Comparative chart – Proposed changes to RBAC No. 01, 21 and 61

Theme 1 of 2023-2024 Regulatory Agenda - Type design data with relevant effects to the operational context

Version for Public Consultation

Docket 00066.004388/2020-13

English version for reference only. In case of discrepancy, the Portuguese version shall prevail.

RBAC No. 01 - Definitions, writing rules and units of measurement to be used in RBAC

RBAC 01 Amdt 11	Foreign reference regulation (when applicable)	RBAC 01 Amdt. 12 for Public Consultation	Rationale
01.1 Definitions		**01.1 Definitions**	
Minimum Equipment List (MEL) means a list, prepared by an aircraft operator in conformity to or more restrictive than the MMEL established for the aircraft type, which establishes how to operate that aircraft type with certain inoperative equipment, provided specific conditions are met.	**Guidance Material to Regulation (EU) No 965/2012** EASA GM1 ORO.MLR.105(a): The Minimum Equipment List (MEL) is a document that lists the equipment that may be temporarily inoperative, subject to certain conditions, at the commencement of flight. This document is prepared by the operator for their own particular aircraft taking account of their aircraft configuration and all those individual variables that cannot be addressed at MMEL level, such as operating environment, route structure, geographic location, aerodromes where spare parts and maintenance capabilities are available, etc., in accordance with a procedure approved by the competent authority.	*Minimum Equipment List (MEL)* means an approved document to be used ~~a list, prepared~~ by an aircraft operator in~~,~~ conformity to or more restrictive than the MMEL established for the aircraft type or specific model, which lists items that may be temporarily ~~establishes how to operate that aircraft type with certain~~ inoperative ~~equipment~~, provided ~~specific conditions are met~~that limitations, procedures and special operating conditions therein described are met, as applicable.	The MEL definition has been revised for clarity and alignment with the proposed MMEL definition. The following aspects are highlighted: • Replacement of “list” with “document”: despite the name being “Minimum List...”, the term document is broader and includes the entire scope beyond the list itself, e.g., preamble and operational and maintenance procedures; • Applicability to an aircraft type or model, not just a type: if the type certificate holder chooses to have independent MMELs for different models within the same type certificate, the operator's MEL must also be independent for these models; and • Inclusion of the term “temporarily”, essential so that inoperative items do not remain in this condition indefinitely.
Master Minimum Equipment List (MMEL) means a list established for a specific aircraft type by the organization responsible for the type design, with the approval of the certification body, containing items, one or more of which are allowed to be inoperative in the commencement of the flight. The MMEL may be associated with special operating conditions, limitations or procedures.	EASA CS-MMEL Issue 3: **CS MMEL.110 MMEL purpose** The MMEL is a document that lists the items which may be temporarily inoperative, associated with special operating conditions, limitations or procedures, as applicable, for a specific aircraft type or model.	*Master Minimum Equipment List (MMEL)* means an approved document ~~a list established~~ for a specific aircraft type or model ~~by the organization responsible for the type design, with the approval of the certification body, containing~~which lists items that may be temporarily~~, one or more of which are allowed to be~~ inoperative, provided that ~~in the commencement of the flight. The MMEL may be associated with special operating conditions,~~ limitations~~,~~ ~~or~~ procedures and special operating conditions therein described are met, as applicable.	The definition of MMEL has been revised for clarity, referring to item CS MMEL.110 of the Certification Specifications CS-MMEL issued by the European Union Aviation Safety Agency (EASA). The following points are highlighted: • Replacement of “list” with “document”: despite the name being “Minimum List...”, the term document is broader and includes the entire scope beyond the list itself, e.g., preamble and operational and maintenance procedures; • Applicability to an aircraft type or model, not just a type: a type certificate holder can choose to have independent MMELs for different models within the same type certificate; • Inclusion of the term “temporarily”, essential so that inoperative items do not remain in this condition indefinitely; and • Replacement of the term “approval by the certification body” with “approved document”, since the issuance of the MMEL varies between different countries and the term “approved”, also defined in RBAC 01, includes both the approval carried out by ANAC and by any person whose approval competence in that matter is recognized by ANAC, including other civil aviation authorities.

RBAC No. 21 - Aeronautical product and article certification

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
SUBPART A - GENERAL		**SUBPART A - GENERAL**	It was decided to include the new requirements on MMEL and Aircraft Operational Evaluation in Subpart A, as they affect multiple subparts, thus avoiding duplication of requirements.
		21.5a-I Master Minimum Equipment List (MMEL)	Due to the unavailability of numbering in Subpart A, it was decided to include the new requirements right after section 21.5, employing suffixes "a" and "b", as provided for in Art. 8, item VIII, of Normative Instruction (IN) No. 15/2008 . The identifier "-I" was also included to demonstrate that this section does not exist in the reference regulation, in this case, Part 21 of Title 14 of the Code of Federal Regulations of the United States, or "14 CFR 21".
	EASA CS-MMEL Issue 3: **CS MMEL.140 Level of safety** The MMEL items are prepared to ensure that an acceptable level of safety as intended by the applicable requirements is maintained taking into account the following factors:	(a) The MMEL shall ensure that an acceptable level of safety, as intended by the applicable requirements, is maintained when the aircraft is operated with inoperative items, taking into account the following factors:	This paragraph covers the assessment of the aircraft's safety level when operated with inoperative items. The text of this section is based entirely on the EASA CS-MMEL item CS MMEL.140, which adequately addresses the factors to be considered when assessing the level of safety.
	(a) reduction of aircraft functional capabilities and/or safety margins;	(1) reduction of aircraft functional capabilities or safety margins;	Based on EASA CS-MMEL item CS MMEL.140(a).
	(b) change in crew workload and/or degradation in crew efficiency;	(2) change in crew workload or degradation in crew efficiency;	Based on EASA CS-MMEL item CS MMEL.140(b).
	(c) consequence(s) to the aircraft and its occupants of the next failure(s) having the worst safety-related impact on the aircraft's take-off, continued flight and landing when dispatching in a known degraded configuration;	(3) consequences to the aircraft and its occupants due to possible next failures having the worst safety-related impact on the aircraft when dispatching in a condition foreseen in the MMEL; and	Based on EASA CS-MMEL item CS MMEL.140(c).
	(d) consequence(s) to the aircraft and its occupants of the next external event(s) for which the item was designed to protect against, if applicable.	(4) consequences to the aircraft and its occupants due to the occurrence of next external events for which the inoperative item was designed to protect against, if applicable	Based on EASA CS-MMEL item CS MMEL.140(d).

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
	EASA CS-MMEL Issue 3: **CS MMEL.145 Justification of MMEL items** (a) The justifications are provided by the applicant along with each MMEL item. (b) The inclusion of each item in the MMEL is justified following one or more methods, also referred to as MMEL safety methodologies, as agreed with EASA. (c) The justifications include at least a qualitative safety assessments which: (1) evaluate the consequences of the proposed MMEL dispatch configuration on the aircraft functional capabilities, crew workload and discomfort to occupants and show compliance with CS MMEL.140; (2) evaluate the consequences of the next worst safety-related failure and, if applicable for the item, separately evaluate the consequences of the external event for which the item was designed to protect against, and ensure the combination of the MMEL dispatch configuration with the next worst safety-related failure or event do not correspond to an hazardous or catastrophic failure condition; and (3) notwithstanding paragraph (2) above, specific cases may be accepted when supported by quantitative safety assessment as per paragraph (d) below. (d) The qualitative safety assessment is supplemented by a quantitative	(b) Each MMEL item shall be technically justified according to methods acceptable to ANAC.	This paragraph covers the need for MMEL items to be justified in a manner acceptable to ANAC. The text was inspired on EASA CS MMEL.145, however, a more succinct requirement was chosen, which will be further detailed in a Supplementary Instruction (IS).

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
	safety assessment when both of the following considerations are met: (1) relief is proposed for items, functions and/or systems involved in catastrophic or hazardous failure conditions, and the severity of the failure condition under MMEL configuration is not mitigated by special operating conditions, limitations or procedures; and (2) when the operation with the inoperative item leaves the aircraft one failure away from a hazardous failure condition, or one or two failures away from a catastrophic failure condition. (e) When an operational or maintenance procedure is associated to an MMEL item, corresponding symbol is included in the MMEL, and the intent of the procedure is specified in the associated item justification. (f) Where a detailed quantitative analysis is required, notwithstanding paragraph (d), a qualitative analysis may only be used for conventional and simple systems when the aircraft is certified against requirements other than CS 25/29.1309.		
	Commission Regulation (EU) No 748/2012 – Anexo 1 (Parte 21) **21.A.62 Availability of operational suitability data** The holder of the type-certificate or restricted type-certificate shall make available: (…)	(c) The holder of an approved MMEL or Supplement to the MMEL shall make such document available to any interested person.	Until now, ANAC has always published on its website all MMELs issued or approved by ANAC. With the proposed regulation, the MMEL becomes formally a document of the holder of the type certificate or supplementary type certificate, being necessary a requirement for its availability. The proposed text preserves the current level of access, that is, any interested person could have access to the MMEL. However, as with the Instructions for Continued Airworthiness (ICA), the holder may charge for access to such publications. This particularity will be covered in IS.

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	(c) on request, the relevant data referred to in points (a) and (b) above, to: (…) 2. any person required to comply with one or more elements of this set of operational suitability data. **GM to 21.A.62, 21.A.108 and 21.A.120B Availability of Operational Suitability Data** (…) (b) When making data available, the holder of the design approval can impose conditions addressing the intellectual property nature of the data**.**		EASA Part 21 21.A.62(c)(2) was used as a reference, but more broadly, to any interested party, as justified above. At EASA, the possibility of charge is foreseen in Guidance Material. The term "Approved MMEL" will be detailed in IS and is based on the definition of "Approved" in RBAC 01, not limited to an approval carried out directly by ANAC. The following are considered approved MMEL, in a non-exhaustive way: • MMEL and MMEL Supplements approved directly by ANAC; • Foreign MMEL and MMEL Supplements issued before the effectiveness of this section and those that do not require an additional Brazilian supplement; and • Foreign MMELs complemented by an ANAC supplement in case of differences in Brazilian technical criteria in relation to the State of Design.
	Commission Regulation (EU) No 748/2012 – Anexo 1 (Parte 21) **21.A.62 Availability of operational suitability data** The holder of the type-certificate or restricted type-certificate shall make available: (a) at least one set of complete operational suitability data prepared in accordance with the applicable operational suitability certification basis, to all known EU operators of the aircraft, before the operational suitability data must be used by a training organisation or an EU operator; and (…)	(d) The holder of or applicant to a type certificate for an airplane having one or more turbine engines or for a large rotorcraft, whose application for the model has been submitted after [date of publication on the Official Journal + 6 months], shall have an approved MMEL before the issuance of a Brazilian standard certificate of airworthiness to the affected aircraft.	This paragraph determines that an approved MMEL must exist, mandatorily, for new aircraft models, from a certain complexity, whose applications for type certification at ANAC are carried out after 6 months of publication of the rule. This obligation does not apply to: • Aircraft models for which the application for the type certificate was submitted before the vacancy period; and • Modifications to the type certificate, either through an amendment to the Type Certificate (TC) or Supplementary Type Certificate (STC), except in the case of a new model. See justifications in paragraphs 21.5a-I(e) and (f). In terms of complexity, the following criteria were chosen for the obligation of an approved MMEL: • For airplanes, those that have turbine engine(s), either turboprops or turbofans. Aircraft with conventional (piston) engines are excluded from the criterion; It is • For helicopters, only those that qualify as large aircraft, that is, with a maximum take-off weight greater than 5,670 kg (12,500 lb), as defined in RBAC 01 for "large aircraft". These complexity criteria correspond to aircraft that are allowed to operate with inoperative items without an approved Minimum Equipment List (MEL), even if there is an MMEL applicable to that aircraft, as per §91.213(d)(1)(ii) of RBAC 91. Thus, if, even with an MMEL, a specific MEL would not be necessary, then it was

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale

			considered reasonable not to require an MMEL either, harmonizing the criteria of RBAC 21 and 91.
			
			It is important to mention that there is no international harmonization in the criteria for the obligation of a MMEL.
			
			In the US, there is a generic MMEL for single-engine aircraft , however, Federal Aviation Administration (FAA) may require a specific MMEL to be developed for complex single-engine aircraft with a turbine engine, as occurred with the Cessna 208 Caravan model (refer to Advisory Circular – AC 91-67, item 22(c)).
			
			In EASA, there are two Certification Specifications (Certification Specifications) for MMEL: CS-MMEL for more complex aircraft, and CS-GEN-MMEL for less complex aircraft. In CS-GEN-MMEL, there is a list of generic MMEL items that do not require justification (CS GEN.MMEL.145), and other items may be added following the more restrictive rules of CS-MMEL, as per CS GEN.MMEL. 115. In CS-MMEL, all items need to be justified.
			
			The following aircraft must comply with CS-MMEL, according to item CS MMEL.100:
			• Complex motor-powered aircraft, according to Article 3, item (j), of Regulation (EC) No. 216/2008 :
			  ○ Airplanes:
			  ▪ with a maximum take-off mass greater than 5,700 kg;
			  ▪ certified passenger seating configuration of more than 19 seats;
			  ▪ requiring at least 2 pilots; or
			  ▪ equipped with a jet engine or with more than one turboprop engine;
			  ○ Helicopters:
			  ▪ with a maximum takeoff mass greater than 3,175 kg;
			  ▪ with certified passenger seating configuration of more than 9 seats; or
			  ▪ requiring at least 2 pilots;
			  ○ Tilt-rotor aircraft;
			• Non-complex helicopters certified for:
			  ○ Operation under instrument flight rules (IFR);
			  ○ Flight in icing conditions; or
			  ○ Category A operations.
			
			Less complex aircraft are covered by CS-GEN-MMEL, except European Light Aircraft ELA1 and ELA2, which do not need MMEL, according to CS GEN.MMEL.100. ELA 1 and ELA 2 cover a series of light aircraft which, in the case of airplanes, have a maximum take-off mass of up to 2000 kg and do not qualify as complex motor-powered aircraft.
			
			Despite the non-uniformity of the criteria for the applicability of the MMEL need in the different authorities, it is expected that rarely cases of new foreign aircraft models that do not have a specific MMEL and that will be obliged to comply with the Brazilian MMEL regulation will exist. Even at EASA, aircraft covered by the

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
			CS-GEN-MMEL will have their own MMEL, even if developed from pre-established generic items. As for the deadline for approval of the MMEL, its impact on aircraft operations in Brazil was considered. In the case of aircraft of Brazilian design for operation abroad, the MMEL approval will occur according to the needs of the State of Operation. The text was inspired in European regulations, where Operational Suitability Data (OSD), even if part of the type certificate, must be available before they are needed by end users, e.g. as described in EASA Part 21 21.A.62(a). Although the MMEL, in Brazil, is not part of the type certificate, the requirement was considered adequate for the Brazilian context. Since the deadline for obtaining MMEL approval is until the issuance of the Brazilian standard Certificate of Airworthiness (C-of-A) for the affected aircraft, that is, the MMEL can be approved after the issuance of the Type Certificate (TC), the requirement was included in the applicability not only for applicants, but also for TC holders. Consequently, in order not to imply retroactive applicability, the vacancy period of 6 months after the publication of the rule in the Official Journal (DOU) was included in the text of the requirement. Such vacancy period was chosen as being 6 months so that potential applicants can adapt to the new rules. It should be noted that the development of MMEL has been a market practice for decades for minimally complex aircraft, so no significant impact is expected, either for national or foreign applicants.
		(e) Except as provided in paragraph (f) of this section, the holder of or applicant to an amendment to a type certificate or supplemental type certificate for aircraft having an approved MMEL, whose application for the modification has been submitted after [date of publication on the Official Journal + 6 months], shall, before the operation of an aircraft having a Brazilian standard certificate of airworthiness with the embodied modification:	Paragraph 21.5a-I(e) contain obligations in case of modifications to the TC, either through and amendment or STC, on aircraft that have an approved MMEL. The exception provided for in paragraph (f) refers to the elective nature of compliance with the obligations in this paragraph (see justification in paragraph 21.5a-I(f)). Modifications that qualify as new models are covered by paragraph 21.5a-I(d) above and are not covered by the above electivity. As in paragraph 21.5a-I(d), the obligations apply to new applications for TC or STC amendments submitted to ANAC after the vacancy period, with a compliance deadline before the operation of the affected aircraft. The term “before the operation of an aircraft having a Brazilian standard certificate of airworthiness with the embodied modification” covers both new aircraft and aircraft in service that incorporate the modifications per service bulletin or STC. Paragraphs 21.5a-I(e)(1) and (2) address possibilities for meeting obligations.
		(1) demonstrate that the modifications do not adversely affect the approved MMEL; or	One option for the applicant is to demonstrate that the modification does not adversely impact the approved MMEL. The term “adversely impacts” will be detailed in IS, and includes modifications that, for example:

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
			• Require changes to existing MMEL items due to the removal or replacement of components; • Expand the aircraft's operational capabilities in a way not considered in the original MMEL approval; etc.
		(2) obtain the approval of a MMEL Supplement covering the modifications.	In this second option, the applicant or approval holder prepares a Supplement to the MMEL listing the original MMEL items to be disregarded and the new items to be included, and then obtains the approval for that Supplement.
		(f) If the applicant does not comply with the provisions of paragraph (e) of this section, ANAC may limit the use of MMEL items affected by the modification.	This paragraph covers the elective nature of the obligations listed in paragraph 21.5a-I(e) for modifications to a TC, subject to the possibility of ANAC limiting the use of approved MMEL items affected by the modification. The text provides for such a limitation as a possibility since it will be up to ANAC, according to its assessment on the matter, to decide whether to act due to the applicant or holder choosing not to carry out the demonstrations provided for in paragraph 21.5aI(e). Such elective status has been included for amendments to Type Certificates (TC) and Supplemental Type Certificates (STC), other than new models, for the following reasons: • Many foreign STC holders would be disinterested in validating the STC in Brazil, which would make it impossible to import many aircraft or would require the removal of the STC from the aircraft; • Most STC validations are currently from US designs and are classified as "Basic" in the validation criteria of the Implementation Procedures of the Bilateral Agreement for the Promotion of Aviation Safety between Brazil and the United States, where validation occurs with minimal involvement of ANAC and in the shortest possible timeframe. The requirement of a Brazilian supplement to the MMEL would imply a greater workload for ANAC, affecting other activities carried out by the technical staff; • In the US, there can be a considerable time lag between the approval of a type certificate amendment or a STC and the publication of the revised MMEL. Thus, the applicability of the requirement for such cases would imply the need for a Brazilian Supplement to the MMEL even before the modification is covered by an MMEL approved in the State of Design; • Revisions to the MMEL due to amendments to the TC are generally carried out in batches. The applicability of this requirement to amendments to the TC could affect the entry into service of aircraft that have already incorporated such amendments to the type certificate; and • In case of foreign designs, the applicability of the requirement for amendments to the TC and STC would imply a significant burden on applicants, in demonstrating compliance, and on ANAC, due to the workload on for approval and control of modifications.
		21.5b-I Aircraft Operational Evaluation	Due to the unavailability of numbering in Subpart A, it was decided to include the new requirements right after section 21.5, employing suffixes "a" and "b", as

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
			provided for in Art. 8, item VIII, of IN No. 15/2008 . The identifier "-I" was also included to demonstrate that this section does not exist in the reference regulation, in this case, Part 21 of Title 14 of the Code of Federal Regulations of the United States, or "14 CFR 21".
	EASA CS-FCD Issue 2: **CS FCD.050 Scope** (a) These Certification Specifications for Flight Crew Data (CS-FCD) address: (1) the determination of a pilot type rating: (i) to establish whether an aircraft is recognised as a new type or as a variant to an existing type of aircraft, or as a modification to an existing type or variant, including its new systems, new equipment, or new procedures; and (ii) to assign the pilot licence endorsement designation for an aircraft. (2) the minimum syllabus for an aircraft type-specific pilot training course, including checking requirements, currency requirements and recent experience requirements; (3) the identification and validation of training areas of special emphasis (TASE); (4) the determination of initial and recurrent training, as well as of checking and credit based on the differences/commonalities between types, variants, aircraft systems, equipment, or procedures; and (5) pilot experience and pilot prerequisites for the issuance of a type rating, as provided for in Regulation (EU) No 1178/2011 ('Aircrew Regulation').	(a) The holder of or applicant to a type certificate or supplemental type certificate for an aircraft model for which a pilot type rating is required, according to RBAC 61, shall perform an operational evaluation campaign in an acceptable manner and with satisfactory result if intending to obtain the determination by ANAC of:	There is currently no requirement in RBAC related to the operational assessment of aircraft, which is carried out on a voluntary basis following the IS 00-007A criteria. The purpose of this paragraph is to link the benefits of operational evaluation to RBAC criteria. However, its realization remains voluntary. As it is today, the operational evaluation applies only to aircraft for which a pilot type rating is required. Aircraft that can be operated by pilots holding only a class rating are simple enough for not requiring the issuance of a specific rating, justifying the non-applicability of the operational evaluation process. The scope of the determinations was based on operational evaluation campaigns carried out by ANAC and used as reference the EASA Flight Crew Data Certification Specifications (CS-FCD) item CS FCD.050(a). As for the need, or not, for type rating, it was decided to maintain the same requirements already existing in section 61.5 of the RBAC 61. Under EASA requirements, such determination is based on item CS FCD.200 (Determination of a pilot type rating) and forms part of the type certification. Considering that in this regulation it was decided to keep the operational evaluation as a voluntary activity, without being part of the type certificate, it was concluded that the requirements for determining the type rating should not be migrated from RBAC 61 to RBAC 21. The evaluation of the possible commonality of a type rating between two or more models is one of the possible determinations of the operational evaluation process and is covered in this requirement. In the text of the requirement, "operational evaluation campaign" represents the set of activities necessary for ANAC to issue an Operational Evaluation Report with the intended determinations. This term and the possible forms of this campaign will be detailed in IS. Carrying out this campaign "in an acceptable manner" implies meeting the acceptable means of compliance established either in IS 00-007; an IS that replaces it, or other means of compliance approved by ANAC. ANAC will only issue the intended determinations upon a "satisfactory result", that is, with a favorable opinion on obtaining it after the operational evaluation campaign. The determinations that can be made by ANAC are listed in paragraphs 21.5bI(a)(1) to (4). It is important to note that section 61.213 of RBAC 61 contains

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
			only general non-type specific experience requirements, unlike EASA item CS FCD.050(a)(5).
		(1) specifications for minimum recommended training for the issuance of the corresponding type rating;	This determination refers to the minimum recommended training for granting the corresponding type rating. The minimum training is recommended, and not mandatory, as it is a guideline for the necessary training, subject to some flexibility in accordance with the operational reality of the qualification candidate or the company involved. This item includes Training Areas with Special Emphasis (TASE).
		(2) a single type rating for two or more models;	As a standard, two different aircraft requiring type rating for pilots will have distinct type rating designations unless an operational evaluation campaign is conducted. In the operational evaluation campaign, the applicant may request the candidate aircraft to be assigned with the same type rating as a the base aircraft, due to their operational similarities.
		(3) credit recommendations for training, checking and recent experience regarding an aircraft for which operational similarity has been established; or	This determination allows pilots who already have a type rating for a given aircraft model to operate a similar aircraft, from an operational perspective, with a reduced scope of training, checking or recent experience.
		(4) specifications for minimum recommended training for the operation of different aircraft configurations or models requiring the same type rating.	This item refers to differences training in case of the pilot, holder of a valid type rating for a group of models or several relevant configurations of the same model, being able to operate different models or configurations for which he was originally qualified.
		(b) The determinations forseen in paragraph (a) may be limited by ANAC if:	This paragraph covers the possibility for ANAC to limit previous determinations after an operational evaluation campaign under certain conditions, and is related to the voluntarity of the requirements in this section. The text foresees such limitations as a possibility since it will be up to ANAC, according to its assessment on the subject, to decide whether to restrict the existing results of an operational evaluation campaign when there is a change with effect on those results and the applicant chooses not to carry out the necessary demonstrations. Such conditions are detailed in the subsequent paragraphs.
		(1) the corresponding aircraft type certification is amended or a supplemental type certificate is issued for that aircraft model;	The first condition is that there is a modification to the type certificate, either by amendment or by STC.
		(2) such modification might appreciably affect the obtained determinations; and	The second condition is that the modification “might appreciably affect” the determinations obtained as a result of a previous operational assessment campaign.

RBAC 21 Amdt 9	Foreign reference regulation (when applicable)	RBAC 21 Amdt. 10 for Public Consultation	Rationale
			The term “might appreciably affect” was inspired by the definitions of “major change” in RBAC 01 and “minor change” in RBAC 21, that is, the change has a relevant impact on the aspects of the operational evaluation carried out previously. This term will be detailed in IS.
		(3) the applicant to the type certificate or supplemental type certificate does not perform an operational evaluation campaign in an acceptable manner and with satisfactory result to complement the applicable determinations.	The third condition for the possibility of ANAC limiting the determinations resulting from a previous operational evaluation campaign is that the applicant does not carry out an operational evaluation campaign to complement the applicable determinations.

RBAC No. 61 - Pilot licenses, ratings and certificates

RBAC 61 Amdt 14	Foreign reference regulation (when applicable)	RBAC 61 Amdt. 15 for Public Consultation	Rationale
61.215 Maintenance or re-establishment of the validity of type ratings		**61.215 Maintenance or re-establishment of the validity of type ratings**	
(c) If it does not exist, until the date the candidate starts the training, a CTAC certified or validated by ANAC to provide it, that training may be provided by a PC or PLA rated and qualified in the aircraft. The training shall include, in such case, at least 20% (twenty per cent) of the flight hours foreseen in paragraphs 61.213(a)(3)(iii)(A), 61.213(a)(3)(iii)(B) or 61.213(a)(3)(iii)(C), as applicable. *CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot		(c) If it does not exist, until the date the candidate starts the training, a CTAC certified or validated by ANAC to provide it, that training may be provided by a PC or PLA rated and qualified in the aircraft, following a minimum syllabus established by ANAC, including. ~~The training shall include, in such case,~~ at least 20% (twenty per cent) of the flight hours foreseen in paragraphs 61.213(a)(3)(iii)(A), 61.213(a)(3)(iii)(B) or 61.213(a)(3)(iii)(C), as applicable. *CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot	Paragraph 61.213(a)(3)(iii) contains requirements on the flight training necessary to obtain a type rating when there is no Civil Aviation Training Center (CTAC) approved or validated by ANAC. In amendment 14 of RBAC 61, the term “observing the minimum syllabus established by ANAC” was included. This minimum syllabus refers to the result of the operational evaluation, when existent, as detailed in IS 61-005D. The proposed change in paragraph 61.215(c) aims at harmonizing it with section 61.213, thus ensuring the link with the result of the operational evaluation, when existent, in the case of training for maintenance or re-establishment of the validity of the type rating.
61.217 Privileges and limitations to the type rating holder		**61.217 Privileges and limitations to the holder of a type rating**	
(b) When the type rating is applicable to more than one aircraft model, the privileges of the type rating holder are limited only to the aircraft model for which the proficiency check was done. To be qualified to operate another aircraft model pertaining to the same type rating, the rating holder shall be given the differences or familiarization training, as applicable. The differences training shall be done in a CTAC certified or validated by ANAC or, in case it does not exist, it shall be given by a PC or PLA qualified in the model. On the other hand, the familiarization training consists in reading technical materials covering the differences amongst aircraft models, not being required to obtain an additional endorsement or certificate.		(b) When the type rating is applicable to more than one aircraft model or configuration, the privileges of the type rating holder are limited only to the aircraft model or configuration for which the proficiency check was done. To be qualified to operate another aircraft model or configuration pertaining to the same type rating, the rating holder shall be given the differences or familiarization training, as applicable. The differences training shall be done in a CTAC certified or validated by ANAC or, in case it does not exist, it shall be given by a PC or PLA qualified in the model or configuration. On the other hand, the familiarization training consists in reading technical materials covering the differences amongst aircraft models or configurations, not being required to obtain an additional endorsement or certificate.	It is common for the same aircraft model to evolve over time, with the introduction of new features and capabilities that affect piloting, for example, new avionics systems, auto throttle, etc. Such features and capabilities often require additional training, as established in an operational evaluation report, even when dealing with the same model. The proposed change aims to ensure that the pilot is adequately qualified to operate different configurations of the same model, carrying out the necessary training.

RBAC 61 Amdt 14	Foreign reference regulation (when applicable)	RBAC 61 Amdt. 15 for Public Consultation	Rationale
61.219 Maintenance or re-establishment of the validity of type ratings exclusively for the second-in-command pilot function		**61.219 Maintenance or re-establishment of the validity of type ratings exclusively for the second-in-command pilot function**	
(c) If it does not exist, until the date the candidate starts the training, a CTAC certified or validated by ANAC to provide it, that training may be provided by a PC or PLA rated and qualified in the aircraft. The training shall include, in such case, at least 30% (thirty per cent) of the flight hours foreseen in paragraphs 61.218(b)(3)(iii)(A), 61.218(b)(3)(iii)(B) or 61.218(b)(3)(iii)(C), as applicable. *CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot		(c) If it does not exist, until the date the candidate starts the training, a CTAC certified or validated by ANAC to provide it, that training may be provided by a PC or PLA rated and qualified in the aircraft, following a minimum syllabus established by ANAC, including ~~The training shall include, in such case,~~ at least 30% (thirty per cent) of the flight hours foreseen in paragraphs 61.218(b)(3)(iii)(A), 61.218(b)(3)(iii)(B) or 61.218(b)(3)(iii)(C), as applicable. *CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot	Paragraph 61.213(a)(3)(iii) contains requirements on the flight training necessary to obtain a type rating when there is no Civil Aviation Training Center (CTAC) approved or validated by ANAC. In amendment 14 of RBAC 61, the term “observing the minimum syllabus established by ANAC” was included. This minimum syllabus refers to the result of the operational evaluation, when existent, as detailed in IS 61-005D. The proposed change in paragraph 61.219(c) is identical to that one proposed for paragraph 61.215(c) and aims at harmonizing it with section 61.213, thus ensuring the link with the result of the operational evaluation, when existent, in the case of training for maintenance or re-establishment of the validity of the type rating exclusively for the second-in-command pilot function.