Checklist Mixed-EBT

Operator [(1)]	**Date of check**	**Inspector (Name/signature)** [(2)]	**Check ref.**
Purpose of check:			

[(2)] *By signing this checklist, I hereby confirm that, at the time of performing this activity, I did not have any conflict of interest to declare regarding the above-mentioned operator* [(1)].

OM amendment information			
Rev. No		**Date**	

List of non-compliances identified			
No	Ref Non-compliance	Ref OM	Non-compliances

List of remarks	
Ref OM	Remarks

Additional notes/comments:

NA = Not Applicable; C = Compliant; NC = Not Compliant; R = Remark; N/R = Not Reviewed

Reference	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
EBT programme implementation plan					
ORO.FC.231 + AMCs ORO.FC.232 + AMCs	EBT programme: Operators should implement the EBT programme referred to in EASA Air OPS Regulation (Reg (EU) 2020/20236 and ED Decision 2021/002/R) or ICAO Doc 9995	- Check that the operator's EBT application is related to a mixed-EBT programme and is based on Regulation (EU) 2020/20236 and related AMCs.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.GEN.200(a)(3) AMC1 ORO.GEN.200(a)(3)	Management of changes / safety risk management	- Check that the hazard identification process of the operator captured the risks associated with the transition to a mixed-EBT programme, in order to demonstrate how an equivalent level of safety is achieved - Check the adequate subsequent risk analysis and definition of mitigations. - Check that this was completed in the frame of the operator's management of change process.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(a) ICAO Doc 9995, Part I, 4.1.2	Definition of an implementation and operations plan	- Check that the operator has defined an implementation plan, including milestones and any limitation. The plan should include among others: o Aircraft classification (according to defined generations) o Development of a competency framework o Description of the information provided to pilots. o Instructor training and standardisation o Instructor concordance o Definition of a malfunction clustering (optional) o Definition of an approach type clustering (optional) o Description EBT modules and their integration o Selection and adaptation of the scenarios according to the generation of aircraft and type of operations o EBT programme design, incl. demonstrate of compliance with ORO.FC.230. o Definition of contingency procedures for unforeseen factors which may affect the delivery of the EBT program o o Definition of an assessment and grading system		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		○ Definition of remedial training ○ Review of the EBT programme based on the training system performance feedback. ○ Verification of the accuracy of the grading system - Check that the operator has established a gap analysis to determine the elements to be put in place to implement mixed-EBT. - Additionally the plan may include a plan to return to legacy training if the implementation of EBT mixed is cancelled.			
Mixed-EBT programme elements					
ORO.FC.231(e) + AMC1	Volume and FSTD qualification level: (1) Each EBT module shall be conducted in an FSTD with a qualification level adequate to ensure the correct delivery of the assessment and training topics. (2) The operator shall provide a sufficient volume of hours in the suitable training device for the pilot to complete the operator's EBT programme.	- Check in particular the adequate duration of simulator sessions when used for several LPCs (not less than 3 hours for 2 LPCs in one simulator session in mixed-EBT).. - Check that the duration is adequate considering the type of aircraft and the complexity of the operations.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.232(b) + AMC1 ORO.FC.232 (b)(3) ICAO Doc 9995, part I, 3.1.2.	Applicability - Aircraft and generation: The operator should determine which generations of aircraft apply.	- Check that the operator has adequately classified the aircraft concerned in accordance with the table contained in AMC1 ORO.FC.232 (b)(3).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(b) AMC1 ORO.FC.231(b) ICAO Doc 9995, 3.2, 4.1.1, appendix 1	Development or adoption of a system of core competencies	- Check that the competencies listed in AMC1 ORO.FC.231(b) have been included in the operator's list of competencies. - Check that this list includes a description of each competency and related behavioural markers meeting their specific needs and including a comprehensive set of technical and non-technical knowledge, skills and attitudes Note: The core competencies listed in ICAO Doc 9995 are intended as an example. Industry practice and experience indicates that behavioural indicators related to "knowledge" (not defined in Doc 9995) are very useful and may be included as an additional core competency		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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ICAO Doc 9995, Part I, 4.1.1(c), 6.1.1 & 6.1.2, 7.2.3	Availability of information to pilots regarding EBT principles, methodology and the set of competencies to demonstrate, including performance indicators (EBT pilot handbook).	- Check that the operator has adequately briefed its pilots on its EBT programme. - Check that the information provided to pilots include the following: o competencies and related behaviour indicators; o purpose of each phase of EBT (evaluation phase, manoeuvres validation phase and scenario-based training phase); o assessment methods and performance criteria; and o operator grading system.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.146 + AMCs ORO.FC.231 ICAO Doc 9995, Part I, 4.1.1, 6.3	Instructor training and standardisation	- Check that the operator has established a training programme for personnel providing training, checking and assessment in the frame of the EBT programme, which focusses on the development of competences in the following areas: o Operator's competency framework, in particular the measuring of behaviours observed according to the defined grading system; o Assessment of competencies by observing behaviours and the gathering of evidences regarding behavioural indicators; o Correlation between observed behaviour and potential outcome in training situations; o Recognition and highlight of good performance; o Determination of root causes for deviations below the standards of performance; o Identification of situations that could result in unacceptable reductions in safety margins. This is a session conducted in an FSTD as part of an EBT programme, or a similar FSTD session involving pilots role-playing to facilitate standardisation of the examiner or instructor. Note: compliance with the related provisions of ORO.FC.146 and its AMC/GM is not mandatory for mixed-EBT, however recommended by EASA. - Any items of check completed as part of the EBT programme should be conducted by a TRE or SFE. Any items which do not form part of the equivalent LPC or OPC check may be conducted by a TRI or SFI.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
ORO.FC.146 ORO.FC.231(a)(4) ICAO Doc 9995, Part I, 4.1.1, 6.3	Instructor concordance: The operator shall establish an EBT instructor standardisation and concordance assurance programme to ensure that the instructors involved in EBT are properly qualified to perform their tasks.	**- This methodology is optional for mixed-EBT.** - Check that the operator has established methods and metrics to assess concordance. - Check the implementation on the defined methods and metrics and the actions taken in case of lack of concordance, based on a root cause analysis.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(f) + AMC1 AMC1 ORO.FC.230, para (a)(4)(i)(A) ICAO Doc 9995, Part I, 3.8.3	Equivalency of malfunctions (Malfunction clustering).	**- This item is optional for mixed-EBT.** - Should an operator decide to establish and use a malfunction clustering, it should be based on the following steps: o Gather a list of all aircraft malfunctions. o Retain in the list only malfunctions that place a significant demand on a proficient crew in isolation from any environmental or operational context. o Classify and group malfunctions according to the 5 characteristics: ▪ Immediacy ▪ Complexity ▪ Degradation of control* ▪ Loss of instrumentation* ▪ Management of consequences o Develop the EBT FSTD programme to incorporate malfunctions at the frequency specified in the table of assessment and training topics (AMC 2 to AMC6 ORO.FC.232 or Appendix 2 to 6 in ICAO Doc.9995). - Note: In general, the management of aircraft malfunctions is considered as a crew, but where the characteristics degradation of control and loss of instrumentation are considered, each pilot should have an opportunity of performing the role of PF. - Note 2: Malfunctions included in the equivalency of malfunctions but not included in the EBT FSTD programme require review and appropriate procedural knowledge training, conducted in suitable alternative environment (classroom, flight procedure training device, computer-based training, etc.). - Note 3: it is advisable to verify if the result of the malfunction clustering is valid for the different aircraft variants/models used in the airline.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		- Note 4: Doc 9995 reads "combining characteristics should not reduce the number of malfunctions below 4" EASA recommends a minimum of 7 malfunctions per year (1 immediacy, 1 complexity, 2 degradation of control, 2 loss of instrumentation (1 for each pilot) and 1 management of consequences.			
ORO.FC.231(g) +AMCs ICAO Doc 9995, Part I, 3.8.4	Equivalency of Approaches (approach clustering).	**- This item is optional for mixed-EBT.** - Should an operator decide to establish and use an approach clustering, it should be based on the following steps: o Review its operational network; o Select approaches with one or more of the following characteristics: ▪ unusual design; ▪ low frequency of exposure; and ▪ degraded approach guidance; o Select at least one approach of each type and method and include them in the EBT programme at the frequency given in the table of assessment and training topics; and o Ensure the approaches selected cover all the characteristics at the frequency given in the table of assessment and training topics. - Any approach that is required to be flown in the PF role-specifically should be classified as 'skills retention' and may be trained in the manoeuvres training phase (MT).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(a)	EBT Modules	- Check that the operator described how the EBT modules and its phases (evaluation, manoeuvres validation and scenario-based training) are distributed throughout the simulator programme: o Evaluation phase: line-orientated flight scenario, representative of the operator's environment during which there are one or more occurrences to evaluate key elements of the defined competency framework o Manoeuvres validation phase, to check the handling skills necessary to fly critical flight manoeuvres so that they are		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		maintained to a defined level of proficiency. This replaces the manoeuvres training phase described in ICAO Doc 9995 Chapter 7.5. Check that it includes at least all the items listed in Part-FCL Appendix 9 not included in the evaluation phase. o Scenario-based training phase to further develop pilot core competencies in a learning environment. This does not form part of any LPC or OPC requirement. Although the SBT should be done in the form of a LOFT, it is acceptable to use a small part of the SBT to train some isolated manoeuvres following the philosophy of the ICAO manoeuvres training phase.			
ORO.FC.232(b) AMC2 to AMC7 ORO.FC.232 ICAO Doc 9995, Part I, 4.1.2	Selection and adaptation of the scenarios defined in Appendices 2 to 6 ICAO Doc 9995 or AMC2 to AMC6 ORO.FC.232 according to the generation of aircraft (fleet) and type of operation.	- Check that the operator has determined the distribution of training topics listed as A, B and C over the 3-year period. - The manoeuvres and scenarios examples listed in appendix 2 to Part ORO, (App 2 to 6 in ICAO Doc.9995) are non-exhaustive and may be added to as applicable to meet the needs of the operator.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231 AMC1 ORO.FC.115, para (a)(7) ICAO Doc 9995, Part I, attachment to Chapter 1 Step 7A.	EBT Programme design. EBT programme design. The programme should be designed according to the guidance and priorities within ICAO Doc 9995. All modules and lesson plans should be fully tested before use, to ensure that anticipated timings and FSTD fidelity provide for the training outcomes defined.	- Check that the programme is designed according to the guidance and priorities of EASA regulatory provisions or ICAO Doc 9995. - Check that all modules and lesson plans have been fully tested before use, to ensure that anticipated timings and FSTD fidelity provide for the training outcomes defined. - Check that: o LPC and OPC elements are included in the mixed EBT programme; and that the LPC and OPC elements are completed between the EVAL and Manoeuvres validation phase. o Training topics and frequencies are correctly included; **Note: the following 2 items are not required at the start of EBT Mixed. However, a functional system with the 4 items should be established within 2 year of EBT mixed in order to ensure full compliance for EBT baseline.** o There is a reasonable contextualization of the example scenarios based on the real operation performed by the operator and feedback from the SMS (e.g. if the network of the operator is in Europe, the LOFTS may be located		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		in Europe, or if SMS has reported that TCAS alerts occurs in Spain then the contextualisation of TCAS example scenarios may be located in Spanish aerospace, a new route is established in the network then SBT may use the same route..etc); o Data provided by the EBT system is used to design the EBT programme (e.g. if deficient is found in one competency across the fleet/pilot rank/airline the future EBT programmes should reinforce this competency). - Check that the operator has established a system (including procedures) to design the EBT programme which includes how the selection of the example scenarios is done and how the operator contextualize those example scenarios. The contextualisation should be based on the operational data (Area of operation, SMS data, FDM data, pilots report…etc.).			
Part-FCL Appendix 9	Compliance with Part-FCL and Part ORO.FC.230 (ORO.FC.A.245 for ATQP), according to the methodology described in GM1 ORO.FC. 230(a);(b);(f)	- The operator shall demonstrate compliance with Part-FCL and ORO.FC.230. - The EASA compliance checklist 'FCL-OPS items' objectives during an LPC-OPC check may help the operator to demonstrate compliance for the LPC-OPC part; the remaining parts not covered by the mentioned checklist should be demonstrated.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(a)(5) AMC1 ORO.FC.231 (a)(5)	Contingency procedures for unforeseen factors which may affect the delivery of the EBT program	**- This item is optional for mixed-EBT.** - Check that the operator has described in its OM contingency procedures when crews are unable to perform the planned module; this should include: o short-term unavailability (e.g. Broken simulator during the execution of a module, or just before starting a module, last minutes sickness of crew …etc.) o long-term unavailability (e.g. long-term sick of crew, pregnancy…etc.,) and o the procedures to re-instate the crew into the program. - Generally, the principles that should drive the development of such contingency procedures are: o Maintain the approach that has been approved in traditional training; o Contingency situations outside the control of the operator (e.g. Sickness of crew...etc.); o Contingency procedures under the control of the operator (e.g. broken simulator (either self-owned or		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		subcontracted, in both cases operator retains the responsibility iaw. ORO.GEN.205), inability of the crew member due to delay of the preceding flight duty period, or positioning flight, etc.).			
ORO.FC.231(d) AMC1 ORO.FC.231 (d)(1) & AMC4 ORO.FC.231 (d)(1) ICAO Doc 9995, Part I, 3.6.3.	<u>Assessment and grading system:</u> 1) The operator shall use a grading system to assess the pilot competencies. 2) The operator shall verify at regular intervals the accuracy of the grading system against a criterion-referenced system.	- Check that the operator has established an assessment and grading system ensuring: o a sufficient level of detail to enable accurate and useful measurements of individual performance; o a performance criterion and a scale for each competency, with a point on the scale which determines the minimum acceptable level to be achieved for the conduct of line operations; o data integrity; o data security. - Check that the operator has developed procedures to address low performance of the pilot.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(d)(1) AMC4 ORO.FC.231(d)(1)	<u>Remedial training:</u>	**- This item is optional for mixed-EBT.** - Check that the operator has established procedures to address low performances (e.g. removal of line operations, remedial training). - Remedial training should be linked to the grading system and to the training needs analysis performed by the instructors to allow remediation tailored to the pilot.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(c) AMC1 ORO.FC.231(c) ICAO Doc 9995, Part I, 3.6.6 and 3.6.8.	<u>Training system performance (Performance feedback system).</u>	**- This item is optional for mixed-EBT.** - Check that the programme is reviewed periodically based on the data obtained in the EBT programme (e.g. grading of the pilots, feedback from instructors and pilots, deficiencies found in one or more competencies…). - Check that revised internationally available EBT data and any recommendations to training topic prioritisation is also taken into account.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231(c) AMC1 ORO.FC.231(c) ICAO Doc 9995, Part I, 3.6.6 and 3.6.8.	<u>Quality management within the training system performance.</u>	- **This item is optional for mixed-EBT.** - The training system performance should be measured and evaluated in respect of the organisational objectives. Monitoring should include a feedback system to identify trends and ensure corrective action where necessary. The operator should be able to monitor training system effectiveness and determine adjustments to		☐ N/A ☐ C ☐ NC ☐ R	

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		the EBT program where necessary.		☐ N/R	
ORO.FC.231 (c) AMC2 ORO.FC.231 (c)	Data protection	**- This item is optional for mixed-EBT.** - Check that the operator has a data access and security policy, including a procedure to prevent disclosure of crew identity, agreed by all parties involved and covering the following: o Measures to ensure the security of data o Policy and accountability for data retention o Measures to ensure that the security of the data includes information security standards (e.g. ISO2700x-ISO 27001, NIST SP 800-53,00)		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.FC.231 (d)(2) AMC1 ORO.FC.231 (d)(2)	Verification of the accuracy of the grading system	**- This item is optional for mixed-EBT.** - Check that the operator has a system (including procedures) to verify the accuracy of the grading system, which provides a reasonable root cause analysis when there is a mismatch, and that sensible corrected actions are established in such case.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	