# **Regulatory Impact Assessment (RIA) methodology for task RMT.0196 Task Force Training-FSTD Matrix / Methodology**

# Background

A RIA is expected to be prepared for the rulemaking task RMT.0196 to analyse the effect of the proposal for FCL type rating training and an ORO.FC training-FSTD matrix / methodology.

The objective of the RIA is to identify the best policy option as a regulatory intervention which achieves maximum benefits at minimum costs. This is done by analysing different policy options which address the issues/challenges in the regulatory framework and to assess the costs and the benefits of each option for the stakeholders.

The current questionnaire is developed to collect data from the rulemaking group, participants in the focused consultation that EASA held on 30 October 2018 and other stakeholders. The data collected will be analysed and used to prepare the impact assessment.

# Confidentiality

# Please note that all data will be treated with confidentiality. They will be aggregated in a way to avoid the possibility to recognise any person who answered to the survey. Any information which will be used for the purpose of that impact assessment will be de–identified to ensure the confidentiality of the respondents.

# Deadlines

Please send back the completed questionnaire to impact.assessment@easa.europa.eu **by 30 January 2019.** Thank you for your support.

# Scope of analysis

The analysis affects FCL type rating and recurrent training for a single pilot and multi-pilot aircraft.

As regards the devices, it affects all active CS-FSTD (A) devices in EASA MS and in third countries where EASA acts as the competent authority.

The number of affected devices is:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | FFS (A) | FTD (A) | FNTP (A) | BITD(A) | All |
| EASA MS (source of data: EASA standardisation data 2018) | 407 | 70 | 440 | 8 |  |
| Third countries, qualified by EASA (source of data: EASA database)[[1]](#footnote-1) | 347 | 48 | 47 | 0 |
| **Total** | **754** | **118** | **487** | **5** | **1367** |
| **% in terms of total** | **55.2%** | **8.6%** | **35.6%** | **0.4%** |  |

# Issues

There is insufficient utilisation of existing and future device capabilities due to:

* Discrepancies between CS-FSTD, capabilities of the FSTD (F&S table) and Part-FCL. The existing requirements demand that the type rating and recurrent training is largely performed in FFS, thus limiting the possibility to use other types of devices.
* Insufficient recognition/crediting of new device capabilities in the training. If other than FFS devices are used in the training, their features are not always fully recognised and the training is therefore not always credited. Currently, the training credit is limited to the minimum criteria for devices other than FFS.

In order to address these issues, the following policy options are proposed.

# Policy options

***The stakeholders are invited to propose as well any other options which address the problems/issues.***

|  |  |  |  |
| --- | --- | --- | --- |
| *No* | *Short title* | Description | Affected stakeholders and impact of the option |
| Option 0 | No policy change | Baseline option (no change to the existing CS-FSTD and FCL type rating and ORO.FC recurrent training). There is insufficient utilisation of existing and future device capabilities due to problems/issues explained above. | List of stakeholders affected:   * ATO * EASA and EASA MS competent authorities * FSTD operators * Aircraft manufacturers/FSTD data providers * Simulator manufacturers * pilots   No impact on them, if current situation is maintained. |
| Option 1 | FSTD meets training needs and is qualified using the current baseline FSTD qualification levels | The current baseline FSTD qualification levels (FFS A, B, C, D, FTD level 1, level 2, and FNPT level I, II, II MCC) are kept, however the technical standards/technical fidelity criteria for these devices are updated to comply with ICAO Doc 9625 (Edition 4).  The device qualification would include the outcome of the device evaluation against 12 fidelity features (“DNA”). The “DNA” would be specified in the FSTD certificate. ATOs can propose to the competent authority which device could be used for which part of the training depending on the capabilities needed to achieve the training objectives.  The option refers to the existing ca 1400 devices and new devices which would arrive at the market.  It would ensure that only devices with appropriate fidelity levels in all qualification criteria are used for training. | Affected stakeholders and impact on them:  Competent authorities (CA) – qualify and evaluate each individual device according to the 12 fidelity features (DNA). In order to do that, they have to:   * Train their inspectors to perform the evaluation according to the DNA * Train inspectors who approve the training programmes * Change their internal documentation/manuals/ instructions * Change FSTD qualification certificates (can be done as a follow-up of a recurrent evaluation). * Perform a special evaluation to ensure that the device has the capability to achieve the training task objectives, if the ATO or FSTD Operator wish to make full use of the greater flexibility provided by the training matrix.   FSTD operators – change their FSTD qualification certificates which may/will require a special evaluation. However, this evaluation may be performed within the recurrent evaluation and therefore no extract cost would incur for the FSTD operators, hence overall no impact. Nevertheless, some extra costs (evaluation and blocked training device) may occur, if for the FSTD operator wants to benefit from the additional features earlier than required by the minimum standard to get more training credits for a device with more capabilities.  ATO – analyse the device capabilities needed to achieve the training objective using the matrix for training programmes for type rating and recurrent training contained in the new AMC to Appendix 9. The ATO will need to propose to their CA the devices needed for their training based on the outcome of their analysis. For the ATO/AOC holder, there might be benefits in terms of use of other devices than FFS where the hourly rate is less than for FFS.  Aircraft manufacturers/FSTD data providers - may be required to provide additional data (delta between the data for the current level device fidelity and the data to achieve the training task) in support of the additional capabilities.  Simulator manufacturers - may produce new devices tailored to the needs for training tasks/objectives. This caters for innovations and may open new markets for more tailored devices.  Pilots - may receive the benefits in terms of training savings (e.g. cost reduction compared to the price when using full flight simulator only). And they may be able to receive more training than today for same or less cost. However, they need to contribute to the initial invest associated with setting this new system. It may be the case, that the pilots may be exposed to travel more to the different FSTD to perform different training tasks.  In order to estimate the impact on the affected stakeholders, the questions below are drafted to collect data. |

**List of discarded options**

Based on an initial analysis of the options, the following options have been discarded due to the reasons mentioned below.

*The stakeholders are invited to comment on them. If you consider, that any of these options should be analysed further into the RIA, please provide justification.*

List of discarded policy options

|  |  |  |  |
| --- | --- | --- | --- |
| **Option** | **Title** | **Description** | **Rational for being discarded** |
| 2 | FSTD meets training needs while abandoning the current baseline FSTD qualification levels | Classification of the FSTD qualification levels (FFS, FTD, FNPT, and BITD) will be abandoned. The devices are qualified only according to the 12 FSTD simulator features. Device qualification includes the outcome of the device evaluation against 12 fidelity features (“DNA”). | This option would have a negative impact on BASA/FAA and ICAO 9625compliance, as EASA rules would no longer be consistent with FAA and ICAO requirements. In addition, it would require complete changes in Part FCL. In addition, this option might lead to more expensive solutions depending on the customer’s specification. |
| 3 | Abandoning FSTD qualification level, however setting up a conversion table defining the FSTD level equivalence in a set of DNA | The option is proposed to mitigate the negative impact of the Option 2 in terms of consistency with ICAO and BASA and envisages setting up a conversion table defining the FSTD level equivalence in a set of “DNA”. This will facilitate the conversion, without having a negative adverse effect on compliance with BASA and ICAO Doc 9625. | The idea of setting up a conversion table is not accepted, as it is not practical/feasible. This option might induce problems with its correct application. It may lead to wrong interpretation and “multiple-conversion” errors. |

# Questions to collect data on the impact expected by the affected stakeholders

Please reply to the respective set of questions, depending on the type of organisation/stakeholder you are representing.

If you represent several type of organisations (e.g. ATO, FSTD operator), please fill in the questionnaire for every type of organisation, you are representing.

## Questions to the competent authorities

1. What would be the perceived impact for you to implement Option 1 in terms of:

* Benefits (e.g safety)
* Costs/negative impact (workload to re-evaluate FSTDs/re-issue FSTD qualification certificates; change manuals; train inspectors, etc.)

Please describe in a quantitative manner to the possible extent.

1. Please define constraints in implementing Option 1, if any, in addition to your answer to question 1.
2. What is/would be workload in terms of working hours to evaluate/qualify and issue/revalidate qualification certificate under Option 0 and Option 1 for:

|  |  |  |
| --- | --- | --- |
|  | Option 0  (in working hours) | Option 1  (in working hours) |
| Evaluate/qualify and issue/revalidate qualification certificate for a **FFS** |  |  |
| Evaluate/qualify and issue/revalidate qualification certificate for a **FTD** |  |  |
| Evaluate/qualify and issue/revalidate qualification certificate for a **FNTP** |  |  |

1. What would be the impact on safety for Option 1 in your view (in addition to your answer to question 1)?

## Questions to ATO/AOC holder

1. How much does a training session currently cost (dry cost – without instructor) in
   1. FFS
   2. FTD
   3. FNTP
2. What would be the impact for you to implement Option 1 in terms of:

* Benefits (accessibility of the FSTD, price to use an FSTD, No of training sessions which a pilot could follow for the same price, etc.)
* Costs/negative impact (in terms of the work, related to the analysis the device capabilities needed to achieve the training objective and proposing to the CA the device needed)

Please describe in a quantitative manner to the possible extent.

1. Please define perceived constraints in implementing Option 1, if any, in addition to your answer to the previous question.

1. How much do you expect to change the cost for a training session for type rating and/or recurrent training, as applicable, in Option 1 in
   1. FFS
   2. FTD
   3. FNPT
2. Do you expect that more training sessions may be provided compared to the current situation (due to the potential decrease in the price to use a simulator)? If, yes how many more?
3. What would be the impact on safety for Option 1 in your view (in addition to your answer to question 6)?
4. Please identify indicators/measurements which you use currently to measure the success/failure rate of the training of the pilots in
   1. FFS
   2. FTD
   3. FNTP
5. Do you expect these indicators/measurements to be changed after implementing Option 1?

## Questions to FSTD Operators

1. How much does a recurrent and special evaluation currently cost for:
   1. FFS
   2. FTD
   3. FNPT
2. What would be the impact for you to implement Option 1 in terms of:

* Benefits (e.g. safety)
* Costs/negative impact (related to special evaluation of the device to make full use of the greater flexibility provide by the training matrix, etc.)

Please describe in a quantitative manner to the possible extent.

1. Please define constrains in implementing Option 1, if any, in addition of your answer to the previous question.

1. What would be the impact on safety for Option 1 in your view (in addition to your answer to question 14)?

## Questions to Aircraft Manufacturers / data package suppliers

1. Do you expect any change in the price of an FSTD as result of Option 1? If yes, please identify.
   1. FFS
   2. FTD
   3. FNTP
2. What would be the impact for you to implement Option 1 in terms of:

* Benefits (e.g. safety)
* Costs/negative impact

Please describe in a quantitative manner to the possible extent.

1. Please define constrains in implementing Option 1, if any.
2. What would be the impact on safety for Option 1 in your view (in addition to your answer to question 18)?

## Questions to FSTD manufacturers

1. Do you expect any change in the price of a simulator as result of Option 1? If yes, please identify.
   1. FFS
   2. FTD
   3. FNPT
2. What would be the impact for you to implement Option 1 in terms of:

* Benefits (e.g. safety)
* Costs/negative impact

Please describe in a quantitative manner to the possible extent.

1. Please define constrains in implementing Option 1, if any.
2. What would be the impact on safety for Option 1in your view (in addition to your answer to question 22)?

## Questions to pilots

1. What would be the impact for you to implement Option 1 in terms of:

* Benefits (accessibility of the FSTD, price to use an FSTD, No of training sessions which a pilot could follow for the same price, etc.)
* Costs/negative impact

Please describe in a quantitative manner to the possible extent.

1. Please define constraints in implementing Option 1, if any.
2. What would be the impact on safety for Option 1in your view?

# Any other comments

If you have any comments/additional ideas for policy options, impacts for the affected stakeholders, please identify them here.

1. https://lisstdis.easa.europa.eu/eqstdis/ [↑](#footnote-ref-1)