



EASA

European Aviation Safety Agency

Overview of the main developments in the syllabus and learning objectives (LOs)

ED Decision 2018/001/R

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Main content of Decision 2018/001/R

- ✈ Updated Learning Objectives (LOs) for the theoretical knowledge syllabi and ground school assessments
- ✈ Introduction of the threat and error management (TEM) concept and its application
- ✈ Introduction of new LOs under Area 100 'Knowledge, skills and attitudes' (KSA) whose aim is to enhance the pilots' KSA contained in the core competencies



Timeline: from RMT to Decision

- ✈ Starting with rulemaking task (RMT) 0595 → publication of the Terms of Reference (ToR) – 11.03.2015
- ✈ Establishing of the Rulemaking Group (RMG)
- ✈ Developing the Notice of Proposed Amendment (NPA) by EASA based on the input of the RMG
- ✈ Publication of NPA –2016-03 – 09.06.2016
- ✈ NPA three months consultation phase
- ✈ EASA received **1164** individual comments with multiple statements, mostly related to the amended LOs
- ✈ Establishing of NPA Review Group assisting EASA in reviewing all comments
- ✈ Publication of this Decision with the AMCs/GM – 06.02.2018



Why we need to change the AMCs/GM?

- ✈ The last significant technical update of the syllabi and LOs for the ATPL, MPL, CPL and IR theoretical knowledge courses for aeroplane and helicopter categories was conducted in 2006
- ✈ Need to review, amend, and update these LOs (where necessary) because of:
 - ✈ the emergence of new technologies
 - ✈ the advancement of training philosophy
- ✈ The amended AMCs/GM should now provide all the necessary knowledge and competencies to prepare pilots for performing state-of-the-art flight operations



What we want to achieve? Objectives

- ✈ To enhance the theoretical training, assessment and subsequent examinations for ATPL, MPL, CPL, IR for aeroplanes and helicopters and CB-IR and EIR for aeroplanes
- ✈ To update the theoretical knowledge syllabi and LOs, whilst also
 - ✈ improving teaching methodologies; and
 - ✈ accommodating evolving learning needs;
- ✈ To facilitate updating the ECQB, thus ensuring that it is current and relevant to evolving training needs



How we want to achieve it? – part 1

The review and update over a number of steps:

✈ **First step**

- ✈ Publication of the LOs in 2016 (Decision 2016/008/R of 02 May 2016)

✈ **Second step**

- ✈ Publication of this Decision 2018/001/R after the technical review of the theoretical knowledge syllabi and LOs
- ✈ This Decision amends AMC/GM to Part-FCL and Part-ORA

✈ **Third step**

- ✈ Publication of another Decision amending the examination procedures in the relevant AMCs to ARA.FCL.300(b) Examination procedures
- ✈ Publication of 'Subject 090 Radio Communications' in Annex I to this Decision



How we want to achieve it – part 2

During the review the following activities have been undertaken:

- ✈ Ensure that current categorisation of subject areas remains meaningful
- ✈ Ensure that all LOs of each subject area are current, up to date, relevant and proportionate for the specific examinations
- ✈ Syllabus structure and LOs are drafted in compliance with the newly developed taxonomy guidelines



Overview main amendments – Part-FCL

- ✈ New AMC1 FCL.025(a)(2): student pilots should be first assessed for Area 100 KSA by their ATOs before being recommended for the final theoretical knowledge examination paper
- ✈ AMC1 FCL.310; FCL.515(b); FCL.615(b): substantially revised:
 - ✈ Several LOs categorised as comprising ‘Basic Knowledge (BK)’
 - ✈ The LOs for EIR and CB-IR(A) have been reviewed and merged
 - ✈ Outdated or irrelevant LOs have been deleted
 - ✈ Duplication of LOs in different subject areas kept in only one subject area
 - ✈ New LOs have been added to take account of new technology, current safety priorities, changes in operational practices and the outcome of the work done in other RMTs (e.g. LOs on UPRT)
 - ✈ Renumbering of the LOs, paragraphs, topics or subtopics
 - ✈ A new LO area (Area 100 KSA) has been added



Overview main amendments – Part-FCL

- ✈ New GM1 FCL.310; FCL.515(b); FCL.615(b): to explain the Benjamin Bloom Taxonomy and the verbs used throughout the TK syllabi and LOs
- ✈ The tables in AMC2 to AMC8 FCL.615(b): deleted and content in the revised AMC1 FCL.310; FCL.515(b); FCL.615(b)
 - ✈ Note: AMCs to FCL.615(b) apply until the end of the transition period
- ✈ AMC1 FCL.720.A(b)(2)(i): amended with the updated tables containing the course syllabi for VFR and IFR operations to reflect the revised syllabi and LOs
- ✈ AMC1 to Appendix 3 and GM1 to Appendix 5: amended in the theoretical knowledge paragraphs to include 'Area 100 KSA'
- ✈ AMC1 and AMC3 to Appendix 6: amended to detail various ways of completing classroom training



Overview main amendments – Part-ORA

- ✈ AMC1 ORA.ATO.230(a): amended to include the assessment for 'Area 100 KSA'
- ✈ New AMC2, AMC3 and AMC4 to ORA.ATO.230(a):
 - ✈ to cover the theoretical knowledge course design requirements and the training and assessment for 'Area 100 KSA'
- ✈ New GM1, GM2, GM3, GM4 and GM5 ORA.ATO.230(a):
 - ✈ to provide guidance on how student pilots should be assessed on Area 100 KSA
 - ✈ to explain the concept of 'word pictures' used for the assessment of the LOs in Area 100 KSA, and to provide assessment indicators
 - ✈ to provide guidelines on the practical exercises to be used for the assessment of Area 100 KSA
 - ✈ to provide guidance on Area 100 KSA instruction and assessment training
 - ✈ to provide guidance on instructional systems design



Where are the LO tables published?

- ✈ The LO tables are published as appendices to Annex 1 to Decision 2018/001/R, as a clean document, to assist ATOs working with them to modify their training materials and courseware.
- ✈ The LO tables with the marked amendments are published together with the CRDs, and are meant purely as a documentation tool.



How we monitor and evaluate the rules?

- ✈ Through EASA's regular standardisation activities
- ✈ Before the new system can be fully implemented, there are several actions that need to be completed first:
 - ✈ EASA to update the ECQB to reflect the amendments made to the LOs
 - ✈ The competent authorities to:
 - ✈ train their inspectors for the approval of Area 100 KSA
 - ✈ approve the revised ATO training manuals
 - ✈ prepare their exam delivery system to accommodate the revised ECQB
 - ✈ migrate the revised ECQB into their examination delivery platform; and
 - ✈ translate the questions into the language(s) of the examination
 - ✈ The ATOs to:
 - ✈ update their training course applying instructional design
 - ✈ amend their training manuals to introduce the new LOs and the new Area 100 KSA; and
 - ✈ train the Area 100 KSA assessors and instructors



Transition period

- ✈ All these activities will take time to manage effectively
- ✈ Transition plan spanning over 4 years, starting from the publication of the Decision 06.02.2018:
 - ✈ First 2 years will be necessary to update the ECQB with questions based on the new and revised syllabi and LOs
 - ✈ Last 2 years are envisaged for the competent authorities to implement the updated ECQB and the amendments mentioned above
- ✈ ATOs should start preparing their new courses
- ✈ Competent authorities should prepare the implementation measures. It would be up to the individual competent authorities to set an expiry date for the old syllabus examinations — this would provide flexibility for each competent authority to choose the date of transition