



European Union Aviation Safety Agency

Comment-Response Document (CRD) 2021-03

RELATED NPA/CRD: 2021-03— RMT.0688

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1. Summary of the outcome of the consultation

A summary of the stakeholders' comments submitted to NPA 2021-03 is provided in the related Decision 2022/003/R. Of all comments received, 25 % were accepted, 27 % were partially accepted, 15 % were noted and 27 % not accepted.

In addition to this overview, all questions have been addressed individually in Chapter 2 of this document.

Several commentators contributed to the improvement of the additional guidance material (GM) provided in the NPA.

Firstly, GM1 SIMD.100 Scope of validation source data has been reviewed following the comments received to adjust the terminology, the new diagram detailing the roles and responsibilities of the data provider and the authority, EASA (and NAA), as well as to provide further guidance on the content associated with additional features when data does not come from an aircraft type certificate (TC) applicant/holder.

Secondly, some commentators acknowledged the additional clarity brought in CS-SIMD in term of process and suggested to further develop the guidance in terms of expectations and requirements to support the substantiation of the scope of validation source data. EASA clarified, in this respect, that CS-SIMD should only be used in conjunction with the applicable CS-FSTDs or special conditions(SCs) under Part-ORA containing the actual specifications to support the data development.

Lastly, during the consultation phase, a commentator disagreed with GM2 SIMD.200 Sources of the validation source data, where it clarifies the need for entities, other than TC holders, to develop alternative aircraft reference data via an STC. EASA clarified that this revision does not propose any change in this respect as the approach was agreed during the development of the rulemaking task (RMT.0108) and recorded in the Explanatory Note to Decision 2014/033/R. The inclusion of this GM is simply to add more clarity.



2. Individual comments (and responses)

In responding to the comments, the following terminology is applied to attest EASA's position:

- (a) **Accepted** — EASA agrees with the comment and any proposed change is incorporated into the text.
- (b) **Partially accepted** — EASA either partially agrees with the comment or agrees with it but the proposed change is partially incorporated into the text.
- (c) **Noted** — EASA acknowledges the comment, but no change to the text is considered necessary.
- (d) **Not accepted** — EASA does not agree with the comment or proposed change.

comment 2

comment by: SIM OPS

Reference CS SIMD.100 Scope of validation source data, states that:-

1.

(a) the validation source data (VSD) to support the objective qualification of aeroplane full flight simulators (FFSs) associated with the pilot type rating training, or of the provisional VSD to support their interim qualification, including additional features as requested by the applicant;

Why is this limited to only FFS used in type rating training for aeroplanes but for FTDs and FFS for helicopters as per point (b)?

Today it is already possible to conduct some type rating training tasks on aeroplane FTDs qualified to Level 2 in accordance with CS FSTD(A) initial issue or issue 2.

Further the intent of CS FSTD(A) issue 3 is to use the FCS approach and as such it is the FCS that will be relevant and not the type or qualification level of an FSTD as we know it today.

It is proposed therefore that, to future proof CS SIMD.100, it should be rewritten as follows:-

The Certification Specifications for Simulator Data contain the scope of:

1. *(a) the validation source data (VSD) to support the objective qualification of aeroplane or helicopter Flight Simulation Training Devices (FSTDs) associated with the pilot type rating training, or of the provisional VSD to support their interim qualification, including additional features as requested by the applicant;and*
2. *(b) the VSD to support the objective qualification of other categories of aircraft FSTDs associated with the pilot type rating training, or of the provisional VSD to support their interim qualification, including additional features as requested by the applicant when special conditions are established based on points ORA.FSTD.210 (a)(3) and ARA.FSTD.100 (c) of Regulation (EU) No 1178/2011 (the 'Aircrew Regulation').*



response Partially accepted. Several comments have been raised regarding this topic and CS SIMD.100 has been amended accordingly. See comment 47.1.

comment 3 comment by: *THALES Training & Simulation*

Page 12 & 13

GM2 SIMD.200 Sources of the validation source data

The sentence "Data from other sources may be used, when properly justified." has been suppressed.

In addition, the sentence "Data that does not come from a TC applicant/holder may be use if submitted by an organisation that holds an EASA supplemental type certificate (STC)." is added.

Thales has strong concerns with these changes.

Such measures will prevent simulator manufacturers to develop FSTDs with other data than the ones provided by the aircraft OEMs.

EASA STC process is certainly well adapted when the aircraft configuration is modified but is not adapted when only data are considered. This process is too heavy and it will exclude the possibility to collect data on a real aircraft as an alternative solution to OEM data.

It will therefore impose the use of OEM data to make the simulator : having a single source of data is not acceptable.

OEMs will have the monopoly on their data and will be able to impose the price they want according to who is asking for them (generally high price) and even will refuse du sell them if they want as it is already observed, given no other alternative for a simulator manufacturers to make the simulator.

Consequently, Thales strongly disagrees with this proposal and requests to come back to the original text.

response Noted.

Firstly, EASA highlights the fact that the need for other than the TCH to develop alternative data via an STC was already included in the explanatory note to Decision 2014/033/R. This document was published together with CS-SIMD Initial issue. No new or amended provisions have been added in the revised CS-SIMD text.

Secondly, EASA does not believe that these provisions can create a monopoly. They aim at keeping a level playing field when an original set of simulator data has been developed by a TCH under the OSD SIM, ensuring that an adequate level of safety is maintained.

EASA is not of the opinion that the process is too heavy and excludes the possibility to collect alternative data. The process would simply require a differently regulated environment with only a marginal, if any, additional burden for the interested stakeholders.

comment 5 comment by: *THALES Training & Simulation*



	<p>Page 14: GM3 SIMD.200 Process overview, item 5 It is said that “EASA is present during the FSTD evaluation to witness the correct implementation of the VDR” If EASA must be present during the FSTD evaluation with the NAA, the process to present a FSTD for qualification must be amended to describe if it's the FSTD operator who needs to contact EASA for this evaluation or if it's under NAA responsibility.</p>
response	<p>Not accepted. Neither the FSTD operator nor the NAA will have to contact EASA.</p> <p>When an NAA is the competent authority to conduct the initial qualification, EASA will contact this NAA and inform them about their participation. The process to present an FSTD for qualification itself must not be amended since it remains unchanged.</p>
comment	<p>6 comment by: <i>THALES Training & Simulation</i></p>
	<p>General This NPA doesn't clarify the fact that OSD documents which are now managed by aircraft OEMs and no more accessible on EASA website, must be public and accessible for consultation. It's the case for OSD documents needed for ATOs to define their training courseware, and CS-SIMD needed for the simulator manufacturer to know what data is needed to make the simulator. This NPA must clarify the accessibility to these documents, and Thales considers that a free access to these documents on EASA website as it was before with OEB documents, is required for safety reasons : for ATOs to make their courseware in accordance with aircraft OEMs recommendations, and for FSTD manufacturers to build the simulators with the recommended data.</p>
response	<p>Noted. The NPA is related to CS-SIMD. Provisions on the availability of the OSD are included in Part-21 (21.A.62) which contains an obligation for the TC or RTC holder to make available, on request, the relevant data referred to any person required to comply with one or more elements of the set of operational suitability data.</p>
comment	<p>7 comment by: <i>UK CAA</i></p>
	<p>Page No: 12</p> <p>Paragraph No: GM2 SIMD.200 Sources of the validation source data (a)</p> <p>Comment: This section references the initial qualification of Aeroplane FFS's only. However, CS SIMD.100 Applicability (1)(ii) also references specifically level D FFS and level B FTD where qualification is to CS-FSTD(A) Issue 3</p> <p>Justification: Inconsistency</p>



	<p>Proposed Text: Replace paragraph (a) with:</p> <p>“For the initial qualification of aeroplane FSTDs as defined in CS SIMD.100 Applicability (1)(ii), aeroplane Type Certificate (TC) applicant/holder’s validation data (VD), including validation flight test data or engineering data that is provided by the type certificate (TC) applicant or TC holder, should be used.”</p>
response	Partially accepted. Text will include a reference to CS SIMD.110

comment	<p>8 comment by: <i>Traficom</i></p> <p>GM1 SIMD.100 and GM5 SIMD.200 use the words '<i>simulator definition</i>'. These words are difficult to interpret precisely correct. Perhaps the word 'definition' is common terminology for Part-21. But CS-SIMD is read and used also by FSTD experts and for the FSTD experts the words 'simulator definition' are not widely used and hence are a concept that is difficult to clearly understand.</p> <p><u>It is proposed that the meaning of 'simulator definition' is described in CS SIMD.120 (Terminology).</u></p> <p>In addition, since CS-SIMD concerns also FTDs and not only full flight simulators, <u>it is proposed to change the words 'simulator definition' as 'FSTD definition'.</u></p>
response	Partially accepted. The text has been amended to read 'specification of the FSTD'.

comment	<p>9 comment by: <i>Traficom</i></p> <p>GM1 SIMD.100 paragraph (b) says: '<i>...thus becoming a part of the TC.</i>'</p> <p>While this is correct, paragraph (a) tells that also STC may be applicable. Therefore, to cater for all possible outcomes, it is proposed to change the words as '<i>...thus becoming a part of the TC or STC.</i>'</p>
response	Accepted. The text has been amended accordingly.

comment	<p>10 comment by: <i>Traficom</i></p> <p>GM1 SIMD.100 shows an explanatory diagram, where the arrows are from the authority to the data provider. The text tells that the authority 'verifies' the data. So it means that the data provider delivers the data to the authority. Then the authority verifies it and gives feedback to the data provider.</p> <p>Therefore, for clarity, it is proposed to have arrows in both directions (i.e. add arrows also from the data provider to the authority), to make it clear that this process includes</p>
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flow of information in both directions. Please note that this flow is very well described in GM3 SIMD.200 image, but could still be noted in GM1 SIMD.100 also.

response Not accepted. The diagram should only demonstrate that the authority will perform a technical verification of the data provider's processes and the proposed VDR. The flow in both directions as an outcome of the technical verification is then shown in the diagram of GM2 SIMD.200 with the inner correction loop.

comment 11 comment by: *Traficom*

CS SIMD.110 paragraph (a)(1)(i) says:
'These Certification Specifications apply to all aircraft type certificate (TC) applicants for which the following qualified devices is used during the pilot type rating training for aeroplanes:
*(i) Level B, C or D full flight simulators (FFSs) that are qualified in accordance with the **Initial Issue** or Issue 2 of CS-FSTD(A)..'*

It is not understood CS-SIMD refers to CS-FSTD(A) initial issue. That revision is no longer applicable to new FSTDs. Now the current revision is CS-FSTD(A) issue 2 and all the new FSTDs must be qualified under that regulation. CS-SIMD concerns only initial FSTD qualifications, so old outdated versions of CS-FSTD(A) are not applicable here.

It is proposed to remove references to CS-FSTD(A) initial issue.

response Accepted. The reference in CS SIMD.110 (a)(1) should refer to CS-FSTD(A) and in CS SIMD.110 (a)(2) it should refer to CS-FSTD(H).

comment 12 comment by: *Traficom*

GM1 SIMD.120 shows a good and clear diagram. For clarity, it is proposed to add a footnote reminding that the authority (EASA) is doing the verification of the data as is presented in diagrams in GM1 SIMD.100 and in GM3 SIMD.200.

response Not accepted. EASA's involvement is explained in other diagrams and in the CS text itself

comment 13 comment by: *Traficom*

The NPA cover page says that the objectives of this NPA are:
'...to provide stakeholders with additional guidance on the processes, procedures, and requirements related to operational suitability data (OSD) for simulator data.'

'To this end, this NPA proposes to: - clarify the means for substantiating the scope of validation source data (VSD)'



While the proposed CS-SIMD indeed clarifies many aspects very well, it is noted that the NPA does not really clarify the expectations, requirements and means of the substance, the flight test data and engineering data. Apparently this is left to the discretion of the EASA experts to verify if the data meets its purpose. However, also the data providers should know the high level requirements of what is expected from the data. Therefore, it is considered that at least some guidelines for the expectations should be given in CS-SIMD.

Apparently the purpose of CS-SIMD is to ensure for example that:

- The data has adequate quality (e.g. well trimmed cases, correct piloting technique, no excessive 'noise' in pilot controls, sampling frequency of data is adequate, flight trajectory is as expected for the test case, etc...)
- The test cases fulfill the FSTD requirements
- Some (helicopter tests) are described in CS-FSTD(H) so that the data may be a 'series of snapshots'. Note that some test mention only 'snapshots', but some tests say that it should be a 'series of snapshots'. It is interpreted that a 'series of snapshots' should be from one continuous flight (i.e. taken from one time history data set), and not from multiple flights in different configurations or conditions.
- The test cases are performed in appropriate configurations and conditions
- The test cases fulfill expectations of RAeS 'Aeroplane Flight Simulator Evaluation Handbook'
- The nomenclature of the data is presented
- All applicable parameters needed to assessment the data and verify the flight condition are provided for all the test cases
- The data is provided in a format where it can be easily assessed and verified
- Rationales are given where applicable (e.g. in case of data shows only aerodynamic surface deflection but not the flight control input)
- Etc.

It is proposed that some more information is added to CS-SIMD to cater for the aspects listed above.

response

Noted. Some guidance on this matter is already provided in GM1 SIMD.200. Please consider that CS-SIMD is meant to be used in conjunction with the applicable CS-FSTDs or Special Conditions under Part-ORA. EASA believes all elements identified in your comment should be addressed in CS-SIMD content, which mainly describes a process, and CS-FSTD, containing the actual specifications to support the data development.

comment

14 (14.1)

comment by: *FSTD-Consulting*

GM1 SIMD.100 Scope of validation source data

(a):

Because of the impact on training programs and device capabilities, additional features should also consider the definition of aircraft malfunctions

(b):



" ...

- *the simulation methods;*
- *the simulation itself;*
- *the models that are established by the data provider;*

" ... "

The above elements may not always been delivered by the data provider and therefore should only be verified only "if applicable".

The applicant's internal process used to verify the quality, adequacy and suitability of the VSD should be also considered and carefully scrutinised.

(14.2)

CS SIMD.120 Terminology:

"...is used to objectively confirm that the flight simulator..." should flight simulator be replaced by FSTD in order to also cover FTDS?

GM1 SIMD.120 Terminology:

"While Chapters 1 (Performance) and 2 (Handling Qualities) of the Table of FSTD validation tests are widely based on aircraft reference data, Chapters 3 (Motion System), 4 (Visual System), and 5 (Sound Systems) **should** also be taken into consideration. For instance, the VSD **may** include information related to the position of the pilot eye and the cockpit cut-off angle (visual ground segment test), information related to the computation of the transport delay or latency tests, vibration and sound reference data, etc.

"

Using verbs such as "should" and "may" in a GM are likely to be interpreted as these data are not necessarily needed and subject to the willingness of the data provider.

Any aircraft related validation data required to support an objective test as required in CS-FSTD QTG shall be provided by the CS-SIMD applicant.

In addition, the aircraft manufacturer or data provider should not be the one determining if aircraft parts should be used or not in the FSTDs.

Therefore validation data shall be provided to support all required FSTD objective tests in order to assess a device regardless of the solution adopted by the operators or developed by the TDMs (typical areas subject to this consideration are flight controls, HUD response time, etc.).

(14.3)

GM1 SIMD.200 Substantiation of the scope of the validation source data:

(a)(4):

The term "*in any other way that may be proposed by the applicant*" should be categorised as "*under special circumstances*", otherwise it may become the default approach.

(c):

"...EASA may **approve** the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR.

"

The verb "*approve*" can be interpreted as a process implying the issuance of a Technical Visa and/or the release of a TCDS or STC which may not yet be feasible or could take to much time and delay the evaluation of the first device.

What about something such as:

"



EASA will indicate when the proposed VDR and associated validation data is considered mature enough to envisage its usage for an FSTD initial evaluation.

At the end of the observation of the first initial evaluation, a debrief note is issued by EASA providing the conclusions and recommendations for any amendments to the proposed VDR and/or VD (such as amended or additional rationales, supplemental cases, etc); usually implying the amendment of the associated documents (see GM3 SIMD.200).

Subsequently, the updated VDR becomes the basis for the qualification of flight simulation training devices (FSTDs) for that type of aircraft.

In addition, the outcome of the debrief note may be used by the competent authority evaluating the first device to support a qualification certificate although the VDR has not yet been formally approved by the agency."

(14.4)

GM3 SIMD.200 Process overview:

"

After successful completion of the technical verification and the inner correction loop (point ②, if required), the process for generating the VSD and the completeness of the VDR are **approved**, and the VDR becomes the basis for the **qualification** of the first FSTD.

"

As indicated in the previous comment, at this stage the VDR has probably not yet been formally "approved". Should the word "evaluation" used instead?

The NPA is also considering the non TC holders, but should the Explanatory Note to Decision 2014/033/R (c) incorporated in this update?

(14.5)

GM4 SIMD.200 Determination of the scope of the validation source data:

Should contemplate the need to define and provide data for aircraft weight and balance configurations as well as other mass properties for which an FSTD Statement Of Compliance is required.

Weight and balance data should establish figures to determine configuration terms such as "light", "heavy", "medium", "AFT CG", "FWD CG", etc.

response

14.1: Accepted. GM1 SIMD.100(b) has been modified for some of the aspects to be verified only when its applicable.

14.2: Accepted.

14.3: Partially accepted.

This aspect of the technical verification has been commented several times, and GM1 SIMD.200(c) has been amended accordingly. Please refer to the response to comment 32

14.4: Partially accepted. GM3 SIMD.200 Process overview has been amended.

14.5: Accepted. GM5 SIMD.200(b) has been amended to include the data and information required to determine FSTD statement of compliances.



15

comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Thank you for the opportunity to comment on NPA 2021-03, Regular update of the Certification Specifications for Simulator Data — CS-SIMD. Please be advised that there are no comments from the Swedish Transport Agency.

Noted.

comment

16

comment by: *Austro Control*

Dear all,

Austro Control offers the following comments to NPA 2021-03.

On Page 15: GM4 SIMD.200

(a) An OSD applicant may choose to supply validation source data from an ‘audited’ engineering simulator/simulation’ to selectively supplement flight test data.

(b) To be qualified to supply engineering simulator/simulation validation data, an applicant should:

(1) have a proven track record of developing successful data packages

(2) have demonstrated high quality prediction methods through comparisons of predicted and flight test validated data;

(3) provide a demonstration of the engineering simulator/simulation fidelity to the aircraft. The use of the engineering simulator/simulation to support aircraft development and certification is an acceptable means of demonstration; and

(4) have an acceptable configuration control system in place covering the engineering simulator/simulation.

(c) Applicants that seek to take advantage of this alternative arrangement should **inform EASA at an early stage of the process.**

ACG comment/Justification

The process for the auditing of an engineering simulator is still not clearly defined by the certification specifications and often leads to discussions with applicants what data from which simulators to be used.

In addition, a list of successfully audited engineering simulators is not available for use by the NAAs.

Furthermore, the CS does not specify which percentage of validation data or MQTG tests respectively can be derived from an engineering simulator.



ACG proposed text

The following additional sub-paragraphs are proposed to be added to clarify the use of engineering simulator data:

(d) The competent authority should use engineering simulator data from successfully audited engineering simulators as published by EASA.

(e) The competent authority should use the percentage of validation data or MQTG tests as specified by EASA.

GM5 SIMD.200 Determination of the Scope of validation source data

(a) The definition of the scope of the validation source data (VSD) to be used as validation data (VD) in the master qualification test guide (MQTG) should be provided through a validation data road map (VDR).

(b) The VDR should clearly identify the sources of the data for all the required tests. It should also provide information on the validity of that data. For example, the VDR for a specific engine type and thrust/power rating configuration, should include the revision levels of all the avionics that affect the aircraft handling qualities and performance and/or navigation equipment capabilities and performances (for instance, localiser performance with vertical guidance (LPV) approaches).

The VDR should also include justifications/rationales for:

- cases where data or parameters are missing (in such cases, engineering simulation data may be used);
- cases where flight test methods require explanation; or
- other comparable cases,

together with a brief description of the cause/effect of any deviation from the data requirements.

Furthermore, the applicable aircraft configuration that affects the simulator definition should be identified.

More guidance on the VDR is available in the following documents:

- CS-FSTD(A) or (H) (see Appendix 2 to AMC1 FSTD(A).300 'Validation data roadmap' and Appendix 2 to AMC1 FSTD(H).300 'Validation data roadmap');
- ICAO Document 9625 'Manual of Criteria for the Qualification of Flight Simulation Training Devices, Vol I and II, Attachment D, as amended; and
- ARINC 450 'FLIGHT SIMULATOR DESIGN AND PERFORMANCE DATA', Appendix.

ACG comment

A list of approved VDRs must be maintained by EASA and made available to the NAAs. As of today, the NAAs are obliged to check the validity of each VDR separately and therefore it is not clear in any case whether the VDR named in a document is valid or not.

ACG proposed text

The following additional sub-paragraph is proposed to be added to clarify the use of engineering simulator data:

(c) The competent authority should use approved VDRs as specified and listed by EASA.

response

Partially accepted.

Proposed GM4 SIMD.200(e)(d) paragraphs are not accepted: CS-SIMD is an airworthiness requirement for aircraft manufacturers and as such, assessment and acceptance of the data provider processes and tools including engineering simulation are EASA remits. How NAAs uses the outcome of CS-SIMD data for evaluation and qualification of devices relates to Part-ARA Aircrew regulation.

Proposed GM4 SIMD.200(c) paragraph is partially accepted: for aircraft for which CS-SIMD applies, the approved VDR is referenced in the associated Type Certificate Data Sheet (TCDS) and published in EASA website.

The data provider is the owner of its validation data and corresponding VDRs and, as part of its configuration control processes, it must keep them up-to-date and have a mechanism for notifying such changes. Please refer to the response to comment 26 for further details.

comment

17

comment by: AIRBUS

Comment Airbus

Reference: whole CS-SIMD

Existing text: validation data road map

Proposed change: validation data **roadmap**

Justification:

harmonization with other texts (e.g. EASA, FAA, ARINC industry standards)

“road map” does not have the same meaning as “roadmap”

response

Accepted. Changes in the document have been made accordingly.

comment

18

comment by: AIRBUS

Comment Airbus

Reference: CS-SIMD, PART-ARA (?)

Existing text: -

Proposed change:

Describe the process for the application to VDR approval by the data provider.

Provide information on the deadlines, typical lead time, etc

Provide an example of form to cover the submission for approval of a VDR by a data provider to EASA.



response	<p>Provide an example of a VDR evaluation report form.</p> <p>Justification: provide guidance, harmonisation of practices</p> <p>Noted. Your proposal is part of the TC process and will be handled during the TC application process which is followed by meetings with the applicant (OSD: for the different constituents). It will be discussed and agreed during those meetings(process, deadline, lead time) since it is dependent on the individual certification plan.</p>
comment	<p>19 comment by: AIRBUS</p> <p>Comment Airbus</p> <p>Reference: - Existing text: -</p> <p>Proposed change: in addition to the reference to “FFS”/“FTD”, it may be interesting to refer to an FSTD Capability Signature (FCS), as defined in NPA 2020-15. We suggest that the FSTDs subjected to CS-SIMD requirements are the ones with a “Specific” fidelity level for all five aircraft simulation features (flight deck layout and structure, flight model, ground model, aircraft systems, flight controls and forces).</p> <p>Justification: Harmonization, evolutivity.</p>
response	<p>Not accepted. The introduction of an applicable regulation containing the FCS concept has been postponed and consequently will be published later than the revision of CS-SIMD. A reference to a non-existing text is not possible.</p>
comment	<p>20 comment by: AIRBUS</p> <p>Comment Airbus</p> <p>Reference: CS-SIMD.100 Scope, NPA page 6 Existing text: -</p> <p>Proposed change: All references within the section to FFS and FTD should be changed to a more englobing FSTD.</p> <p>Justification: To put in line with CS-FSTD(A) version 3.</p>
response	<p>Accepted. CS-FSTD(A) Issue 3 will not be published until well after the revision of CS-SIMD. Therefore, references to types of devices have been removed.</p>



comment	21	comment by: AIRBUS
	<p>Comment Airbus</p> <p>Reference: GM1 SIMD.100 Scope of validation source data, NPA page 6 Existing text: “this may be the case of specific abnormal aircraft conditions that are considered important for training (e.g. autopilot malfunctions, degraded control laws, system malfunctions);”</p> <p>Proposed change: “this may be the case of particular aircraft systems or manoeuvres that require specific skill to be trained (e.g. use of specific aircraft systems, application of specific procedure)</p> <p>Justification: The proposed change is more in line with CS-FCD definition of TASE.</p>	
response	Partially accepted. The text has been amended.	

comment	22	comment by: AIRBUS
	<p>Comment Airbus</p> <p>Reference: CS SIMD.120 Terminology, pages 9 - 11 Existing text: - Proposed change: Add a definition for VDR, and precise that :”The VDR describes what is called throughout CS-SIMD as the scope of the VSD, i.e the list of reference data and their origin.”</p> <p>Justification: This terminology section defines VSD and VD, but not VDR.</p> <p>Proposal: use the same definition as NPA 2020-15, CS FSTD(A).GEN.005 ‘Validation data roadmap (VDR)’, with reference to CS FSTD(A).QTG.400.</p>	
response	Partially accepted. The text has been amended.	

comment	23	comment by: AIRBUS
	<p>Comment Airbus</p> <p>Reference: GM1 SIMD.120 Terminology, NPA page 10 Existing text: The origin and the content of the VDS include, but are not limited to</p> <p>Proposed change: The origin and the content of the VSD include, but are not limited to:</p>	



response	Justification: Typo
	Accepted. The text has been updated to reflect the change.

comment	24	comment by: AIRBUS
	<p>Comment Airbus</p> <p>Reference: GM1 SIMD.200 Determination of the scope of the validation source data, NPA page 11 (a)(2)</p> <p>Existing text: “or arises from the training areas of special emphasis (TASE) of the flight crew data operational suitability data (OSD) constituent”.</p> <p>Proposed change: “or arises from the training areas of special emphasis (TASE) of the Operational Suitability Data (OSD) Flight Crew Data (CS-FCD) constituent”</p> <p>Justification: harmonisation with CS-FCD wording.</p>	
response	Partially accepted. The document has been amended.	

comment	25	comment by: AIRBUS
	<p>Comment Airbus</p> <p>Reference: GM1 SIMD.200 Substantiation of the scope of the validation source data, NPA page 12</p> <p>Existing text: (c) Based on the technical verification performed at the data provider and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may approve the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR (see GM3 SIMD.200). Subsequently, the updated VDR becomes the basis for the qualification of flight simulation training devices (FSTDs) for that type of aircraft.</p> <p>Proposed change: (c)Based on the technical verification performed at the data provider (see point 1 of GM3 SIMD200) and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may should approve the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR (see GM3 SIMD.200).</p>	



Subsequently, the updated VDR should become the approved VDR and should be the basis reference for the qualification of flight simulation training devices (FSTDs) for that type of aircraft. Any change to the VDR should be submitted to EASA for approval.

Justification:

Two proposals are provided:

1. The proposed change is explicit about the fact that the VDR should be approved by EASA.

or

2. Be explicit about the fact that the EASA only approves the VDR of the first FFS qualified for a given aircraft type, and that following versions of the VDR may be issued by the Data Provider without being approved nor communicated to the EASA.

response Partially accepted. Several comments have been raised regarding this subject.
The confusion may come from the word 'approve' used in GM1 SIMD.200(c).
For further details, please refer to the response to comment 32.

comment 26

comment by: AIRBUS

Comment Airbus

Reference: GM1 SIMD.200 Substantiation of the scope of the validation source data, NPA page 12

Existing text: (d) -

Proposed change:

(d) Any modification of an approved VDR should be notified to EASA for approval by the Data Provider, and the potential impact on FSTD qualification should be notified to operators and competent authority (e.g. special evaluation or QTG package update required).

Justification:

In previous A/C programs, it has been observed that VDR could be modified in accordance with A/C modifications, additional capabilities or systems, and to answer to FSTD related additional requirements (changes in regulation, comments during FSTD evaluations). It would be great to create an information flow from the data provider to FSTD organizations and competent authorities in order to notify them of the availability of a new approved VDR.

This would be mainly information sharing, in order to ensure that FSTD organizations are aware of the availability of a new approved VDR, so that they assess the relevance of updating their FSTDs.



response

Additional Note: Although Technical Verification from EASA includes Configuration Control Process of changes to the VDR (refer to GM1 SIMD.100 (b)) and that it is precised that this CS applies to Applicants for the approval of changes (refer to CS SIMD.110 (c)) ; it could be useful to add this paragraph to GM1 SIMD.200

Partially accepted. The management of SIMD changes should be performed in accordance with the corresponding airworthiness regulation and based on the privileges of the applicant.

comment

27

comment by: AIRBUS

Comment Airbus

Reference: GM2 SIMD.200 Sources of the validation source data (a), NPA page 12

Existing text: For the initial qualification of full flight simulators (FFSs), ...

Proposed change: For the initial qualification of **FSTD(s)**, ...

Justification: Bring in line with CS-FSTD(A) version 3.

response

Partially accepted (except for the justification).

The text has been amended accordingly.

comment

28

comment by: AIRBUS

Comment Airbus

Reference: GM2 SIMD.200 Sources of the validation source data (d), NPA page 13

Existing text:

In case of a new aircraft type, the aircraft TC applicant/holder's engineering simulation/simulator data, partially validated by flight test data, may be used to support the interim qualification of the FFS or FTD.

Proposed change:

In case of a new aircraft type, the aircraft TC applicant/holder's engineering simulation/simulator data, partially validated by flight test data, may be used to support the interim qualification of the **FSTD**.

Justification:

Bring in line with CS-FSTD(A) version 3.

response

partially accepted.

The text has been amended accordingly.



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comment 29 comment by: AIRBUS

Comment Airbus

Reference: GM3 SIMD.200 Process overview. NPA page 13

Existing text: A new item of guidance material on the process overview is added:

Proposed change: Delete this sentence

Justification:

This sentence seems to be a comment to show the difference between CS SIMD Initial issue and issue 2.

response Not accepted. The sentence is part of the NPA and does not change CS-SIMD.

comment 30 comment by: AIRBUS

Comment Airbus

Reference: GM3 SIMD.200 Process overview - both graphics, NPA page 13

Existing text: Both graphics

Proposed change:

References to
FFS interim qualification and
FFS / FTD qualifications

should be changed to
FSTD interim qualification and
FSTD qualification.

Justification: Bring in line with CS-FSTD(A) version 3, and with Point 4 text.

response Partially accepted. The changes are not made because of CS-FSTD(A) Issue 3, since this is a non-existing CS at the time of publication of the revised CS-SIMD.
For CS SIMD, the text is changed to: FSTD interim qualification and FSTD qualification.

comment 31 comment by: AIRBUS

Comment Airbus

Reference: GM3 SIMD.200 Process overview, NPA page 13



response	<p>Existing text: Point ①: EASA is responsible for the technical verification of compliance against CS-SIMD.</p> <p>Proposed change: Point ①: EASA is responsible for the technical verification of compliance against CS-SIMD. This technical verification may be done at the data provider location.</p> <p>Justification: Specify that the technical verification is conducted at the data provider in the process overview. This is to be consistent with GM1 SIMD.200 (c) that indicates “Based on the technical verification performed at the data provider”, while the process did not mention such an evaluation at the data provider.</p> <p>Accepted.</p>
comment	<p>32 comment by: AIRBUS</p> <p>Comment Airbus</p> <p>Reference: GM3 SIMD.200 Process overview, NPA page 14</p> <p>Existing text: Additional feedback loops to the data provider may exist (e.g. from the training device manufacturer (TDM)) and should be considered by the data provider, as they may contribute to the improvement of the VDR.</p> <p>Proposed change: open question</p> <p>Justification: What should be done in this case ? Should the improved VDR be approved by EASA? Would it be worth explaining that in such cases, the data provider should inform EASA and seek approval for the modified VDR?</p> <p><i>A suggestion would be to rewrite the GM3 SIMD.200, and show 2 phases in the process: Phase 1 - Approval of the initial VDR by the EASA, as the outcome of an Audit of the Data Provider’s process to generate the VSD.</i></p> <p><i>The EASA will also attend the qualification of the first FFS, on top of the NAA, to witness the correct implementation of the initial VDR and to evaluate whether corrections to the VDR are needed. This may require a VDR update, as described in phase 2.</i></p> <p><i>Phase 2 - Approval of the VDR updates by the EASA. During the aircraft life, many reasons may require the data provider to update the VDR. For example, updates of avionics on the aircraft, or comments received from a TDM, or from authorities. The CS-SIMD should explain if, when and how the VDR updates will be approved by the EASA.</i></p> <p>Partially accepted. The confusion may come from the word ‘approve’ used in GM1 SIMD.200(c).</p>
response	



For a new aircraft type, the technical verification determines if the proposed validation data and associated VDR is considered mature enough for its utilisation to support and initial evaluation. The VDR approval as such is not completed until the final VDR is referenced in the aircraft TCDS.

Aircraft modifications affecting validation data should be taken into consideration as part of the data provider configuration control processes together with amendments resulting from TDMs or operator's comments or data queries.

In all cases EASA should be kept informed of VDR changes.

comment

33

comment by: AIRBUS

Comment Airbus

Reference: GM3 SIMD.200 Process overview

Existing text: -

Proposed change:

define the concept of a "Reference VDR" (RVDR) that would be approved by the Agency, knowing that there might be several VDRs based on this RVDR, that would contain additional information directly related to the qualification of FSTDs.

This RVDR would be approved independently from an FSTD qualification.

Justification:

Differentiate:

- Simulator Data approval, that is an exercise linked to aircraft certification,
- Qualification of FSTDs, that may lead to VDR adaptations. The adaptations should not contradict the approved RVDR, should be minor in nature and should be well documented and all VDRs should be managed by the data provider.

response

Not accepted. This is likely to create further complexity and confusion when an operator or NAA is trying to establish the suitability and adequacy of a specific VDR.

comment

34

comment by: AIRBUS

Comment Airbus

Reference: GM3 SIMD.200 Process overview, NPA page 15

Existing text: "Audit" in the Diagram at the very end of the GM3

Proposed change: "Technical Verification"

Justification:



response	<p>To avoid confusion, replace the word audit by the wording “ technical verification” used in point 1 of this same GM3.</p> <p>Accepted. The term ‘Audit’ in the diagram has been replaced by ‘Technical verification’ to remain consistent.</p>
comment	<p>35 comment by: AIRBUS</p> <p>Comment Airbus</p> <p>Reference: GM3 SIMD.200 Process overview Existing text: -</p> <p>Proposed change: Add options to the industry in order to allow the “VDR approval process” and the “FSTD qualification process” to be decoupled. Some proposals of provisions are listed below. It has to be clarified that the VDR may be approved even if the FSTD is not yet qualified. An FSTD may see its qualification fail or be delayed, even if it is based on a correct VDR. In such a case, the VDR should be approved nonetheless.</p> <p>In some cases, the VDR may be published and subjected to an approval process, even if there are no related FSTD qualifications planned.</p> <p>The VDR approval would be under EASA responsibility (clear boundaries).</p> <p>The FSTD qualification would be under CA responsibility (clear boundaries).</p> <p>A VDR could be approved in a simpler way, as a document and process review exercise (with potential visit on data provider’s site in order to get to grips with the engineering simulation platforms, or even remote meetings/presentations), which would simplify the VDR change management, and approval of the new revisions.</p> <p>This would enable the certification of the aircraft, even if no FSTD is qualified.</p> <p>- This would also avoid potential “grid-lock” where the VDR approval is delayed due to a missing first FSTD qualification, while the same FSTD qualification is prevented due to the absence of an approved VDR.</p>
response	<p>Not accepted.</p> <p>CS-SIMD applies to new aircraft types for which an FSTD is required for aircrew training. This implies that an FSTD will be necessary for the entry into service of the aircraft.</p>



Furthermore, CS-SIMD does not require the successful qualification of a device, it only refers to the oversight of the evaluation to assess the suitability and adequacy of the proposed validation data. For some simulation aspects such as sound, vibration and even certain flight controls aspects such assessment cannot be performed until the proposed data is used to validate a device.

All previous CS-SIMD projects have required updates to the proposed VDRs subsequent to the device evaluation. Therefore, the evaluation of the first device is considered a key milestone in the approval of the proposed validation data.

comment

36

comment by: AIRBUS

Comment Airbus

Reference: GM5 SIMD.200 Scope of the validation source data, NPA page 18

Existing text: The whole paragraph (b)

Proposed change:

(b) The VDR should clearly identify the sources of the data for all the required tests.

More guidance on the VDR is available in CS FSTD(A).QTG.400 Validation Data Roadmap

Justification:

This paragraph (b) does not take into account the changes brought in CS FSTD(A) issue 3.

It could be simplified with a simple reference to CS FSTD(A).QTG.400

response

Not accepted. CS-FSTD(A) Issue 3 will not be published when the revision of CS-SIMD will be issued. Reference cannot be made to a non-existing text.

comment

37

comment by: AIRBUS

Comment Airbus

Reference: GM5 SIMD.200 (b) NPA page 16

Existing text:

— ARINC 450 'FLIGHT SIMULATOR DESIGN AND PERFORMANCE DATA', Appendix.

Proposed change:

— ARINC 450 'FLIGHT SIMULATOR DESIGN AND PERFORMANCE DATA', ~~Appendix~~.

Justification:

Information on VDR is not in the appendices of ARINC 450.

It is in the body of the document and refers to ICAO Doc 9625.

response

Accepted. The text has been modified accordingly.



comment	<p>38</p> <p style="text-align: right;">comment by: <i>Bombardier Aviation</i></p> <p>Page 6 of 21 - CS SIMD.100 Scope of validation source data Sub-paragraph (c):</p> <p><u>Bombardier Comment/Query:</u> Can EASA please elaborate on what is meant by "... other categories of aircraft ..."?</p>
response	<p>Accepted.A sentence has been added for clarification.</p>

comment	<p>39</p> <p style="text-align: right;">comment by: <i>Bombardier Aviation</i></p> <p>Page 6 of 21 - GM1 SIMD.100 Scope of validation source data <u>Bombardier Comments/Queries:</u></p> <ol style="list-style-type: none"> 1. Feature introductions on simulators (example: Steep Approach capability) can be handled in different ways and can depend highly on the applicant or end-user. In some cases, the need for additional aircraft data may not be necessary. In these cases, does EASA expect some communication with the data provider, or is it handled through the FSTD operator? Are justifications expected from data providers? 2. If data from the data provider is required in support of additional feature implementations, what is the process to be followed? How is the process triggered, especially if the aircraft feature is available post-certification?
response	<p>Noted. One of the scopes of the OSD (including SIMD) is to ensure that the impact of design changes on the 'operational' elements is captured and approved. If a TC change is introduced by adding a specific feature or capability to an aircraft, Part-21 provides guidance on assessing the impact on the different OSD constituents and, if there is an impact on the SIMD, these data must be amended accordingly. There is therefore a double responsibility, residing on the TC/STC holder, based on airworthiness requirements, and on the FSTD operator, based on the relevant portions of the Aircrew Regulation.</p>

comment	<p>40</p> <p style="text-align: right;">comment by: <i>Bombardier Aviation</i></p> <p>Page 7 of 21 GM1 SIMD.100 Scope of validation source data (cont'd.) <i>The data provider should define objective tests in relation to the additional features that are needed to be demonstrated on the FSTD and discuss the conditions for those tests with EASA as soon as the need for those tests is identified.</i></p> <p><u>Bombardier Comment:</u></p>
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	This must be covered by the TC holder Simulator Qualification Plan (SQP) review with EASA; any later than that would conflict with the flight test schedule of a new aircraft development.
response	Noted. Indeed this is valid in the case of the data provider being the TC applicant. There may be cases, however, where the data provider is a third party acting as applicant for an STC.

comment	41 comment by: <i>Bombardier Aviation</i>
	Page 12 of 21 GM2 SIMD.200
	<u>Bombardier Comment:</u> Bombardier proposes the following update in bold : <i>Item a) Aeroplanes</i> ... <i>Data that does not come from a TC applicant/holder may be used if submitted by an organisation that holds an EASA supplemental type certificate (STC) that has been approved by the TC holder.</i>
response	Not accepted. There is no relationship between the TCH and the applicant for an STC, except for any data or information that the STC applicant may need from the original TC holder. Furthermore, it is EASA issuing an STC, without any need of a TCH approval.

comment	42 comment by: <i>Bombardier Aviation</i>
	Page 14 of 21 GM3 SIMD.200 Process overview (Cont'd.)
	In the example under Point ⑤: " <i>If the manufacturer of the first full flight simulator (FFS) ...</i> "
	<u>Bombardier Comment:</u> The FFS manufacturer should contact the TC holder immediately upon discovery of an error in the flight test parameters via the agreed to process (between data provider and manufacturer) to correct such errors. The TC holder will update the VDR to reflect any changes.
response	Noted. It is one of the main purpose of the initial evaluation and the reason for the observation of such evaluation and contemplating a VDR approval afterwards.

comment	43 comment by: <i>Bombardier Aviation</i>
	Page 15 of 21 GM3 SIMD.200 Process overview (Cont'd.)
	<u>Bombardier Comments:</u>



response

1. In the last sentence above the diagram presented, it is written "If no interim qualification is sought, then Step 1 does not apply". BA assumes that the "Audit EASA (+ NAA)" block is also part of Step 1. Please confirm or clarify in the block diagram.
2. This is also the first time "Audit EASA" is mentioned in this NPA. Is it possible to expand on this here and/or add a reference to the CS FSTD (A)?

1. Noted. The 'Audit'-Block is applicable in any case. This is clear from the diagram before.
2. Partially accepted. The term 'Audit' will be replaced by 'Technical verification' to remain consistent.

comment

45

comment by: FAA

Page#	Para#	C, E, or F	Comment/Rationale	Recommended Change/Proposed Rewrite
10	1	E	VDS syntax error	Change VDS to VSD

response

Accepted. The text has been modified accordingly.

comment

46

comment by: Lilium

Comment			Comment summary	Suggested resolution
#	Section	Page		
1	GM1 SIMD.100 Scope of validation source data	3	Existing text: "this may be the case of specific abnormal aircraft conditions that are considered important for training (e.g. autopilot malfunctions, degraded control laws, system malfunctions);" Suggest amending the text to be more in line with TASE definition as per CS-FCD.	Proposed text change: "this may be the case of particular aircraft systems or manoeuvres in normal or abnormal conditions that require specific skill to be trained (e.g. use of specific aircraft systems, application of specific procedure in case of systems malfunctions, degraded control laws...)
2	CS SIMD.120 Terminology	9	There is a need to have consistency in terminology between CS-SIMD and	Proposed change: Add a definition for VDR, using the same definition as NPA 2020-15, CS FSTD(A).GEN.005



			<p>proposed CS-FSTD3 part of the NPA 2020-15.</p> <p>This terminology section defines VSD and VD, but not VDR.</p> <p>Suggest for clarification to add Validation Data Roadmap in the terminology of CS-SIMD. and also, to indicate that The VDR describes what is called throughout CS-SIMD as the scope of the VSD, i.e. the list of reference data and their origin.</p>	<p>'Validation data roadmap (VDR)', with reference to CS FSTD(A).QTG.400.</p>
3	CS SIMD.120 Terminology	10	<p>Correct the typo in the current text which refers to VDS instead of VSD.</p>	<p>Text should read: <i>The origin and the content of the VSD include, but are not limited to:</i></p>
4	GM1 SIMD.200 Determination of the scope of the validation source data(a)(2)	11	<p>Existing text: "or arises from the training areas of special emphasis (TASE) of the flight crew data operational suitability data (OSD) constituent".</p> <p>Text a bit confusing, need to be in line with wording from CS-FCD, and could be simplified.</p>	<p>Proposed text: "...or arises from the training areas of special emphasis (TASE) identified in the Operational Suitability Data (OSD) Flight Crew Data.</p> <p>Accepted.</p>
5	GM3 SIMD.200 Process overview	13 to 15	<p>The process is a good add on to the current text however it should emphasize the possibility of decoupled VDR approval (by EASA) versus FSTD Qualification (by NAA). For example, an FSTD may see its qualification fail or be delayed, even if it is based on a correct VDR. In such a case, the VDR should be nonetheless approved.</p>	<p>Proposed change: Add options into the process in order to allow the "VDR approval process" and the "FSTD qualification process" to be decoupled. This would also clarify roles and responsibilities between EASA and the NAA:</p> <ul style="list-style-type: none"> - The VDR approval would be under EASA responsibility - The FSTD qualification would be under CA(NAA) responsibility
6	GM5 SIMD.200 Scope of the validation source data (b)	16	<p>This paragraph currently refers only to CS-FSTD(A) or (H) published and does not take into consideration the</p>	<p>Suggestion: to make a cross reference to the amended CS-FSTD(A).QTG.400 . Proposed text : More guidance on the VDR is</p>



		changes proposed in NPA 2020-15 CS-FSTD3 issue.	available in CS FSTD(A).QTG.400 Validation Data Roadmap
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response 46.1: Accepted. The text has been updated to reflect the proposal.

46.2: Partially accepted. GM1 SIMD.120 already refers to CS-FSTD(A), CS-FSTD(H), and CS-FCD for additional terminology and abbreviations of terms.

46.3: Accepted. The text has been adapted accordingly.

46.5: Partially accepted. The role of EASA and the NAA appears to be sufficiently clear in GM3 SIMD.200. Additional guidance has been added regarding the implication of the first FSTD evaluation.

46.6: Partially accepted. The date for finalisation of CS-FSTD(A) Issue 3 is presently not yet known. But it is recognised that the references provided are likely to change in the near future, and therefore it seems more appropriate to only refer to CS-FSTD(A) and CS-FSTD(H).

comment

47

comment by: LBA

CS SIMD.100 (a); Page 6

"...to support the objective qualification of aeroplane full flight simulators (FFSs) associated with the pilot type rating ,..."

LBA comment:

FSTD type "FTD" is not considered even though it should be part of a Typing and EASA emphasize the use of it.

CS SIMD.100 (a)**GM2 SIMD.200 (d) Page 6&13**

"...to support their interim qualification,..." "...may be used to support the interim qualification of the FFS..."

LBA comment:

Interim qualification of an FSTD is still included in the NPA 2020-15 but not supported through the NGRS approach (missing requirements).

CS SIMD.110 (a)(1)(i); Page 8

"Level, B, C or D FFSs that are qualified..."

LBA comment:

Furthermore no FTDs are considered for the aeroplane category. This is in contradiction to the helicopter category.



CS SIMD.110 (a)(1)(ii); Page 8**"....and Level B FTD taht are qualified...."****LBA comment:**

Why is this not appliclable to FTD Level A? This device is also used during type rating training.

CS SIMD.110 (a)(2); Page 8**"... and Level 3 FTDs in accordance..."****LBA comment:**

Why is this regulation not applicable to lower level FTD?

GM1 SIMD.120; Page 9**"...from the validation source data (VSD) to the master qualification test guide (MGTG)..."****LBA comment:**

Wrong abbreviation is used for master qualification test guide - it should be MQTG.

GM2 SIMD.200 (a); Page 12**"For the initial qualification of full flight simulators (FFS),..."****LBA comment:**

Again no reference to FTD.

GM2 SIMD.200 (d); Page 13**"...may be used to support the interim qualification of the FFS or FTD."****LBA comment:**

According to ARA.FSTD.115 interim qualification can only granted for FFS.

response

47.1: Partially accepted. The definition of the training devices has been revisited.

47.2: Noted.

47.3: A. The type of training devices has been amended.

47.4: Please refer to response to comment 47.3

47.5: Please refer to response to comment 47.4

47.6: Accepted. The text has been amended accordingly.

47.7: Please refer to response to comment 62.

47.8: Noted.

comment

48

comment by: *Airbus Helicopters*

Reference: CS SIMD.120

Existing text: None

Proposed change: RVDR : Reference Validation Data Roadmap. Document to be approved by EASA during real aircraft certification.



	<p><u>Justification:</u> This set of comments proposes to identify a “Reference VDR” that would be subject of EASA approval during the type certification process, whereas there may be VDRs linked and adjusted to specific FSTDs. As the VDR is defined in Aircrew Regulation (EU) No 1178/2011, it is proposed to introduce the concept of Reference VDR to clearly distinguish it from the VDR. This allow to decorelate the OSD certification, which is part of the real aircraft type certification process from FSTD qualification.</p>
response	<p>Not accepted.</p> <p>Allowing device-specific customisation and adjustment is likely to lead to an increasing number of uncontrolled VDRs, defeating the original purpose of CS-SIMD and generating confusion amongst NAAs, TDMs, and operators.</p> <p>Furthermore, the suitability and adequacy of the proposed validation data cannot be established until the observation of the first evaluation of the first FSTD is performed.</p>
comment	<p>49 comment by: <i>Airbus Helicopters</i></p> <p>Reference: GM1 SIMD.120 Terminology <u>Existing text:</u> Validation data roadmap (VDR) and Validation Data (VD) in the diagram <u>Proposed change:</u> Validation data roadmap (VDR) should be replaced by Reference validation data roadmap (RVDR) in the diagram Validation data (VD) should be replaced by Validation Data (VD) + VDR The scope of the data provided as indicated on the upper part of the diagram should be limited to the RVDR and not beyond.</p> <p><u>Justification:</u> VDR document is linked to the FSTD qualification and must be provided to NAA.</p> <p>This set of comments proposes to identify a “Reference VDR” that would be the object of EASA approval, whereas there may be VDRs linked and adjusted to specific FSTDs. RVDR is the document linked to the real aircraft certification (under EASA responsibility) when VDR document is linked to FSTD qualification (under NAA responsibility). If first FSTD is not available for real aircraft certification, RVDR is nevertheless part of the required documents for real aircraft certification and is not formally the same document as the VDR document attached to an FSTD. This is why we propose to define a “RVDR document”. The VDR (based on RVDR) will be provided to NAA during FSTD qualification when the RVDR will be approved by EASA during aircraft certification.</p>
response	<p>Not accepted.</p> <p>The purpose and format of VDR is clearly defined in CS-FSTD and its modification to include new terms and references is outside the scope of this NPA.</p>

comment	50	comment by: Airbus Helicopters
	<p><u>Reference:</u> GM3 SIMD.200</p> <p><u>Existing text:</u> (3) assessing the adequacy of the proposed VD and the associated validation data road map (VDR) by observing the first evaluation of the first device (full flight simulator (FFS)/flight training device (FTD)) (see GM3 SIMD.200); or</p> <p><u>Proposed change:</u> To be removed</p> <p><u>Justification:</u> This set of comments proposes to identify a “Reference VDR” that would be the object of EASA approval, whereas there may be VDRs linked and adjusted to specific FSTDs. The process of approval of the RVDR shall be independent from FSTD qualification. The stepd related to the FSTD qualification should consequently not be aprt of CS SIMD.</p>	
response	<p>Not accepted.</p> <p>The purpose and format of VDR is clearly defined in CS-FSTD and its modification to include new terms and references is outside the scope of this NPA.</p> <p>The suitability and adequacy of the proposed validation data cannot be established until the observation of the first evaluation of the first FSTD is performed. The approval of the VDR is not subject to the issuance of an FSTD qualification certificate. It is fully understood that the SIMD applicant cannot be held responsible for the device quality and fidelity.</p>	
comment	51	comment by: Airbus Helicopters
	<p><u>Reference:</u> GM1 SIMD.200 (c)</p> <p><u>Existing text:</u> VDR</p> <p><u>Proposed change:</u> RDVR</p> <p><u>Justification:</u> This set of comments proposes to identify a “Reference VDR” that would be the object of EASA approval, whereas there may be VDRs linked and adjusted to specific FSTDs. VDR is linked to FSTD qualification (under NAA responsibility)</p>	
response	<p>Not accepted.</p> <p>The purpose and format of VDR is clearly defined in CS-FSTD and its modification to include new terms and references is outside the scope of this NPA.</p> <p>The suitability and adequacy of the proposed validation data cannot be established until the observation of the first evaluation of the first FSTD is performed. The approval of the VDR is not subject to the issuance of an FSTD qualification certificate</p>	
comment	52	comment by: Airbus Helicopters
	<p>Attachment #1</p> <p><u>Reference:</u> GM3 SIMD.200 Process overview</p>	

	<p><u>Existing text:</u> All</p> <p><u>Proposed change:</u> Process has to be reviewed including RVDR (linked to CS-SIMD) and VDR (linked to CS-FSTD) documents.</p> <p><u>Justification:</u> This set of comments proposes to identify a “Reference VDR” that would be the object of EASA approval, whereas there may be VDRs linked and adjusted to specific FSTDs. RVDR approval shall be independent from FSTD qualification. The attached process overview is proposed (see attached annex document)</p>
response	<p>Not accepted.</p> <p>The purpose and format of VDR is clearly defined in CS-FSTD and its modification to include new terms and references is outside the scope of this NPA.</p>

comment	<p>53 comment by: <i>Airbus Helicopters</i></p>
	<p>Reference: General comment on the NPA content Proposed change: see other Airbus Helicopters comments & proposals</p> <p>Justification: The today applicable Part-21 stipulates that the Operational Suitability Data (OSD)” means data, which are part of an aircraft type-certificate, restricted type- certificate or supplemental type-certificate, consisting of: [...] the definition of scope of the aircraft validation source data to support the objective qualification of simulators or the provisional data to support their interim qualification; Although as indicated in GM 21.A.21(b), 21.A.95(c), 21.A.97(c), 21.A.115(c), 21.B.103(b), 21.B.107(b) and 21.B.111(b) Approval of operational suitability data (OSD), the definition of the scope of validation source data to support the objective qualification of a simulator, which should only be available when a simulator has to be qualified, there is no other dependencies required by Part-21 between the approval of the OSD SIMD and the simulator qualification that would impose constraints on the TC holder.</p> <p>Furthermore CS SIMD is, like any other certification specifications applicable to the aircraft product once notified as OSD certification basis, part of the Type Certificate as per 21.A.41 & 21.B.82.</p> <p>EASA is introducing with this NPA a mechanism that would require a revision of the compliance demonstration and possibly also an update of the OSD as soon as activities related to the qualification of FSTDs are performed (see GM1 SIMD.200 (c)) These activities are performed against regulations included in Aircrew(Regulation (EU) No 1178/2011) applicable to the certification of flight simulation training device and are <u>not</u> in the scope of Airworthiness and Environmental Certification (Regulation (EU) No 748/2012) which is dealing with Annex II and thus only with certification of products. It is therefore not acceptable to impose these additional requirements at this stage as they would require first to amend the scope of the regulatory framework.</p> <p>As the CS-FSTD are not comparable to the certification specifications for products as they are not notified as a certification basis by the competent authority, nor are subject to 21.A.101 Change Product Rules but rather constitute technical standards referred to in</p>



response	<p>AMC or GM of ARA.FSTD and ORA.FSTD rules, there is no legal certainty in referring to CS-FSTD in GM1 SIMD.120, CS SIMD.200, GM1 SIMD.200, GM3 SIMD.200, GM5 SIMD.200 without listing the issue of the CS-FSTD precisely.</p> <p>Not accepted.</p> <p>Practical experience made in the past showed that the feedback loop as described in GM3 SIMD.200 is required</p>
comment	<p>54 comment by: <i>Airbus Helicopters</i></p> <p><u>Reference:</u> GM1 SIMD.120, CS SIMD.200, GM1 SIMD.200, GM3 SIMD.200, GM5 SIMD.200 <u>Existing text:</u> CS-FSTD(A) or (H) <u>Proposed change:</u> CS-FSTD(A) or (H) at the issue corresponding to the application for the type certificate of the aircraft</p> <p><u>Justification:</u></p> <p>As the CS-FSTD are not comparable to the certification specifications for products as they are not notified as a certification basis by the competent authority, nor are subject to 21.A.101 Change Product Rules but rather constitute technical standards referred to in AMC or GM of ARA.FSTD and ORA.FSTD rules, there is no legal certainty in referring to CS-FSTD in GM1 SIMD.120, CS SIMD.200, GM1 SIMD.200, GM3 SIMD.200, GM5 SIMD.200 without listing the issue of the CS-FSTD precisely.</p>
response	<p>Not accepted.</p> <p>Future evolutions and amendments of CS-FSTD(A) and (H) may trigger the need for additional validation data (as it has recently been the case for CS-FSTD(A) issue 2); data providers must continue to monitor such evolutions to ensure their data remains adequate and suitable to support the latest requirements.</p>
comment	<p>56 comment by: <i>Embraer S.A.</i></p> <p>GM1 SIMD.100 Scope of validation source data, page 7 Segment description:</p> <p><i>(b) Point (5): see GM3 SIMD.200. The technical verifications include, for example, the following elements at the data provider's level:</i></p> <ul style="list-style-type: none"> - the implemented processes; - the simulator data production and processing plan (in relation to the aircraft certification process); - the simulation methods; - the simulation itself; - the models that are established by the data provider; - the capability to produce the validation data (VD) and the content of the VDR; and



- the configuration control process during the life cycle of the aircraft (for instance, changes to the avionics, flight control laws, etc).

Comment Summary:

It is not clear how EASA expects to receive information from the data provider to conduct their technical verification

Rationale:

The scope of the technical verification was described, but without further details on how the data provider's information could be presented to the authority.

Suggested Resolution:

Please provide further clarification and/or examples on how the data provider could present the information regarding the elements listed in this GM. For instance, it is unclear whether all elements will have to be presented in the VDR report.

response

Noted.

GM1 SIMD.100(b) Point 5 provides guidance on the expected information to be provided when EASA conducts the technical verification. Please refer to Appendix 2 to AMC1 FSTD(A/H).300 for the VDR content and format.

comment

57

comment by: *Embraer S.A.*

GM1 SIMD.120 Terminology, page 9

Segment description:

"The origin and the content of the VDS include, but are not limited to:"

Comment Summary:

Potential typo in sentence.

Rationale:

We believe EASA meant "VSD" instead of "VDS".

Suggested Resolution:

Replace the sentence *"The origin and the content of the VDS include, but are not limited to:"* with *"The origin and the content of the VSD include, but are not limited to:"*

response

Accepted. The text has been amended accordingly.



comment

58

comment by: Embraer S.A.

GM1 SIMD.120 Terminology, page 10**Segment description:**

“The VSD should be the reference data for all the validation tests of the FSTD, as described in CS-FSTD(A) or (H) (‘Table of FSTD validation tests’) or in the applicable special conditions, as required. While Chapters 1 (Performance) and 2 (Handling Qualities) of the Table of FSTD validation tests are widely based on aircraft reference data, Chapters 3 (Motion System), 4 (Visual System), and 5 (Sound Systems) should also be taken into consideration. For instance, the VSD may include information related to the position of the pilot eye and the cockpit cut-off angle (visual ground segment test), information related to the computation of the transport delay or latency tests, vibration and sound reference data, etc.”

Comment Summary:

It may not always be feasible for the data provider to take into consideration the Chapter 3 (Motion System), 4 (Visual System), and 5 (Sound Systems) in the VSD.

Rationale:

The motion, visual, and sound systems are usually developed by the FSTD manufacturer and the data provider (aircraft manufacturer) may not always be able to include information on those systems in the VSD.

Suggested Resolution:

Include the following sentence (underlined below) in this paragraph:

The VSD should be the reference data for all the validation tests of the FSTD, as described in CS-FSTD(A) or (H) (‘Table of FSTD validation tests’) or in the applicable special conditions, as required. While Chapters 1 (Performance) and 2 (Handling Qualities) of the Table of FSTD validation tests are widely based on aircraft reference data, Chapters 3 (Motion System), 4 (Visual System), and 5 (Sound Systems) should also be taken into consideration, when applicable to the scope of the data provider. For instance, the VSD may include information related to the position of the pilot eye and the cockpit cut-off angle (visual ground segment test), information related to the computation of the transport delay or latency tests, vibration and sound reference data, etc

response

Not accepted.

The purpose of CS-SIMD is to establish the aircraft validation data required for the evaluation of a training device in accordance with the objective test established in CS-FSTD(A/H).

The data provider may choose to obtain the necessary expertise from a contracted party, but remains responsible for the required validation data.

comment

59

comment by: Embraer S.A.

CS SIMD.200 Determination of the scope of the validation source data page 11

Segment description:

“(b) The scope of the VSD comprises a list of the flight cases to be used as validation data (VD) in the qualification test guide, its related source and relevant justifications or rationales.”

Comment Summary:

The term “flight cases” in this paragraph may lead one to understand that only flight data are acceptable VD in the VSD scope.

Rationale:

As defined by EASA in GM1 SIMD.120 the origin and content of the VSD include, but is not limited to ground test data, flight test data, engineering simulator data, rationales and justification.

Suggested Resolution:

Replace the term “flight cases” with “cases” in this paragraph, as depicted below:

(b) The scope of the VSD comprises a list of **the cases** to be used as validation data (VD) in the qualification test guide, its related source and relevant justifications or rationales.

response

Accepted. The text has been amended accordingly.

comment

60

comment by: *Embraer S.A.***GM1 SIMD.200 Substantiation of the scope of the validation source data page 11****Segment description:**

“(a) The substantiation of the scope of the validation source data (VSD) should be performed by:

(...)

(2) using a list of parameters to be recorded for the different validation tests; the proposed validation data (VD) should be presented in a way that allows EASA to verify by analysis that the VD is suitable to fulfil the requirements of CS-FSTD(A) or (H);”

Comment Summary:

It is not clear what is the EASA intent with paragraph (a)(2).

Rationale:

Regarding item (a)(2), about the parameters recorded for the validation tests, the EASA concerns were not fully understood. For instance, is it related to having the parameters required to evaluate the test tolerances?

Suggested Resolution:

	Could EASA please provide further clarification and/or examples?
response	Accepted. Additional explanatory material has been added to GM1 SIMD.200(a)(2)

comment

61

comment by: *Embraer S.A.***GM1 SIMD.200 Substantiation of the scope of the validation source data, page 11****Segment description:**

“(a) The substantiation of the scope of the validation source data (VSD) should be performed by:

(3) assessing the adequacy of the proposed VD and the associated validation data road map (VDR) by observing the first evaluation of the first device (full flight simulator (FFS)/flight training device (FTD)) (see GM3 SIMD.200); or”

(...)

“(c) Based on the technical verification performed at the data provider and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may approve the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR (see GM3 SIMD.200).

Subsequently, the updated VDR becomes the basis for the qualification of flight simulation training devices (FSTDs) for that type of aircraft.”

Comment Summary:

It is not clear that when EASA approves the VDR, the simulator data (Validation Source Data) requested from the TC applicant (data provider), as per Regulation (EU) No 748/2012, will also be approved.

Rationale:

According to GM1 SIMD.200(c), based on the technical verification performed at the data provider and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may approve the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR. Also, GM1 SIMD.200 (a)(3) mentions that EASA will assess the adequacy of the proposed VD and the associated validation data road map (VDR) by observing the first evaluation of the first device (full flight simulator (FFS)/flight training device (FTD)).

The VDR’s are usually proposed by the OEM (data provider) at an early stage of the certification process. This is important so the OEM can plan to produce the VDs that will be used later to qualify the FSTD. On the other hand, the FSTD qualification usually happens at the end of the certification process or very close to the EIS date.



The way GM1 SIMD.200 (a)(3) is written, it may be understood as the OEM would only comply with CS-SIMD after the first device qualification, which does not seem to be the intent of the Validation Source Data created in Regulation (EU) No 748/2012. As the Simulator Data will be part of the Type Certificate (ref. 21.A.15 and 21.A.31) it will be required before the TC issuance (ref. 21.A.21). Therefore, it is important to clarify that once the VDR is approved by EASA, the TC applicant has already complied with the CS-SIMD, although the first evaluation of the first FSTD qualification may change the already approved Simulator Data (as per GM3 SIMD.200).

Suggested Resolution:

Change GM1 SIMD.200(a)(c) from:

“(c) Based on the technical verification performed at the data provider and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may approve the VDR. However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR (see GM3 SIMD.200).

To:

“(c) Based on the technical verification performed at the data provider and a theoretical compliance check of the presented VDR against the applicable regulations, EASA may approve the VDR, **which contains the scope of validation source data required to demonstrate compliance with 21.A.21(d) from Regulation (EU) No 748/2012.** However, the result of the first evaluation of the first FSTD may lead to an update of the approved VDR (see GM3 SIMD.200).”

response

Partially accepted.

The confusion may come from the word ‘approve’ used in GM1 SIMD.200(c).

For a new aircraft type, the technical verification determines if the proposed validation data and associated VDR is considered mature enough for its utilisation to support the initial evaluation. The VDR approval as such is not completed until the final VDR is referenced in the aircraft TCDS.

In any case, OSD constituents are not mandatory of the TC issuance; they are necessary for the entry into service of the aircraft which is when the first FSTD will be required to support aircrew training (as established in the corresponding OSD CS-FCD constituent).

comment

62

comment by: *Embraer S.A.*

GM2 SIMD.200 Sources of the validation source data, page 12
Segment description:

“(a) Aeroplanes



For the initial qualification of full flight simulators (FFSs), validation data (VD), including flight test data or engineering data that is provided by the type certificate (TC) applicant or TC holder, should be used.”

Comment Summary:

This paragraph does not include the FTD Level 3 for aeroplanes.

Rationale:

Sometimes, according to the definitions established by the OSD FCD, an FTD could also be part of the minimum initial training approved by the OEM.

Suggested Resolution:

Change the current paragraph to:

“For the initial qualification of full flight simulators (FFSs) **and, if applicable, Level 3 flight training devices (FTDs)**, validation data (VD), including flight test data or engineering data that is provided by the type certificate (TC) applicant or TC holder, should be used.”

response Accepted. GM2 SIMD.200 has been amended accordingly.

comment 63

comment by: *Coptersafety Ltd*

To be considered regarding 2.4

Due to highly restricted distribution implied by the OEMs on their relevant intellectual property, like an OSM or flight manuals, the objective of annulling the monopoly of the OEM, being the sole producer of respective flight models, is not reached by this update. For achieving this objective, we propose to establish terms that enable all qualified Supplement Type Certificate (STC) Holders to acquire the relevant information as stipulated by EASA at no charge from the OEMs.

response Not accepted.

The GM introduced in Part-21 stipulates that, when making the data available to any person required to show compliance with a set of operational suitability data, the holder of the design approval can impose conditions addressing the intellectual property nature of the data.

comment 64

comment by: *CAE Inc.*

Page 6 CS SIMD.100 Scope of validation source data

Paragraph (a) does not address FTDs, please change "simulators (FFSs)" to (simulators (FFSs) and flight training devices (FTDs))"



response Not accepted.

To include FTD for aeroplanes in this stage would mean to change the type of training devices originally addressed. This was not the purpose of this revision of CS-SIMD.

comment 65 comment by: CAE Inc.

Page 6 CS SIMD.100 Scope of validation source data

Comment:
Paragraph (a) specifically limits the VSD to "pilot type rating training", recommend to read "pilot type rating training and operational training"

Rationale:
The scope of VSD data extends to the development of a VDR that will form the basis for qualification of devices that may be used for operational training.

response The content of the CS-SIMD is aligned with the essential requirements laid-down in the REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (Basic Regulation), where it is stated that *"the minimum syllabus of pilot type rating and the reference data for the objective qualification of associated simulators;"*. Your comment is therefore not accepted. Nevertheless, it is worth mentioning that, once an FSTD has been qualified at the appropriate level, it is usable in all cases where an FSTD is allowed to train pilots, including the operational training.

comment 66 comment by: CAE Inc.

Page 6 GM1 SIMD.100 Scope of Validation source data

Comment:
Suggest change "These may consist of tests along with the required flight simulation training device (FSTD) objective validation tests, to cope with, for instance:" to read "These may consist of additional data to support tests other than the objective validation tests required for the qualification of the FSTD. For example, data to support:"

Rationale:
In context of additional features,as written the text is convoluted and it is not immediately clear as to the what the "tests" refers to, and also how this is different to FSTD objective validation tests.

response Accepted. The text has been amended accordingly.

comment 67 comment by: CAE Inc.



Page 6 GM1 SIMD.100 Scope of Validation source data

Comment:

The wording "impacting the simulator definition" could be stated as "impacting the simulator specification"

Rationale:

in this context, specification is perhaps more commonly used

response

Accepted. The text has been amended for clarification.

comment

68

comment by: CAE Inc.

Page 6 GM1 SIMD.100 Scope of Validation source data

Comment:

Regarding "reference to installed equipment; or", If the intent is to address any additional "specific equipment" that the applicant submits for evaluation then perhaps it would be clearer if this is replaced by "any optional aircraft equipment evaluated"

Rationale:

installed equipment is broad and as stated this requirement is not clear. GM1 FCD.050 Scope provides clearer language for the optional equipment

response

Not accepted. The scope of validation data should be based on aircraft type specific equipment rather than on optional equipment.

comment

69

comment by: CAE Inc.

Page 7 GM1 SIMD.100 Scope of Validation source data (a) 2nd paragraph

Comment:

Regarding "The data provider should define objective tests in relation to the additional features that are needed to be demonstrated on the FSTD and discuss the conditions for those tests with EASA as soon as the need for those tests is identified.", we recommend the paragraph is restated as follows: "For a device that is to be used to conduct an operational evaluation of optional equipment in accordance with Part FCD, it may be necessary to develop additional objective tests to support the evaluation of the installed equipment. The applicant should present these tests to EASA as early as possible during the process".

Rationale:

The paragraph as written is ambiguous, the NPA identifies three key stakeholders, the certificate holder/applicant, the device manufacturer and the operator. It is not clear as to whether the scope of the additional tests applies just to the VSD process/requirements or if these extend to the VDR which forms the basis for the MQTG, i.e. the qualification of the FSTD.



response	<p>Not accepted.</p> <p>The focus of GM1 SIMD.100(a) is not on aircraft optional equipment but on aspects directly related to aircraft Training Areas of Special Emphasis.</p>
comment	<p>70 comment by: CAE Inc.</p> <p>Page 7 GM1 SIMD.100 Scope of Validation source data (b) 1st paragraph</p> <p>Comment: "The scope of the VSD is to be included in the validation data road map (VDR) (See GM4 CS SIMD.200)" ; as written the language is confusing and we propose "The VSD forms the basis for the scope of the Validation data road map (VDR) which defines the validation data (VD) that are required to support the qualification of an FSTD, refer to GM5 SID.200 for additional guidance."</p> <p>Rationale: We appreciate the introduction of the terms VSD and VD perhaps to address referential indererminacy, nonetheless , in our view, if its not defined and written clearly and also used consistently then this will likely add to further confusion.</p> <p>Furthermore, if we may respctfully share, it is apparent that in recent updates to the certification specifications including CS-FSTD(A) issue 2 there is a significant to/fro and constant reference to another section for more information, which sometimes also takes you to yet another section. While understandably necessary, it makes it difficult for the user to establish a consistent understanding of the regulatory requirement. Perhaps the format of the AMC/GM material needs to be reviewed so that the document readability is improved. Our comment is based on fiielding many requests for such clarfcations.</p> <p>To help make the point, consider the following: - Page 7 GM1 SIMD.100.Scope of validation source date, paragraph (b) makes 5 points with each taking you to different GM material. - The statement "The scope of the VSD should be technically verified by the comptent authority" , this is a requirement placed on the CA trough a GM? - The statement "validation source data (VSD) from CS-FCD requirements related to TASE, impactimng simulator definition" this in essence now introduces a requirement that specific abnormal aircraft conditions that are considered important for training (e.g. A/P malfunctions etc.) requires to be supported with validation source data. Yet CS-FCD has no reference to such a requirement; and surely ALL malfunctions that are simulated are important for training.</p> <p>We trust you will consider our remarks as constructive towards helping the readability of these requiriements.</p>
response	<p>Partially accepted.</p> <p>In the case of CS-SIMD, the competent authority is EASA. The text has been amended to avoid any confusion.</p>



comment

71

comment by: CAE Inc.

Page 7 GM1 SIMD.100 Scope of validation source data

Comment:

Regarding "If data is used that does not come from an aircraft type certificate (TC) applicant/holder but from an organisation that holds an EASA supplemental type certificate (STC) (see GM2 SIMD.200), the 'additional features' that are included by that organisation should contain at least those already identified by the TC applicant/holder.", does not read well.

- First, the use of the terminology "additional features requested by the applicant" , what is this referring to? looking at CS-FCD there is only one reference to "features" on Page 22 of 36 | Feb 2018 version of the Easy Access Rules document.

- Second, is the intent to state that any alternate data source used to satisfy the requirement for the "additional features" should be equivalent or more than that provided by the TC applicant/holder.

Recommend it is clearly stated.

Rationale:

Ambiguous, and introduction of requirements through guidance!

response

Accepted.

The text has been amended to add clarity.

comment

72

comment by: Reiser Simulation and Training

The NPA offers two ways to generate data for a simulator, through the TC-holder and STC-holders. To have both data sources on equal level and therefore meet the ESA objective to provide high quality of training and adequate access to training, EASA needs to ensure the STC-holders' access to the TC-holder relevant information, such as but not limited to Rotorcraft Flight Manual, OSD, Maintenance & Training Manuals, for the sole purpose of the flight data gathering and validation. Failing to achieve this supports a monopoly-like situation on flight simulation data for the TC-holders, which is not understood to be in EASA's interest and intention with the SIMD-standard.

RST is available to answer question and share experience on this topic.

response

Noted.


Provisions on the availability of Operational Suitability Data are included in Part-21 and they are considered adequate. The implementation of the OSD, or of this regular update to the CS-SIMD, have not introduced restrictions in that sense. The definition of scope of data is approved under the TC and, consequently, under an STC when the provider of the data is not the TC holder. Third party data providers have always worked in a similar



environment and any agreement on the provision of data, in excess of what constitutes the OSD, remains between the interested parties.



Appendix A - Attachments

 [GM3_SIMD_proposal.pdf](#)
Attachment #1 to comment [#52](#)

