CS-FSTD Issue 1 provides the general requirements for the simulation of the ATC environment, should an operator elect to implement simulated ATC environment (SATCE) on their devices.

Performance and handling features are divided into flight regimes: 'on ground', 'in-ground effect' and 'out-of-ground effect'. This approach enables the assessment of the performance and handling characteristics of an FSTD during the different flight regimes and the improved capture of the different fidelity levels of the flight models in those regimes. Flight controls are now considered separately for hardware and system operation. These amendments enable the use of a variety of FSTDs for different training tasks. For example, an FSTD using touchscreens, which cannot receive the highest fidelity level for the 'flight control forces and hardware' feature, can still have the highest fidelity level for the 'light control systems operation' feature and earn training credits for certain tasks. Similarly, the 'light deck layout and structure' and 'aircraft systems' features work logically together, with the former concerning hardware solutions and the latter concerning the system operation and logic.

Introducing helicopters into the FCS framework

Whereas NPA 2020-15 focused only on aeroplanes, this Opinion enables the FCS framework to be applied to helicopters, based on the comments received from the stakeholders. As a consequence, amendments to some provisions related to the type rating for helicopters have been introduced, developing a training matrix for helicopters in AMC3 to Appendix 9 to Part-FCL and integrating the requirements for the qualification of helicopters FSTDs into CS-FSTD Issue 1.

The merging of the qualification requirements for aeroplanes and helicopters may also be beneficial for determining the requirements that would constitute special conditions for novel aircraft categories, such as electric vertical take-off and landing aircraft and tiltrotor aircraft, which present characteristics of both aeroplanes and helicopters.

New technologies

The proposed amendments provide a general framework to accommodate the qualification and use of FSTDs that use new technologies by providing technical requirements in a technologically agnostic

manner. For example, the general requirements of CS-FSTD Issue 1 allow for the qualification of training devices for type rating training whose 'Flight deck layout and structure' is a full touchscreen representation. Furthermore, CS-FSTD Issue 1 includes EASA policies and principles for qualifying FSTDs using extended reality[7]. The regulatory material refers to these special conditions for extended reality.

Alignment with the affected operational suitability data (OSD) provisions and specifications

EASA will propose amendments to CS-FCD and CS-SIMD, as appropriate, in order to ensure consistency across the regulatory framework proposed in this Opinion and associated AMC, GM, CS-FSTD Issue 1 and the affected OSD regulatory provisions and specifications.

2.3.2. Amendments to the Aircrew Regulation

Transitional provisions

Compared with NPA 2020-15, this Opinion proposes an entirely new approach as regards the transition of currently qualified FSTDs into the FCS framework. The proposal is based on an approach that is **voluntary, streamlined and flexible**.

This Opinion proposes that the whole transition into the FCS framework is entirely voluntary, meaning that the decision to apply for an FCS for existing already qualified FSTDs is left to the organisation operating the FSTD. Already qualified FSTDs can opt in to the FCS.

In all other cases, no change will occur in the use of FSTDs in approved training programmes. The amendment introduces the term 'legacy FSTD' to cater for the possibility that FSTDs may maintain their qualification types and levels (without FCSs) and such FSTDs would continue to be used in training without any changes or impact.

Furthermore, the transitional provisions allow for a streamlined approach for those FSTDs that move to the FCS framework, by enabling the organisations operating the FSTD to get an assigned FCS without any evaluation, under certain conditions (please refer to the draft amendment to Article 10b of the Aircrew Regulation).

For FSTDs with dual qualifications (e.g. FNPT II MCC/FTD 2), the Opinion proposes offering the option to remain legacy FSTDs with their qualifications or, if the organisation operating the FSTD wishes to move the device to the FCS framework, such an FSTD will get only one FCS.

The proposed amendments require that all NCAs exchange the existing FSTD qualification certificates for certificates that comply with the new format of the FSTD qualification certificate after receiving, for each FSTD, an equipment specification list (ESL), which must be provided by the organisation operating the FSTD.

As it is considered impractical for competent authorities to keep both old and new FSTD qualification certificate templates for an indefinite period of time, the proposed amendments stipulate that, within 18 months after the FCS framework becomes applicable, all competent authorities must issue FSTD qualification certificates according to the new template for all FSTDs under their oversight. This deadline, however, does not mean that the application for an FCS, if requested by the organisation

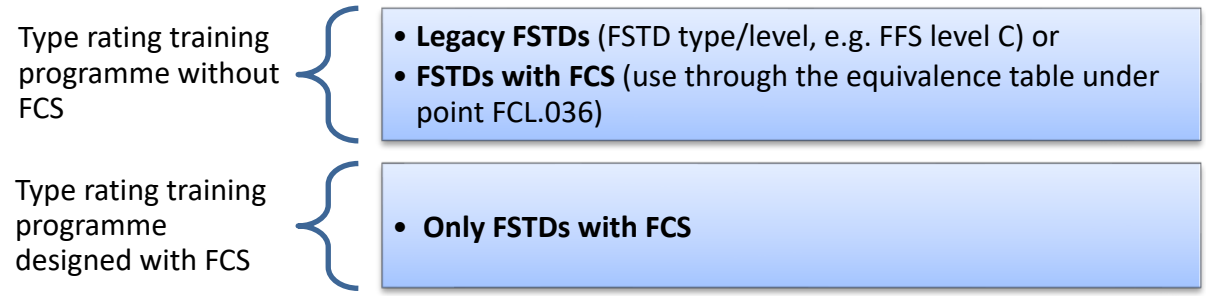
[7] https://www.easa.europa.eu/en/newsroom-and-events/news/fstd-special-conditions-development-and-assessment-process-published-easa; https://www.easa.europa.eu/en/domains/aircrew-and-medical/flight-simulation-training-devices-fstd.

operating the FSTD, has to happen within this period. The organisation operating the FSTD may apply for an FCS at any time. However, the FSTD would be considered and qualified as a legacy FSTD after the expiry of the 18-month period, unless the organisation applies for an FCS for the FSTD.

The transitional provisions make it possible for the training organisations to continue type rating training with the existing training programmes or to switch to new training programmes based on the FCS framework. In this way, the flexibility granted by this Opinion does not impose any changes to the current use of FSTDs for training purposes.

For approved type rating training programmes, legacy FSTDs (FSTDs with type and level qualifications) as well as FSTDs with FCSs can be used.

For type rating training programmes designed in accordance with the task-to-tool principles, only FSTDs with FCSs in their qualification certificates can be used.



For all organisations operating FSTDs, there would be **one important mandatory change** for all FSTDs. The organisation operating the FSTD would need to prepare and submit to the competent authority an ESL for any FSTD that it manages (legacy FSTD and/or FSTD with FCS) no later than one year after the FCS framework becomes applicable. This step is necessary for several reasons.

— The ESL would contain relevant information for training that is currently included in the existing FSTD qualification certificate under 'guidance information for training, testing and checking considerations'. Such information would no longer be visible in the FSTD qualification certificate and therefore the ESL would provide a description of the FSTD to support its use.

— The ESL would play a vital role in helping the FSTD users to understand the FSTD equipment, capabilities and specifications and allowing them to assess the suitability of the device for its use.

— The ESL would provide transparency to the user and the authorities in terms of the FSTD's capabilities and allow for the evaluation of the FSTD.

— In the case of an FSTD with an FCS, the FCSs for some FSTDs may have the same fidelity, but not the same capabilities. In such situations, the ESL would provide details to aid the understanding of the particular capabilities of each FSTD. The ESL would present the equipment, specifications and capabilities that support the fidelity level for each feature.

Equivalence table between FSTDs with types/levels and FSTDs with FCSs

The introduction of the new point FCL.036 enables, where reference is made in Part-FCL to FSTD types and levels, the use of FSTDs whose qualification certificates include FCSs for training, testing and checking, as applicable. This is achieved by creating an equivalence between FSTDs qualified with types and levels and FSTDs qualified with FCSs only (types and levels will no longer appear in the

qualification certificates). In this way, all the references to FSTD types and levels in the implementing rules are left untouched.

Two equivalence tables are established: one for aeroplanes and one for helicopters. The tables provide an exhaustive list of FSTD types and levels and their equivalent FCSs, with the following exceptions.

— The equivalence for FTD 1 is not determined due to the impossibility of establishing a one-size-fits-all FCS for this FSTD. For the same reason, FTD 1 cannot be given an assigned FCS (see the proposed amendment to add Appendix IX to Annex VI (Part-ARA)). If an organisation operating the FSTD decides to use FTD 1 for type rating designed with an FCS, a re-evaluation of the device in accordance with CS-FSTD Issue 1 is required to establish the FCS of the training device.

— The equivalence for FFS level A and FFS level B is not reported, since no such references are present in Part-FCL. In the future, for FSTDs with FCSs, where reference is made to FFSs, only FSTDs whose qualification certificates include FCSs equivalent to that assigned to an FFS level C or FFS level D can be used. FFS level A and FFS level B may still be used as legacy FSTDs.

— The equivalence for FFS level BG/CG/DG is not proposed, as such devices are qualified using a qualification basis older than the reference qualification basis used to establish the equivalence. Therefore, such training devices may be used as only legacy FSTDs or, after being upgraded to the standards required by CS-FSTD Issue 1, FSTDs with FCSs after having gone through a special evaluation.

— This proposal eliminates the need for a double qualification certificate (FTD 1, FTD 2 or FTD 3 / FNPT II MCC or FNPT III MCC) for FSTDs that are used for type rating and MCC training. With the new system, an FSTD with an FCS may be used for MCC training provided that its FCS is at least equivalent to that of an FNPT II MCC or FNPT III MCC, as applicable for the appropriate aircraft category, and that such an FSTD is fitted with the required systems and equipment for MCC training, as specified in CS-FSTD Issue 1.

Amendments to Appendix 9 to Part-FCL

This Opinion includes a regulatory provision to guarantee that an FSTD with adequate features and fidelity levels is used for training, testing and checking. This requirement is equally applicable to legacy FSTDs and FSTDs with FCSs used in training, testing and checking. Any FSTD must possess the technical characteristics required for its use in training, testing and checking, although such characteristics are not explicitly shown in terms of features and fidelity levels on the qualification certificates of the devices. As regards FSTDs with FCSs, applicants need to be trained in FSTDs with FCSs that meet the minimum FCS for a specific exercise as required by the applicable training matrices, which will be included in AMC3 to Appendix 9.

Furthermore, Appendix 9 to Part-FCL clarifies that only training time on FSTDs counts towards the minimum FSTD training time requirements for type rating training. Other training devices (OTDs) may be used to support the acquisition of knowledge and skills for certain tasks of the training syllabus, where specifically permitted in Appendix 9, but such training time cannot be counted towards the minimum FSTD training time requirements.

Format and details of the new FSTD qualification certificate

The Opinion proposes a new form of the FSTD qualification certificate that reflects the structure of the 14 FSTD features with the corresponding fidelity levels (specific, representative, generic, none).

The form is simpler than the existing one and is adapted for legacy FSTDs or FSTDs with FCSs. Additionally, the FSTD qualification certificate indicates whether the device possesses MCC and/or upset prevention and recovery training (UPRT) capabilities. The reason for adding these capabilities to the qualification certificate is that MCC and UPRT are additional capabilities of an FSTD that may be required by the mandatory training requirements in Part-FCL.

For the features 'aircraft systems' and 'flight control forces and hardware', the qualification certificate may provide an indication of the fidelity level with an asterisk (*) in order to indicate that the aircraft systems or flight controls may have different fidelity levels. In such a case, the qualification certificate must refer to the ESL, which must provide further information.

Equipment specification list (ESL) for an FSTD

The requirements of this Opinion mandate the organisation operating the FSTD to be responsible for developing and maintaining the ESL, which is an integral part of the FSTD qualification. The ESL provides accurate and comprehensive information regarding the device qualification and basis, installed equipment, capabilities and specifications.

The main objectives of the ESL, indicated in the proposed amendments (see the draft amendments to point ORA.FSTD.120) are to enable an assessment of the suitability of the FSTD for its intended use and to support the evaluation of the competent authority and the maintenance of the FSTD qualification.

The organisation operating the FSTD has an obligation to verify and validate the ESL.

As the ESL becomes an integral part of the FSTD qualification, there are provisions that ensure that the ESL is reviewed by the competent authorities in the FSTD evaluation process (see the draft amendments to point ARA.FSTD.100) and, in the event of a major modification that affects the ESL, the organisation operating the FSTD must submit the updated ESL to the competent authority (see the draft amendments to point ORA.FSTD.110). Major modifications to the FSTD related to the ESL are subject to verification by the competent authority and, when satisfied that the modification is compliant with the applicable requirements, the authority will approve the modification. Guidance on the template of the ESL and instructions for its completion are included in the AMC and GM in support the requirements proposed with this Opinion.

Procedure for an FSTD evaluation undertaken by the competent authority

This Opinion proposes changes to the evaluation procedure applied by the competent authority to ensure alignment with the FCS framework and CS-FSTD Issue 1. The changes are related to a requirement for the competent authority to assess the suitability of the type of validation data that an FSTD uses (e.g. flight test data, engineering data, alternative flight test data). In the FCS framework, the data has a significant influence on the fidelity level and consequently on the FCS and the qualification of an FSTD.

Furthermore, a new obligation is envisaged for the competent authority to review the ESL for compliance with applicable requirements as part of the initial and recurrent evaluations.

In terms of evaluation procedures, a new regulatory provision is added to provide legal clarity when a competent authority identifies the non-compliance of the FSTD with its qualification basis or when an FSTD does not comply with the ESL submitted to the authority. In such situations, the competent authority shall raise the non-compliance, record it and communicate it to the organisation operating

the FSTD, giving the organisation an opportunity to correct the non-compliance within a defined period.

When drafting these amendments, the principle of regulatory simplification was applied by consolidating all evaluation procedures (currently spread across several rules) into a single provision.

Interim FSTD qualification

The provisions on interim FSTD qualification (refer to the draft amendments to point ARA.FSTD.115) are modified to address the FCS framework. In the event of the introduction of a new aircraft programme, the FSTD may receive an interim FSTD qualification. In such a case, this shall be reported in the qualification certificate. More information on how to use an FSTD with an interim FSTD qualification as regards the FCS will be provided in the supporting AMC and GM.

Management of modifications to an FSTD

The Opinion introduces the new term 'modification' in relation to an FSTD, replacing the current 'update' and 'upgrade', which became obsolete in the context of the FCS concept. The term 'major modification' has been established to cater for a distinction between modifications where the competent authority has to verify compliance with applicable requirements and any other modifications, which are not classified as major.

The Opinion also introduces a simplification of the management of major modifications, which will be applicable to legacy FSTDs and FSTDs with FCSs. There are two approaches:

(1) implementation of a major modification after obtaining prior approval; or

(2) management of a major modification in accordance with a procedure approved by the competent authority.

The latter possibility may be used by the competent authority if the organisation operating the FSTD meets certain conditions (see the draft amendments to point ARA.FSTD.130(b)). Such alleviation is introduced in the context of implementing risk-based oversight principles in the work of the competent authorities. As a general principle, it is proposed that the competent authority verify the compliance of that major modification with the qualification basis and, if deemed necessary, conduct a special evaluation.

The proposed amendments for the modifications to FSTDs introduce the possibility for a legacy FSTD or an FSTD with an assigned FCS to be qualified with UPRT capabilities using CS-FSTD(A) Issue 2. By adding this provision, the continuity of the applicability of CS-FSTD(A) Issue 2 is ensured to provide a level playing field for legacy FSTDs and FSTDs with assigned FCSs.

Enforcement measures: limitation, suspension and revocation of an FSTD qualification certificate

The introduction of the FCS affects the enforcement measure provisions. A new provision is added to entitle the competent authority to limit, suspend or revoke an FSTD certificate if the ESL submitted to the competent authority contains inaccurate information about the FSTD that adversely affects training, testing or checking. Additional provisions cater for situations where an organisation operating the FSTD fails to submit an acceptable corrective action plan to address the non-compliance (known as an item) raised during an evaluation or to perform the corrective action to the satisfaction of and within the period agreed with the competent authority.

Application for an FSTD qualification

The provisions related to the application form and the necessary documents are aligned with the FCS framework. The application is formed of three parts.

— **Part A.** The application form, together with a table of chosen validation data for the FSTD and an ESL.

— **Part B.** A declaration that the organisation has performed the objective tests and meets the criteria in the qualification basis, together with the qualification test guide (QTG).

— **Part C.** A declaration indicating that all objective, functions and subjective tests have been completed, the general requirements for the requested FCS have been achieved and the FSTD complies with the applicable requirements and simulates the appropriate aircraft for each FSTD feature.

Maintenance of an FSTD qualification

Several amendments have been introduced. The requirement to conduct preflight checks no less than 24 hours before the use of the FSTD in training, testing and checking is introduced. The obligation is currently covered under CS-FSTD(A) Issue 2 / CS-FSTD(H) Initial Issue and is moved to Part-ORA, Subpart FSTD, as it relates to the obligations of organisations operating the FSTD.

Considering the feedback from the Advisory Bodies during the workshop on the draft CS-FSTD Issue 1, EASA proposes that functions and subjective tests contained in the master QTG are conducted progressively over a 24-month cycle.

A legal obligation for an organisation operating an FSTD to address a non-compliance identified during the conduct of the objective, functions and subjective tests is established in order to provide legal clarity.

FSTD performance metrics

The Opinion introduces an obligation for the organisation operating the FSTD to provide FSTD performance metrics to the competent authority once every year in order to demonstrate the use and performance of the FSTD. The provision is added to facilitate the risk-based oversight principles and support the development of the oversight programme.

2.3.3. Amendments to the Air OPS Regulation

The amendments to the Air OPS Regulation, Part-ORO, Subpart FC, introduce an opportunity for operators to use an FSTD with an FCS in operator recurrent training. These changes are related to the following areas.

Allowing the use of FSTDs qualified with types/levels and FSTDs qualified with FCSs in operator recurrent training

Similarly to the provisions of Appendix 9 to Part-FCL, a legal provision to allow the use of FSTDs with appropriate features and fidelity levels has been introduced (see the draft amendments to point ORO.FC.145). This requirement is equally applicable to legacy FSTDs and FSTDs with FCSs. Any FSTD must possess the technical characteristics required for its use in training, testing and checking, even where such characteristics are not explicitly demonstrated in terms of features and fidelity levels on the qualification certificates of the devices.

Creating a link/reference between FSTDs qualified with types/levels and FSTDs qualified with FCSs

The provisions of the draft point FCL.036 of the Aircrew Regulation may be applied in the context of the Air OPS Regulation where the requirements refer to FSTD types and levels. Hence, a bridge between the FSTD type/level and the FSTD with an FCS is created and applied in the Air OPS Regulation.

2.3.4. Targeted applicability of the regulatory material

The introduction of the FCS framework is expected to require time for the stakeholders affected to prepare for the implementation of the changes. In order to allow sufficient time for effective implementation support (see Chapter 6), a deferred applicability period of **two years** is proposed.

Once the requirements are applicable, EASA will ensure that the related AMC and GM and CS-FSTD become applicable on the same date.

2.4. What are the stakeholders' views

During the consultations on the draft regulatory material as described in Section 1.1, comments were received from interested parties, including industry, NCAs and stakeholder organisations. Following the analysis of the comments on NPA 2020-15, EASA comprehensively reviewed the regulatory material and revised it significantly. Additional comments were received during (subsequent) focused consultations in 2023 and 2024.

2.4.1. Summary of main comments arising from NPA 2020-15 and focused consultations

This section presents a summary of the main comments received on NPA 2020-15 and comments collected during the focused consultations. More details can be found in the rationale text box associated with each proposed amendment, as presented in the annexes to the draft regulation, and a summary of the comments and EASA's responses from all consultations is provided in Appendix 1.

Hybrid system of FSTD types/levels and FSTDs with FCSs for already qualified FSTDs has limitations compared with the FCS-only approach

The regulatory proposal for qualifying an FSTD with both a type/level and an FCS received multiple comments requesting a complete reconsideration of the approach, since it was deemed misleading and a potential basis for future conflicts. As a result, the Opinion proposes an FCS-only framework.

FSTD features

Several commentators argued that the 12 features and their descriptions proposed in NPA 2020-15 were not optimal, and could lead to misunderstandings and overlaps. In response to the comments, EASA amended the FSTD features, as explained in Section 2.3, to prevent duplications and enhance their relevance for FSTD users.

Several commentators questioned the exclusion of SATCE as an FSTD feature and requested its inclusion. In response, EASA confirms that it is possible for an FSTD to be qualified with SATCE capabilities. In CS-FSTD Issue 1, general requirements for SATCE are included. If SATCE is installed and is to be used, function and subjective testing of the FSTD must be conducted to ensure that SATCE supports the specific training tasks envisaged in an efficient and effective manner. At the moment, EASA does not consider it suitable to include mandatory training requirements in Part-FCL for the use of SATCE in training, testing and checking. For this reason, SATCE is not treated as an FSTD feature.

Transitional provisions for qualified FSTDs

NPA 2020-15 was criticised by many commentators due to its unclear transitional provisions. With this Opinion, EASA provides an entirely new proposal (see the draft amendments to Article 10b), which sets up the framework and comprehensively clarifies the options for FSTDs qualified before the applicability of CS-FSTD Issue 1.

These new transitional provisions were presented to the Advisory Bodies and stakeholders in 2023 and 2024 and were fully supported. During the focused consultations, some commentators requested further clarifications regarding the timing of when an organisation operating an FSTD must submit an ESL to the authority for an FSTD qualified before CS-FSTD Issue 1. In response to these comments, EASA reviewed the cases in the regulatory material and deleted one case in which an ESL must be provided upon the request of the competent authority. This requirement was found to be more restrictive than the permitted timeline of one year after the FCS framework becomes applicable and therefore was not retained in the final regulatory material. In addition, during the focused consultations, several comments led to further clarifications on the transition to the FCS framework for FSTDs that are qualified to multiple FSTD types and levels. Moreover, some Member States requested clarifications on the timeline for when the competent authority exchanges FSTD certificates for certificates in the new format. Hence, an administrative deadline of 18 months after the rule becomes applicable is established to ensure the harmonisation and standardisation of the new FSTD qualification certificate form in EASA Member States.

The Member States welcomed the proposal that an ESL is not required for basic instrument training devices (BITDs), with the proposal's reasoning being that there is a very limited number of FSTDs in the EU (fewer than 10 BITDs) and they are not envisaged under the new CS-FSTD framework.

For more information, please refer to the draft amendments to Article 10b and the related rationale text box.

Equivalent FCS for FTD 1

Some commentators requested the development of an equivalent FCS for FTD 1, since such an FCS did not exist in the equivalence table between FSTDs with types/levels and FSTDs with FCSs. EASA did not accept the proposal and reiterated the rationale that 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. Even if such an equivalent FCS were found for FTD 1, it would be below the minimum FCS required for any training task under the task-to-tool approach. Therefore, an organisation operating an FSTD should continue training on FTD 1 under the approved training programme or, where training benefit is expected, use such devices in an FCS-designed training programme after the device has gone through an evaluation and received an FCS.

FCS framework proposed in Appendix 9 for type rating and the task-to-tool concept

Many commentators did not support the proposed training matrices in NPA 2020-15, as these matrices were found to be too restrictive, were limited only to aeroplanes and were considered inappropriate for future training innovations. Furthermore, commentators suggested that the training matrices should be founded on the principle of the implementation of a competency-to-tool concept.

In response to these comments, EASA completely reworked the training matrices for aeroplanes, which are applicable only to type rating training programmes designed with FCSs, and developed a specific training matrix for type rating for helicopters. As regards the future-proof nature of the task-to-tool concept, in EASA's understanding, the determination of minimum fidelity levels in the training matrix does not conflict with the future application of a competency-based training and assessment methodology. Training course designers should identify the areas where specific fidelities of an FSTD are needed, taking into consideration the objectives of the training.

Some commentators requested the inclusion of a specific training matrix for single-pilot high-performance complex aeroplanes (SP HPCAs) in the supporting AMC3 to Appendix 9. EASA reviewed the proposal and concluded that the training for multi-pilot aeroplanes (MPAs) and SP HPCAs is based on the exact same training tasks and, therefore, cannot find a substantial reason to justify a difference between MPAs and SP HPCAs in terms of the devices to be used for training. From a broader perspective, the amendment to Appendix 9 to Part-FCL introduced with Commission Implementing Regulation (EU) 2024/2076[8] aligns the requirements for MPAs and SP HPCAs regarding the training platforms to be used for training, testing and checking.

In addition, some commentators requested an amendment to Appendix 9 to Part-FCL to authorise the use of FSTDs other than FFSs for conducting a proficiency check, provided that the pilot has recent experience on the aircraft for SP HPCAs. EASA did not support the proposal, with its argument being that, when an FFS is available and accessible, the FFS must be used.

Process for the development and validation of the training matrices for type rating designed based on FCSs

In the focused consultations, many stakeholders requested that explanations of the credibility of the process for developing the training matrices be added to Appendix 9 to Part-FCL. EASA clarified that these matrices were created by training experts who analysed each training task while working individually and without influence from others. The individual results were then included in a summary training matrix and, where conflicts emerged, an analysis of the differences and subsequent discussions were carried out. Ultimately, after several validation iterations, EASA reviewed all the proposed matrices independently to ensure that the fidelity levels proposed for each task and feature were technically sufficient for the execution of the training task, also taking into consideration the general requirements of CS-FSTD Issue 1. Additionally, EASA carried out a validation of the training course design principles with the training matrices, with the involvement of approved training organisations and operators for both aeroplanes and helicopters.

Use of other training devices

During the focused consultations, some stakeholders requested further amendments that would allow for the use of OTDs in type rating training, where suitable, especially for helicopters. EASA accepted the proposal and amended the table containing the list of training tasks in Appendix 9 to allow, where suitable, the use of OTDs for the very initial stage of training on a task. The existing structure of Appendix 9 has been reviewed and the legal basis for the training credit to be granted to OTDs and

[8] Commission Implementing Regulation (EU) 2024/2076 of 24 July 2024 amending Regulations (EU) No 1178/2011 and (EU) No 965/2012 as regards the clarification of requirements for cruise relief co-pilots, updates of requirements for flight crew licensing and medical certification, and improvements for general aviation (OJ L, 2024/2076, 25.7.2024) (http://data.europa.eu/eli/reg_impl/2024/2076/oj).

FSTDs is provided. For OTDs, there is no need to have an FCS. It is also clarified that the OTD time is not considered FSTD time in accordance with point 1g of Appendix 9 to Part-FCL.

Upset prevention and recovery training capabilities for legacy FSTDs or FSTDs with assigned FCSs

Following the comments received and further internal conclusions, this Opinion proposes introducing the possibility (see the amendment to point ARA.FSTD.130) for a legacy FSTD or an FSTD with an assigned FCS to be qualified with UPRT capabilities using CS-FSTD(A) Issue 2. Adding such a provision ensures the continuity of the applicability of CS-FSTD(A) Issue 2 as regards UPRT requirements and provides a level playing field for legacy FSTDs and FSTDs with assigned FCSs.

Use of FSTDs for light aircraft pilot licence (helicopter) / private pilot licence (helicopter) training

Several commentators asked for a revision of the proposed amendment for the approval of an FSTD when used to complete flight instruction in a light aircraft pilot licence (helicopter) (LAPL(H)) / private pilot licence (helicopter) (PPL(H)) training programme, considering that such training might be provided in declared training organisations where there is no such approval. In response, the text clarifies that approval is not for the entire LAPL(H)/PPL(H) training programme, but an authorisation by the competent authority solely of the use of the FSTD during LAPL(H)/PPL(H) training.

Use of FSTDs with FCS in operator recurrent training

Many stakeholders supported the proposed amendment to the Air OPS Regulation (see the draft amendments to point ORO.FC.145) as regards the flexibility for the operator to choose the tool that is best suited to the task in operator recurrent training. This means that the FCS framework may be applied in operator recurrent training, where applicable, as noted by the stakeholders.

Equipment specification list

In response to comments about a missing link between an FSTD qualification certificate and an ESL, this Opinion proposes creating a strong link by specifying that both documents form the FSTD qualification. In addition, to address comments regarding the unclear objective of an ESL, the Opinion clarifies that the ESL is the main document and source of information, together with the FSTD qualification certificate, that allows FSTD users to assess the suitability of an FSTD for a training programme.

Multiple comments requested clarifications on when an ESL has to be submitted to the competent authority. With the amendments, EASA clarifies these triggering events. For details, please refer to the draft amendments to Article 10b.

Several commentators questioned the provisions on ESL modifications, arguing that these might result in an administrative burden for organisations operating FSTDs, as they might need to manage multiple modifications. EASA revised and proposed new provisions on FSTD modifications (see the draft amendments to points ARA.FSTD.130 and ORA.FSTD.110) to clarify the criteria for a major modification and the procedures whereby and cases in which the authority approves major modifications affecting the ESL. These provisions were supported during the focused consultations.

In reaction to proposals from the stakeholders, the regulatory material clarifies the consequences if an authority finds that the ESL contains inaccurate information. For more information, please refer to the draft amendments to point ARA.FSTD.100 and the related rationale text box.

Management of FSTD modifications

NPA 2020-15 introduced amendments related to FSTD changes, which were spread over multiple provisions. Several commentators asked for simplification and clarification. In response, EASA proposes a single provision on a simplified approach to the management of FSTD changes by authorities (please refer to the draft amendments to point ARA.FSTD.130) and a single provision on the management of modifications by the organisation operating the FSTD (please refer to the draft amendments to point ORA.FSTD.110). In addition, the proposed simplification regarding the management of major modifications without prior approval was welcomed and supported by the stakeholders.

During the focused consultations, several comments from the Advisory Bodies asked for a revision of the criteria for a major modification of an FSTD in order to fine-tune the scope of major modifications and avoid situations where every FSTD modification would be considered a major one. In response, EASA redrafted the criteria to distinguish between major and non-major modifications (please refer to the draft amendments to point ORA.FSTD.110).

Enforcement measures in the event of non-compliance of FSTDs

Based on the comments from the Advisory Bodies that NPA 2020-15 did not clarify the enforcement measures in the event of non-compliance of FSTDs, this Opinion suggests a distinction between situations, specifically regarding the procedure to be followed by the competent authority when an organisation operating an FSTD is not in compliance with the applicable legal requirements and that to be followed when the FSTD does not comply with the requirements of its qualification basis.

Frequency of conducting functions and subjective tests contained in the master qualification test guide

During the focused consultations, several stakeholders asked EASA to reconsider the frequency of conducting functions and subjective tests contained in the master QTG. The rationale voiced by organisations that operate FSTDs was that this cycle was unproductive (four fly-outs over a 12-month cycle) and deemed to add minimal value for both the operator and the competent authority. EASA accepted the proposal and reviewed the cycle (see the draft amendments to point ORA.FSTD.105) so that the functions and subjective tests are to be conducted progressively over a 24-month cycle.

2.4.2. Advice from the MAB (Article 6(9) of MB Decision No 01-2022)

In accordance with Article 6(9) of Management Board Decision No 01-2022, EASA sought advice from the Member State Advisory Body on the draft Opinion. Few comments were received, mainly requests for clarification or proposed text modifications for greater clarity, without substantial disagreement or divergent views. These inputs were appropriately considered in the final version of the text. A summary of the comments is provided in Appendix 1.

3. Expected benefits and drawbacks of the proposed regulatory material

An impact assessment was performed and included in NPA 2020-15. The assessment has been updated based on the changes introduced in this pinion. Please note that the benefits and drawbacks are either new in comparison with NPA 2020-15 or amended ones to capture appropriately the changes proposed in this regulatory material.

Overall, the introduction of the FCS framework for type rating training is expected to provide the following **advantages**.

(a) It provides an opportunity for **FSTD users** to complete type rating training by **using FSTDs other than FFSs in more flexible ways**. Currently, a type rating training programme for an MPA requires a minimum of 32 hours of FSTD training, out of which a minimum of 16 hours must be in an FFS. The proposed changes in the Opinion and the associated AMC and GM introduce the alleviation of these requirements and would allow more flexibility for FSTD users to complete type rating in any FSTD whose FCS meets the requirements of a training programme designed using a training matrix. Consequently, a variety of FSTDs with different FCSs would be available for the selected training tasks.

(b) It establishes a new approach for the **identification and qualification of FSTDs** based on the **technical capabilities** (which are described in the FSTD features and fidelity levels) forming the FCSs, thus moving away from FSTD types and levels. The use of an FCS allows for a better identification of a device's training capabilities for users. Consequently, the task-to-tool methodology allows training providers to use the **most suitable training devices** on the basis of the identified training needs, rather than using an FSTD appropriately qualified with a type and level in type rating training. FSTDs having FCSs specified in the FSTD qualification certificates and ESLs would enable their **use much more precisely** in assessing their suitability for the training needs/objectives. The link between the training task for performing type rating training and the assessment of the suitability of the training device is **reinforced**.

(c) It ensures a **level playing field, fairness and equality** of opportunities for **organisations operating (already) qualified FSTDs and for FSTD users**. The term 'legacy FSTD' is established to cater for FSTDs qualified before CS-FSTD Issue 1, and these devices can continue to be used in approved type rating training courses **without any changes in their training credits**.

(d) Furthermore, the **equivalence table between FSTDs with types/levels and FSTDs with FCSs** allows for the use of FSTDs with FCSs in a type rating training programme without FCSs and in training, testing and checking where reference in Part-FCL is made to FSTD types and levels. This ensures equality between FSTDs with FCSs and legacy FSTDs.

(e) The FCS framework is proposed to be implemented **on a voluntary basis by the organisations operating FSTDs and by FSTD users, thus not inducing significant changes for the stakeholders affected**. If an organisation operating the FSTD sees benefits in moving to this framework, it can apply to obtain an FCS for a particular FSTD. In all other cases, FSTDs that are already qualified are considered legacy FSTDs and no change will occur in their use in approved training programmes.

(f) It proposes **a streamlined method of implementation**, without interruption or disruption in the use of qualified FSTDs in training, testing and checking. It allows for **implementation in a more**

efficient and effective way by creating the possibility for the organisation operating the FSTD to get an assigned FCS, without the device being evaluated, provided that the FSTD meets the established conditions.

(g) The proposed amendments provide a general framework to accommodate the qualification and use of FSTDs, which **caters for new technologies** by providing technical requirements in a technologically agnostic manner.

(h) It provides **harmonisation with ICAO Doc 9625**, as appropriate.

On the other hand, the proposed regulatory material would incur some **implementation efforts/costs**, which would vary across the different stakeholders affected. A detailed overview of the benefits and drawbacks/costs per stakeholder group affected is provided in **Table 1** below.

Overall, the regulatory proposal is deemed balanced and cost-effective, ensuring equality and providing opportunities to the stakeholders affected, without inducing a negative impact. The elective transition to the new system makes the regulatory material socially acceptable, while offsetting some costs with the alleviations/benefits provided.

The material implements the principles of regulatory simplification and thus proposes several simplifications in terms of rule drafting and alleviations for the stakeholders when following the requirements (see Section 2.3).

Table 1: Overview of the expected benefits and drawbacks/costs of the regulatory material per significantly affected stakeholder

Affected stakeholder	Expected benefits	Expected indicative drawbacks/costs
Competent authority	(i) Smooth transition phase and less workload for the authority when an organisation operating an FSTD requests an assigned FCS. It would allow a transition of FSTDs to the FCS framework without an evaluation of the FSTD, provided that the conditions for obtaining an assigned FCS are met. (ii) New form for the FSTD qualification certificate applicable to legacy FSTDs and FSTDs with FCSs, ensuring a common standard for the qualification of any FSTD. (iii) New regulatory opportunity for authorities to manage major modifications of FSTD without prior approval, provided that the conditions for allowing such a privilege are met. (iv) Easy determination of how an FSTDs with FCS can be used in: — approved type rating training programmes (which follow a tool-to-task approach) by applying the equivalence table (point FCL.035); — training other than type rating training in Part-FCL where training matrices are not established by applying the equivalence table (point FCL.035). (v) Better standardisation of already qualified FSTDs in EASA Member States by requiring all competent authorities to replace the FSTD certificates with the new form. All existing FSTDs would be accompanied by a new FSTD qualification certificate and ESL, which will be reissued in accordance with the period envisaged in the transition provision (Article 10b).	(i) Internal training of FSTD technical flight inspectors required and need to train inspectors for FCL and operations training on the FCS framework. In order to support the training, EASA is considering conducting a series of workshops to provide implementation support. (ii) Software change of the system issuing the FSTD qualification certificates, if applicable, to introduce the new FSTD certificate template. (iii) Reissuance of all FSTD qualification certificates under the oversight of the competent authority according to the new format within the 18-month period after the regulatory material becomes applicable. The costs are expected to be low, as it is purely administrative work to replace the old FSTD certificate with the new one. In addition, the authorities are given a period of 18 months to perform this task, which is assumed to be sufficient, based on the number of FSTDs under their oversight. (iv) Re-evaluation of FSTDs that apply for FCSs. This task is considered business as usual for the competent authorities and therefore no additional costs would occur, except for the necessary training on the FSTD framework. In addition, it is assumed that many organisations operating the FSTDs would apply for assigned FCSs; therefore, the number of FSTDs that would apply for only FCSs may be limited. (v) Approval of amendments to training manuals of training organisations / air operator certificate holders that would like to use the training matrices based on FCSs in their type rating programmes. The workload for the authorities depends on the uptake of the FCS approach and the number of organisations that would like to organise their type rating training in accordance with the FCS framework.

Organisation operating the FSTD	(i) Possibility for the organisation to decide on a voluntary basis to: — remain in the current legal framework and retain the FSTD type and level as a legacy FSTD; or — move to the new FCS-based legal framework by applying to the competent authority. (ii) No time limit for organisations operating the FSTD to apply for an FCS (e.g. an organisation may decide to keep an FSTD as a legacy FSTD after the regulatory material becomes applicable and then later move to the FCS framework). (iii) Expected advantages of developing ESL for already qualified FSTDs. — For FSTDs that may be kept as legacy FSTDs, it is assumed that the ESL would better and clearly specify the equipment and capabilities of the FSTDs used in training, testing and checking. The ESL would contain relevant information for training that is currently included in the existing FSTD qualification certificate under 'guidance information for training, testing, checking considerations'. Such information would no longer be visible in the FSTD qualification certificate and therefore the ESL would provide a description of the FSTD to support its use. — For FSTDs with FCSs, the ESL would provide transparency to the user and the authorities in terms of the FSTD's capabilities. The ESL would play a very significant role, as some FSTDs may have the same fidelity, but not the same capabilities. In such situations, the ESL would provide details to aid the understanding of the particular capabilities of each FSTD.	(i) For all FSTDs that the organisation manages, development of an ESL for each FSTD qualification certificate, including for legacy FSTDs (except BITDs), no later than one year after the FCS framework becomes applicable. The initial efforts for developing the ESLs for qualified FSTDs would vary and depend on the FSTD, its technical capabilities, its complexity and the information available to the organisation operating the FSTD to complete the ESL. These initial costs, however, are expected to be offset by the benefits of the ESL. Based on preliminary data from case studies, it is expected that initial efforts for ESL development may take around 3–8 hours per FSTD, depending on the complexity of the FSTD, its capabilities, the available information, etc. The recurrent costs for maintaining an ESL are expected to be low, considering the possible cases when the ESL would require an update. (ii) One-off costs for applying for an FCS if the organisation would like to obtain an FCS for an FSTD. The change from an FSTD type/level to an FCS, if requested by the organisation, would necessitate an evaluation of the FSTD in accordance with the new CS-FSTD Issue 1. These costs would be offset by the potential benefits of obtaining the FCS. *Note: If the organisation applies for an assigned FCS under the conditions in the transitional provisions, there is no evaluation of the FSTD, only administrative costs.* (iii) Costs related to training the organisation's personnel to apply the FCS framework, if applicable. EASA has plans for implementation support to provide workshops and guidance and thus support smooth implementation and training of the stakeholders. (iv) All organisations needing to update their internal procedures and documentation related to the obligation to develop and maintain the ESL.

FSTD user (training organisation, air operator certificate holder)	(i) Possibility for the FSTD users to decide on a voluntary basis to: — apply for a change to the type rating training programme and redesign the programme using the FCS framework; or — maintain an approved training programme without any changes; they can use a legacy FSTD (FSTD with type and level qualification) and/or an FSTD with an FCS, allowing them to continue operating without any change. (ii) Training providers allowed to use the most suitable training devices on the basis of the identified training needs. (iii) More flexibility and better use of FSTDs due to a potential reduction of FFS training hours in type rating training as a result of the use of FSTDs other than FFSs. Based on the preliminary case studies, the reduction for some organisations may be up to 20 % compared with the current baseline for FSTD training time.	(i) If the organisation opts in to redesigning the type rating programme using the training matrices, costs for the development and approval of the programmes/changes. In order to support the stakeholders affected, EASA is considering providing implementation support and further guidance. (ii) Costs related to training the organisation's personnel to apply the FCS framework, if applicable. EASA has plans for implementation support to provide workshops and guidance and thus support smooth implementation and training of the stakeholders.

4. Proposed regulatory material

Please refer to:

— Draft Commission Implementing Regulation (EU) 202x/xxx amending Commission Regulation (EU) No 1178/2011 and Commission Regulation (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;

— Draft Annexes I, II, III, IV, V and VI to draft Commission Implementing Regulation (EU) 202x/xxx amending Commission Regulation (EU) No 1178/2011 and Commission Regulation (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.

5. Monitoring and evaluation

EASA will monitor and, if necessary, evaluate the amended and new requirements through its regular standardisation activities and based on information received through the Advisory Bodies.

Specifically, the implementation of the regulatory material could be monitored using the following indicators:

— number of legacy FSTDs under the oversight of competent authorities;

— number of FSTDs with FCSs, including with assigned FCSs, under the oversight of competent authorities;

— number/share of approved training organisations whose type rating programmes are designed using the FCS framework;

— exemptions filed under Article 71 of the Basic Regulation;

— alternative means of compliance;

— analysis of issues or challenges reported by the Advisory Bodies in the implementation of the FCS framework.

The data could be collected through the EASA standardisation process and Advisory Body meetings.

6. Proposed actions to support implementation

EASA intends to initiate an implementation support task to follow up on the RMT, which will be reflected in the EPAS. The implementation support task will aim to ensure that a series of activities are undertaken to support the implementation of the FCS framework during the two-year period after the adoption of the regulatory material and before it becomes applicable. The following is an indicative list of activities envisaged as part of the implementation support:

— enabling focused communication through Advisory Body meetings;

— conducting workshops, information sessions and presentations of case studies to raise awareness through information sharing and address issues raised by stakeholders;

— establishing a dedicated page on the EASA website with an FAQ, clarifications and other important information.

7. References

N/A

8. Appendices

— Appendix 1: Summary of comments received during the development of the regulatory material

— Appendix 2: Draft amendments to the AMC and GM to Regulation (EU) No 1178/2011 Regulation (EU) No 965/2012 – for information only.

— Appendix 3: Draft certification specifications for flight simulation training devices (CS-FSTD) Issue 1 – for information only.