



Comparative chart – Changes to RBAC No. 01, 21, 61 and 90

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

Final rule version

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 Amendment 11	Foreign reference regulation (when applicable)	Draft RBAC 01 Amendment 12 submitted to Public Consultation 03/2023	RBAC 01 Amendment 18 (final rule)	Rationale
01.1 Definitions		01.1 Definitions	01.1 Definitions	
	<p>Commission Regulation (EU) Article 1 Scope and definitions</p> <p>2. For the purpose of this Regulation, the following definitions shall apply:</p> <p>(...)</p> <p>(k) 'operational suitability data (OSD)' means data, which is part of an aircraft type certificate, restricted type certificate or supplemental type certificate, consisting of all of the following:</p> <p>(i) the minimum syllabus of pilot type rating training, including determination of type rating;</p> <p>(ii) the definition of scope of the aircraft validation source data to support the objective qualification of simulations or the provisional data to support their interim qualification;</p> <p>(iii) the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;</p> <p>(iv) determination of type or variant for cabin crew and type-specific data for cabin crew;</p> <p>(v) the master minimum equipment list.</p>		<p><u>Operational Suitability Data (OSD) means data produced during type certification which are relevant to the aircraft safe operation and consisting of the following elements:</u></p> <p><u>(1) Flight Crew Data (FCD), including determination of the pilot type rating and recommended specifications for minimum training, checking and currency;</u></p> <p><u>(2) [Reserved];</u></p> <p><u>(3) [Reserved];</u></p> <p><u>(4) [Reserved]; and</u></p> <p><u>(5) Master Minimum Equipment List (MMEL).</u></p>	<p>Justification of the version submitted to Public Consultation</p> <p>Definition not present in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of the operational evaluation activity were included in the type certificate. For this reason, the model adopted by ANAC was closer to that of the European Union Aviation Safety Agency (EASA), making it convenient to adopt the term “<i>Operational Suitability Data (OSD)</i>” employed by EASA. The acronym OSD is already used worldwide for such data, and it is important to use it without translating it to Portuguese.</p> <p>For the same reason, the result of the operational evaluation is addressed as “Flight Crew Data (FCD)”, as adopted by EASA.</p> <p>The inclusion of this definition in RBAC 01 allows it to be used across the various RBAC and regulations issued by ANAC.</p> <p>Regarding the description used to define the OSD, ANAC chose to include more details when compared to the EASA reference, especially:</p> <ul style="list-style-type: none"> - linkage to type certification, which includes initial issuance of a Type Certificate (TC), amendment to a TC and issuance or amendment of a Supplemental Type Certificate (STC); and - emphasis that these data are relevant to the safe operation of the aircraft. <p>When defining Flight Crew Data (FCD), it was decided to consolidate the determinations that would be the subject of an operational evaluation campaign, according to § 21.5bl(a)(1) to (4) of the RBAC draft 21 submitted to Public Consultation.</p>

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				<p>According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5bl(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just adjusting it, it was decided to consolidate the content of §§21.5bl(a)(1) to (4) into the FCD definition in RBAC 01, using a leaner text, less prone to misinterpretation and yet equally comprehensive in scope. The details of the application will occur in the Supplemental Instruction (IS).</p> <p>The numbering of OSD elements maintained the EASA sequence, placing elements not present in Brazilian regulations as reserved, allowing for possible future evolution.</p>
<p><i>Minimum Equipment List (MEL)</i> 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</p>	<p>Guidance Material to Regulation (EU) No 965/2012</p> <p>EASA GM1 ORO.MLR.105(a):</p> <p>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.</p>	<p><i>Minimum Equipment List (MEL)</i> means <u>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.</u></p>	<p><i>Minimum Equipment List (MEL)</i> means an approved document to be used 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 inoperative, provided that limitations, procedures and special operating conditions therein described are met, as applicable.</p>	<p>Justification of the version submitted to Public Consultation</p> <p>The MEL definition has been revised for clarity and alignment with the proposed MMEL definition. The following aspects are highlighted:</p> <ul style="list-style-type: none"> 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 <p>Inclusion of the term “temporarily”, essential so that inoperative items do not remain in this condition indefinitely.</p> <p>Justification of the version after Public Consultation</p> <p>A grammar correction was implemented in the Portuguese official version, with no effect to this translation.</p>
<p><i>Master Minimum Equipment List (MMEL)</i> means a list established for a specific aircraft type by the</p>	<p>EASA CS-MMEL Issue 3:</p> <p>CS MMEL.110 MMEL purpose</p>	<p><i>Master Minimum Equipment List (MMEL)</i> means <u>an approved document a list established for a</u></p>	<p><i>Master Minimum Equipment List (MMEL)</i> means an approved document for a specific aircraft</p>	<p>Justification of the version submitted to Public Consultation</p>

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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.	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.	specific aircraft type <u>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.</u>	type or model which lists items that may be temporarily inoperative, provided that limitations, procedures and special operating conditions therein described are met, as applicable.	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>Justification of the version after Public Consultation</p> <p>The definition of MMEL was not changed after Public Consultation 03/2023.</p>

* After submitting the process for Public Consultation, Amendments 12 to 17 of RBAC 01 were approved, with no impact on the changes implemented in this normative process.

RBAC No. 21 – Certification of aeronautical products and articles

RBAC 21 Amendment 9	Foreign reference regulation (when applicable)	Draft RBAC 21 Amendment 10 submitted to Public Consultation 03/2023	RBAC 21 Amendment 11* (final rule)	Rationale
SUBPART A – GENERAL		SUBPART A – GENERAL	Refer to Subparts B and D.	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational evaluation were included in the type certificate. For this reason, the corresponding requirements were moved to Subparts B (Type Certificates) and D (Changes to Type Certificates).</p>
		<u>21.5a-l Master Minimum Equipment List (MMEL)</u>	The content of this section was moved to §§21.61-l(e) and (f) and section 21.107-l.	<p>Justification of the version submitted to Public Consultation</p> <p>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 “-l” 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”.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this section was moved to §§21.61-l(e) and (f) and to section 21.107-l.</p>
	EASA CS-MMEL Issue 3: CS MMEL.140 Level of safety The MMEL items are prepared to ensure that an acceptable level	<u>(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</u>	Moved to §21.61-l(e)(1).	<p>Justification of the version submitted to Public Consultation</p> <p>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</p>

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	of safety as intended by the applicable requirements is maintained taking into account the following factors:	<u>inoperative items, taking into account the following factors:</u>		M MEL.140, which adequately addresses the factors to be considered when assessing the level of safety. Justification of the version after Public Consultation Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.61-I(e)(1).
	(a) reduction of aircraft functional capabilities and/or safety margins;	<u>(1) reduction of aircraft functional capabilities or safety margins;</u>	Moved to §21.61-I(e)(1)(i).	Justification of the version submitted to Public Consultation Based on EASA CS-MMEL item CS MMEL.140(a). Justification of the version after Public Consultation The content of this paragraph was moved to §21.61-I(e)(1)(i).
	(b) change in crew workload and/or degradation in crew efficiency;	<u>(2) change in crew workload or degradation in crew efficiency;</u>	Moved to §21.61-I(e)(1)(ii).	Justification of the version submitted to Public Consultation Based on EASA CS-MMEL item CS MMEL.140(b). Justification of the version after Public Consultation The content of this paragraph was moved to §21.61-I(e)(1)(ii).
	(e) 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;	<u>(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</u>	Moved to §21.61-I(e)(1)(iii).	Justification of the version submitted to Public Consultation Based on EASA CS-MMEL item CS MMEL.140(e). Justification of the version after Public Consultation The content of this paragraph was moved to §21.61-I(e)(1)(iii).
	(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.	<u>(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</u>	Moved to §21.61-I(e)(1)(iv).	Justification of the version submitted to Public Consultation Based on EASA CS-MMEL item CS MMEL.140(d). Justification of the version after Public Consultation

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				The content of this paragraph was moved to §21.61-I(e)(1)(iv).
	<p>EASA CS-MMEL Issue 3:</p> <p>CS MMEL.145 Justification of MMEL items</p> <p>(a) The justifications are provided by the applicant along with each MMEL item.</p> <p>(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.</p> <p>(c) The justifications include at least one qualitative safety assessments which:</p> <p>(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;</p> <p>(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</p>	<p>(b) Each MMEL item shall be technically justified according to methods acceptable to ANAC.</p>	<p>Moved to §21.61-I(e)(2).</p>	<p>Justification of the version submitted to Public Consultation</p> <p>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).</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.61-I(e)(2).</p>

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	<p>combination of the MMEL dispatch configuration with the next worst safety-related failure or event does not correspond to a hazardous or catastrophic failure condition; and</p> <p>(3) notwithstanding paragraph (2) above, specific cases may be accepted when supported by quantitative safety assessment as per paragraph (d) below.</p> <p>(d) The qualitative safety assessment is supplemented by a quantitative safety assessment when both of the following considerations are met:</p> <p>(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</p> <p>(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</p>			

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	<p>catastrophic failure condition.</p> <p>(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.</p> <p>(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.</p>			
	<p>Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21)</p> <p>21.A.62 Availability of operational suitability data</p> <p>The holder of the type-certificate or restricted type-certificate shall make available:</p> <p>(...)</p> <p>(c) on request, the relevant data referred to in points (a) and (b) above, to:</p> <p>(...)</p> <p>2. any person required to comply with one or more elements of this set of operational suitability data.</p> <p>GM to 21.A.62, 21.A.108 and 21.A.120B Availability of Operational Suitability Data</p>	<p><u>(c) The holder of an approved MMEL or Supplement to the MMEL shall make such document available to any interested person.</u></p>	<p>Moved to §21.61-l(f).</p>	<p>Justification of the version submitted to Public Consultation</p> <p>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 supplemental type certificate, being necessary a requirement for its availability.</p> <p>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.</p> <p>EASA Part 21 21.A.62(e)(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.</p> <p>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:</p>

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	<p>(...)</p> <p>(b) When making data available, the holder of the design approval can impose conditions addressing the intellectual property nature of the data .</p>			<ul style="list-style-type: none"> • 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. <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.61-l(f).</p>
	<p>Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21) (version of 08/25/2023)</p> <p>21.A.62 Availability of operational suitability data</p> <p>The holder of the type-certificate or restricted type-certificate shall make available:</p> <p>(a) at least one set of complete operational suitability data prepared in accordance with the applicable suitability certification basis, to all known EU operators of the aircraft, before the operational suitability data must be used by a training organization or an EU operator; and</p> <p>(...)</p>	<p><u>(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.</u></p>	<p>Moved to §21.61-l(e)(3).</p>	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>This obligation does not apply to:</p> <ul style="list-style-type: none"> • 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 Supplemental Type Certificate (STC), except in the case of a new model. See justifications in paragraphs 21.5a-l(e) and (f). <p>In terms of complexity, the following criteria were chosen for the obligation of an approved MMEL:</p> <ul style="list-style-type: none"> • For airplanes, those that have turbine engine(s), either turboprops or turboprops. 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". <p>These complexity criteria correspond to aircraft that are allowed to operate with inoperative items without an</p>

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				<p>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 considered reasonable not to require an MMEL either, harmonizing the criteria of RBAC 21 and 91.</p> <p>It is important to mention that there is no international harmonization in the criteria for the obligation of a MMEL.</p> <p>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(e)).</p> <p>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.</p> <p>The following aircraft must comply with CS-MMEL, according to item CS MMEL.100:</p> <ul style="list-style-type: none"> • Complex motor-powered aircraft, according to Article 3, item (j), of Regulation (EC) No. 216/2008 : <ul style="list-style-type: none"> ○ Airplanes: <ul style="list-style-type: none"> ▪ 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: <ul style="list-style-type: none"> ▪ 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;

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				<ul style="list-style-type: none"> ○ Tilt-rotor aircraft; • Non-complex helicopters certified for: <ul style="list-style-type: none"> ○ Operation under instrument flight rules (IFR); ○ Flight in icing conditions; or ○ Category A operations. <p>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.</p> <p>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 CS-GEN-MMEL will have their own MMEL, even if developed from pre-established generic items.</p> <p>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.</p> <p>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.</p>

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				<p>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.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.61-l(e)(3).</p>
		<p><u>(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:</u></p>	Moved to §21.107-l(a).	<p>Justification of the version submitted to Public Consultation</p> <p>Paragraph 21.5a-l(e) contain obligations in case of modifications to the TC, either through an 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-l(f)).</p> <p>Modifications that qualify as new models are covered by paragraph 21.5a-l(d) above and are not covered by the above electivity.</p> <p>As in paragraph 21.5a-l(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.</p> <p>Paragraphs 21.5a-l(e)(1) and (2) address possibilities for meeting obligations.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.107-l(a).</p>

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		<u>(1) demonstrate that the modifications do not adversely affect the approved MMEL; or</u>	Moved to §21.107-l(a)(1).	<p>Justification of the version submitted to Public Consultation</p> <p>One option for the applicant is to demonstrate that the modification does not adversely impact the approved MMEL.</p> <p>The term “adversely impacts” will be detailed in IS, and includes modifications that, for example:</p> <ul style="list-style-type: none"> • 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. <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.107-l(a)(1).</p>
		<u>(2) obtain the approval of a MMEL Supplement covering the modifications.</u>	Moved to §21.107-l(a)(2).	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.107-l(a)(2).</p>
		<u>(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.</u>	Moved to §21.107-l(b).	<p>Justification of the version submitted to Public Consultation</p> <p>This paragraph covers the elective nature of the obligations listed in paragraph 21.5a-l(e) for modifications to a TC, subject to the possibility of ANAC limiting the use of approved MMEL items affected by the modification.</p>

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				<p>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 21.5a-l(e).</p> <p>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:</p> <ul style="list-style-type: none"> • 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. <p>Justification of the version after Public Consultation</p>

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				Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this paragraph was moved to §21.107-I(b).
		21.5b-I Aircraft Operational Evaluation	Moved to §21.61-I(a) and section 21.107-I.	<p>Justification of the version submitted to Public Consultation</p> <p>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 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”.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the content of this section was moved to §21.61-I(a) and section 21.107-I.</p>
	<p>EASA CS-FCD Issue 2 :</p> <p>CS FCD.050 Scope</p> <p>(a) These Certification Specifications for Flight Crew Data (CS-FCD) address:</p> <p>(1) the determination of a pilot type rating:</p> <p>(i) to establish whether an aircraft is recognized 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</p>	<p>(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:</p>	Moved to §21.61-I(a).	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>The purpose of this paragraph is to link the benefits of operational evaluation to RBAC criteria. However, its realization remains voluntary.</p> <p>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.</p> <p>The scope of the determinations was based on operational evaluation campaigns carried out by ANAC and used as</p>

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	<p>(ii) to assign the pilot license endorsement designation for an aircraft.</p> <p>(2) the minimum syllabus for an aircraft type-specific pilot training course, including checking requirements, currency requirements and recent experience requirements;</p> <p>(3) the identification and validation of training areas of special emphasis (TASE);</p> <p>(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</p> <p>(5) pilot experience and pilot prerequisites for the issuance of a type rating, as provided for in Regulation (EU) No 1178/2011 ('Aircrew Regulation').</p>			<p>reference the EASA Flight Crew Data Certification Specifications (CS-FCD) item CS FCD.050(a).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>The determinations that can be made by ANAC are listed in paragraphs 21.5b(a)(1) to (4). It is important to note that section 61.213 of RBAC 61 contains only general non-type specific experience requirements, unlike EASA item CS FCD.050(a)(5).</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational</p>

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				evaluation were included in the type certificate, and, therefore, this requirement was moved to section 21.61-l in Subpart B. See changes and justifications subsequent to Public Consultation 03/2023 in the respective line of this Comparative Chart.
		<u>(1) specifications for minimum recommended training for the issuance of the corresponding type rating;</u>	Moved, with new wording, to the definition of Operational Suitability Data (OSD) in RBAC 01.	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>This item includes Training Areas with Special Emphasis (TASE).</p> <p>Justification of the version after Public Consultation</p> <p>According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5bl(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just adjusting it, it was decided to consolidate the content of §§21.5bl(a)(1) to (4) in the definition of Data Relevant to the Operation in RBAC 01, using a leaner text, less prone to incorrect interpretations and , yet equally comprehensive in scope.</p>
		<u>(2) a single type rating for two or more models;</u>	Same.	<p>Justification of the version submitted to Public Consultation</p> <p>As a standard, two different aircraft requiring type rating for pilots will have distinct type rating designations unless an operational evaluation campaign is conducted.</p> <p>In the operational evaluation campaign, the applicant may request the candidate aircraft to be assigned with the same type rating as the base aircraft, due to their operational similarities.</p> <p>Justification of the version after Public Consultation</p>

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				According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5bl(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just adjusting it, it was decided to consolidate the content of §§21.5bl(a)(1) to (4) in the definition of Data Relevant to the Operation in RBAC 01, using a leaner text, less prone to incorrect interpretations and yet equally comprehensive in scope.
		<u>(3) credit recommendations for training, checking and recent experience regarding an aircraft for which operational similarity has been established; or</u>	Same.	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5bl(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just adjusting it, it was decided to consolidate the content of §§21.5bl(a)(1) to (4) in the definition of Data Relevant to the Operation in RBAC 01, using a leaner text, less prone to incorrect interpretations and yet equally comprehensive in scope.</p>
		<u>(4) specifications for minimum recommended training for the operation of different aircraft configurations or models requiring the same type rating.</u>	Same.	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5bl(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just</p>

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				adjusting it, it was decided to consolidate the content of §§21.5bl(a)(1) to (4) in the definition of Data Relevant to the Operation in RBAC 01, using a leaner text, less prone to incorrect interpretations and yet equally comprehensive in scope.
		<u>(b) The determinations foreseen in paragraph (a) may be limited by ANAC if:</u>	Superseded by §§21.107-l(a) and (b).	<p>Justification of the version submitted to Public Consultation</p> <p>This paragraph covers the possibility for ANAC to limit previous determinations after an operational evaluation campaign under certain conditions, and is related to the voluntariness of the requirements in this section.</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational evaluation were included in the type certificate. As part of the implementation, change-related requirements were incorporated into Subpart D, with a single criteria for MMEL and flight crew data, in §§21.107-l(a) and (b). The text originally proposed for MMEL was adopted as the base text, replacing this paragraph.</p>
		<u>(1) the corresponding aircraft type certification is amended or a supplemental type certificate is issued for that aircraft model;</u>	Same	<p>Justification of the version submitted to Public Consultation</p> <p>The first condition is that there is a modification to the type certificate, either by amendment or by STC.</p> <p>Justification of the version after Public Consultation</p> <p>This requirement was superseded by §§21.107-l(a) and (b), as explained above.</p>

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		<u>(2) such modification might appreciably affect the obtained determinations: and</u>	Same	<p>Justification of the version submitted to Public Consultation</p> <p>The second condition is that the modification “might appreciably affect” the determinations obtained as a result of a previous operational assessment campaign.</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>This requirement was superseded by §§21.107-I(a) and (b), as explained above.</p>
		<u>(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.</u>	Same	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>This requirement was superseded by §§21.107-I(a) and (b), as explained above.</p>
SUBPART B – TYPE CERTIFICATES		SUBPART B – TYPE CERTIFICATES	SUBPART B – TYPE CERTIFICATES	<p>Justification of the version submitted to Public Consultation</p> <p>This Subpart was not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of the operational evaluation were included in the type certificate. For this reason, the corresponding requirements were moved to</p>

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				Subparts B (Type Certificates) and D (Changes to Type Certificates).
21.29 Issue of type certificate: import products		21.29 Issue of type certificate: import products	21.29 Issue of type certificate: import products	
(a) A type certificate may be issued for a product that has been manufactured in a foreign country with which Brazil has an agreement for the acceptance of these products for export and import and that is to be imported into Brazil, if:		(a) A type certificate may be issued for a product that has been manufactured in a foreign country with which Brazil has an agreement for the acceptance of these products for export and import and that is to be imported into Brazil, if:	(a) A type certificate may be issued for a product that has been manufactured in a foreign country with which Brazil has an agreement for the acceptance of these products for export and import and that is to be imported into Brazil, if:	
(2) the applicant has provided technical data related to noise and airworthiness of the product that were required in paragraph (a)(1) of this section; and		(2) the applicant has provided technical data related to noise and airworthiness of the product that were required in paragraph (a)(1) of this section; and	(2) the applicant has provided technical data related to noise and airworthiness of the product that were required in paragraph (a)(1) of this section; and	Justification of the version submitted to Public Consultation Requirement not affected in the draft submitted to Public Consultation. Justification of the version after Public Consultation The conjunction “and” was removed due to the inclusion of new §21.29(a)(4)-I.
(3) the applicant has shown compliance with section 21.41-I.		(3) the applicant has shown compliance with section 21.41-I.	(3) the applicant has shown compliance with section 21.41-I; and .	Justification of the version submitted to Public Consultation Requirement not affected in the draft submitted to Public Consultation. Justification of the version after Public Consultation The conjunction “and” was included preceding the new §21.29(a)(4)-I.
			<u>(4)-I the operational suitability data to be included in the type certificate have been approved or issued by the State of Design, or otherwise established by ANAC.</u>	Justification of the version submitted to Public Consultation Requirement not present in the draft submitted to Public Consultation. Justification of the version after Public Consultation Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, a provision was included requiring that the OSD that become part of the type certificate issued by ANAC have been approved or issued by the State of Design.

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				<p>This provision also address the fact that most foreign civil aviation authorities do not have OSD as part of their type certificates, allowing for the inclusion of the MMEL or operational evaluation result as part of the type certificate issued by ANAC.</p> <p>Furthermore, the provision “or otherwise established by ANAC” was included so that ANAC can deal, in IS, with particular cases of type certificates or supplemental type certificates validations that, in the State of Design, do not have OSD approval, but some other reputable civil aviation authority has issued or approved such OSD, as well as specific situations for which ANAC considers being of public interest to act in advance or in parallel with the exporting civil aviation authority.</p> <p>Finally, it is important to highlight that it is not the intention of this requirement to demand that OSD to be part of the Brazilian type certificate have been fully approved by the design state. If there are particularities in the Brazilian type design or in the Brazilian OSD, such differences may be approved or issued by ANAC in an ANAC supplement to the original OSD.</p> <p>The identifier “-I” was included to demonstrate that this section does not exist in the reference regulation.</p>
21.41 Type certificate		21.41 Type certificate	21.41 Type certificate	Justification of the version submitted to Public Consultation
Each type certificate is considered to include the type design, the operating limitations, the certificate datasheet, the applicable RBAC with which compliance has been shown, and any other conditions or limitations prescribed for the product in accordance with this regulation.	<p>Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21)</p> <p>21.A.41 Type-certificate</p> <p>The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the instructions for continued airworthiness, the type-certificate data sheet for airworthiness and emissions, the applicable type-certification basis and environmental protection requirements with which the Agency records</p>	Each type certificate is considered to include the type design, the operating limitations, the certificate datasheet, the applicable RBAC with which compliance has been shown, and any other conditions or limitations prescribed for the product in accordance with this regulation.	Each type certificate is considered to include the type design, the operating limitations, the certificate datasheet, the applicable RBAC with which compliance has been shown, and any other conditions or limitations prescribed for the product in accordance with this regulation. <u>The type certificate includes in addition the operational suitability data.</u>	<p>Requirement not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational evaluation were included in the type certificate. For this reason, the model adopted by ANAC was closer to that of EASA, making it convenient to adopt the term “Operational Suitability Data (OSD)” employed by EASA.</p>

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	compliance, and any other conditions or limitations prescribed for the product in the applicable certification specifications and environmental protection requirements. The aircraft type-certificate and restricted type-certificate shall include in addition the applicable operational suitability data certification basis, the operational suitability data and the type-certificate data sheet for noise. The aircraft type-certificate and restricted type-certificate data sheet shall include the record of CO ₂ emissions compliance and the engine type-certificate data sheet shall include the record of exhaust emissions compliance.			
			21.61-I Operational Suitability Data	<p>Justification of the version submitted to Public Consultation</p> <p>New section, not existing in the version submitted to Public Consultation.</p> <p>The requirements of this section correspond to §§21.5a1(a) to (d), regarding MMEL, and §§21.5b1(a), regarding Operational evaluation, of the draft RBAC 21 submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational evaluation were included in the type certificate. For this reason, the corresponding requirements have been moved to Subparts B (Type Certificates) and D (Changes to Type Certificates).</p>

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				<p>The specific OSD requirements in Subpart B have been condensed into new section 21.61-I. In addition to making it easier to identify existing OSD requirements, it reduces the likelihood of conflicting numbering with new sections eventually created in foreign reference regulations (especially from the FAA or EASA).</p> <p>The identifier “-I” was also included to demonstrate that this section does not exist in the reference regulation.</p>
		<p>Refer to §21.5b-I(a) of the draft RBAC 21 submitted to Public Consultation.</p>	<p>(a) <u>Flight crew data.</u> 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 <u>include flight crew data in the respective certificate</u>. obtain the determination by ANAC of:</p> <p>(1) specifications for minimum recommended training for the issuance of the corresponding type rating;</p> <p>(2) a single type rating for two or more models;</p> <p>(3) credit recommendations for training, checking and recent experience regarding an aircraft for which operational similarity has been established; or</p> <p>(4) specifications for minimum recommended training for the operation of different aircraft configurations or models requiring the same type rating;</p>	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of this requirement was extracted from section 21.5b-I of the draft RBAC 21 submitted to Public Consultation 03/2023.</p> <p>See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contribution No. 20 of Public Consultation 03/2023, the text was changed to reference “aircraft” instead of “aircraft model”, harmonizing with the terminology used in RBAC 61.</p> <p>Due to the inclusion of the OSD in the type certificate, the purpose of the requirement was better identified as being for the inclusion of data relevant to the operation for pilots in the type certificate, rather than the determination by ANAC of the sub-items originally proposed in §§21.5b-I(a)(1) to (4) of the draft RBAC 21 submitted to Public Consultation.</p> <p>According to the analysis of contributions No. 20 and 21 of Public Consultation 03/2023, the text originally proposed in §§21.5b-I(a)(2) and (3) of the draft RBAC 21 submitted to the Public Consultation was questioned and, instead of just adjusting it, it was decided to consolidate the content of §§21.5b-I(a)(1) to (4) in the definition of Operational Suitability Data in RBAC 01, using a leaner text, less prone to incorrect interpretations and yet equally comprehensive in scope.</p> <p>It is important to highlight that, as in §21.5b-I(a) of the draft RBAC 21 submitted to Public Consultation, the inclusion of</p>

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				flight crew data remains voluntary. However, if there is an intention to obtain benefits arising from operational evaluation activities, such data will necessarily be part of the type certificate, according to section 21.41 of RBAC 21.
			<u>(b) [Reserved];</u>	<p>Justification of the version submitted to Public Consultation</p> <p>Paragraph did not exist in the version submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>§§ 21.61-I(b) to (d) were kept reserved for possible new OSD elements, maintaining the identification sequence of OSD elements existing in the EASA regulations.</p>
			<u>(c) [Reserved];</u>	Same.
			<u>(d) [Reserved];</u>	Same.
		Refer to §§21.5a-I(a) to (d) of the draft RBAC 21 submitted to Public Consultation.	<u>(e) Master Minimum Equipment List (MMEL)</u>	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.61-I(e) was extracted from paragraphs 21.5a-I(a), (b) and (d) of the draft RBAC 21 submitted to Public Consultation 03/2023. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>See specific justification for changes implemented after the Public Consultation in each subsequent subparagraph.</p>
	<p>EASA CS-MMEL Issue 3:</p> <p>CS MMEL.140 Level of safety</p> <p>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:</p> <p>(a) reduction of aircraft functional capabilities and/or safety margins;</p>	Refer to §21.5a-I(a) of the draft RBAC 21 submitted to Public Consultation.	<p><u>(a1)</u> 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:</p> <p><u>(1i)</u> reduction of aircraft functional capabilities or safety margins;</p> <p><u>(2ii)</u> change in crew workload or degradation in crew efficiency;</p>	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.61-I(e)(1) was extracted from §21.5a(a) of the draft RBAC 21 submitted to Public Consultation 03/2023. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>There was only adjustment of the numbering, without changing the content of §21.5a-I(a) submitted to Public Consultation.</p>

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	<p>(b) change in crew workload and/or degradation in crew efficiency;</p> <p>(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;</p> <p>(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.</p>		<p>(3iii) 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</p> <p>(4iv) 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</p>	
		Refer to §21.5a-l(b) of the draft RBAC 21 submitted to Public Consultation.	(b2) Each MMEL item shall be technically justified according to methods acceptable to ANAC.	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.61-l(e)(2) was extracted from §21.5a-l(b) of the draft RBAC 21 submitted to Public Consultation 03/2023. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>There was only adjustment of the numbering, without changing the content of §21.5a-l(b) submitted to Public Consultation.</p>
	Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21) (version of 08/25/2023)	Refer to §21.5a-l(d) of the draft RBAC 21 submitted to Public Consultation.	(d3) Except for small rotorcraft, small reciprocating-engine powered airplanes, gliders and lighter-than-air aircraft, The holder of or applicant to a type	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.61-l(e)(3) was extracted from §21.5a-l(d) of the draft RBAC 21 submitted to Public Consultation</p>

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	<p>21.A.62 Availability of operational suitability data</p> <p>The holder of the type-certificate or restricted type-certificate shall make available:</p> <p>(a) at least one set of complete operational suitability data prepared in accordance with the applicable suitability certification basis, to all known EU operators of the aircraft, before the operational suitability data must be used by a training organization or an EU operator; and</p> <p>(...)</p>		<p>certificate for an airplane aircraft having one or more turbine engines or for a large rotorcraft, whose application for the model has been submitted after January 1st 2025 [date of publication on the Official Journal + 6 months], shall have <u>include</u> an approved MMEL before the issuance of the first Brazilian standard certificate of airworthiness to the affected aircraft.</p>	<p>03/2023. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>With the inclusion of the MMEL to the type certificate, according to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, it was possible to simplify the text proposed in §21.5a-I(d) of the draft RBAC 21 submitted to Public Consultation, linking the obligation directly to the type certificate, so that it is no longer necessary to reference the certificate holder or applicant in its text.</p> <p>The term “shall have” has been replaced by “shall include” to further align with the term used in section 21.41 (“Each type certificate considered to include...”).</p> <p>Furthermore, in the text it was decided to use the term “before the issuance of the first standard certificate of airworthiness”, maintaining harmony with the requirement of section 21.50 on Instructions for Continued Airworthiness. In this text, it is implicit that this is a standard Brazilian airworthiness certificate, since any mandatory actions before issuing a foreign airworthiness certificate must be included in the regulations of the importing country.</p> <p>As in the text of §21.61-I(a), the date of the type certificate application was considered instead of the model, since the concept of aircraft model is not defined in the RBAC, as described in the analysis of contribution No. 20 of Public Consultation 03/2023.</p> <p>The entry-into-force date for mandatory MMEL moved from 6 months after the publication of the rule in the Official Journal of the Union to the beginning of 2025. This is due to the analysis of contributions No. 22, 26 and 27 of Public Consultation 03/2023, in which the inclusion of OSD in the type certificate brought greater complexity to the regulatory model. The new deadline will allow for a more flexible adaptation of the sector and will allow ANAC to issue new IS on the topic in a timely manner. The beginning of 2025 also aims to meet the decision of the ANAC Board of Directors in Public Consultation 03/2023, when it was requested that the</p>

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				<p>entry-into-force date coincided with the beginning of the year, facilitating the use of the regulation.</p> <p>Due to the analysis of contribution No. 31 of Public Consultation 03/2023, the delimitation of aircraft for which an MMEL is mandatory was rewritten in the form of an exception (except for that group of aircraft, the MMEL is mandatory), preserving greater alignment with the text of §91.213(d)(1)(ii) of RBAC 91 that originally motivated it. Primary category aircraft were not covered in the new text as they only operate with a special airworthiness certificate and, consequently, are automatically excluded from the MMEL requirement.</p> <p>It is important to highlight that, as in §21.5a-l(d) of the draft RBAC 21 submitted to Public Consultation, an approved MMEL is mandatory only for aircraft covered by the criteria in this paragraph. However, approval of an MMEL is voluntary for other aircraft.</p>
	<p>Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21) 21.A.62 Availability of operational suitability data</p> <p>The holder of the type-certificate or restricted type-certificate shall make available:</p> <p>(...)</p> <p>(c) on request, the relevant data referred to in points (a) and (b) above, to:</p> <p>(...)</p> <p>2. any person required to comply with one or more elements of this set of operational suitability data.</p> <p>GM to 21.A.62, 21.A.108 and 21.A.120B Availability of Operational Suitability Data</p> <p>(...)</p>	<p>Refer to §21.5a-l(c) of the version submitted to Public Consultation (originally applicable only to MMEL)</p>	<p>(ef) The holder of an approved MMEL or Supplement to the MMEL Operational suitability data included in the type certificate or supplemental type certificate shall be make such document available, in a form and manner acceptable to ANAC, to ANAC and any interested person needing those data for compliance with RBAC.</p>	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.61-l(f) was extracted from paragraph 21.5a-l(c) of the draft RBAC 21 submitted to Public Consultation 03/2023, with the inclusion of changes after the Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of Operational Suitability Data (OSD) in the type certificate, it was decided to migrate the specific requirement for MMEL availability (§21.5a-l(c) of the draft RBAC 21 submitted to Public Consultation) to a broader requirement, rather applicable to all OSD.</p> <p>Due to the analysis of contribution No. 18 of Public Consultation 03/2023, availability is no longer mandatory for any interested person and is now only required to be available to ANAC and people who need the data to comply with requirements.</p> <p>The term “in a form and manner acceptable to ANAC” was inserted so that the particularities regarding the ownership of the data or the State of Design may be detailed in IS.</p>

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	(b) When making data available, the holder of the design approval can impose conditions addressing the intellectual property nature of the data .			
SUBPART D – CHANGES TO TYPE CERTIFICATES		SUBPART D – CHANGES TO TYPE CERTIFICATES	SUBPART D – CHANGES TO TYPE CERTIFICATES	<p>Justification of the version submitted to Public Consultation</p> <p>This Subpart was not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of the operational evaluation were included in the type certificate. For this reason, the corresponding requirements were moved to Subparts B (Type Certificates) and D (Changes to Type Certificates).</p>
		Refer to §§21.5a-l(e) and (f) and §21.5b-l(b) of the version submitted to Public Consultation.	<u>21.107-l Changes to operational suitability data</u>	<p>Justification of the version submitted to Public Consultation</p> <p>New section, not existing in the version submitted to Public Consultation.</p> <p>The requirements of this section correspond to §§21.5a-l(e) and (f), regarding MMEL, and §§21.5b-l(b), regarding operational evaluation, of the draft RBAC 21 submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of Operational Suitability Data (OSD) in the type certificate, aspects related to changes affecting the OSD, for both flight crew data and MMEL, were condensed into a single section. The text originally proposed for changes to the MMEL in §§21.5a-l(e) and (f) of the draft submitted to Public Consultation was used as a basis.</p> <p>Although Subpart D covers changes to the type certificate, the existing requirements apply primarily to changes to the type design, which would exclude OSD. Therefore, a new</p>

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				<p>section was created, adapting the provisions of the text submitted to public consultation and replicating the existing classification and approval criteria for changes to the type design contained in sections 21.93, 21.95 and 21.97 of RBAC 21, adjusting them to changes affecting the OSD.</p> <p>The identifier “-I” was also included to demonstrate that this section does not exist in the reference regulation.</p>
		Refer to §21.5a-I(e) and §21.5b-I(b) of the version submitted to Public Consultation.	<p>(ea) Except as provided in paragraph (fb) of this section, the holder of or applicant to an <u>approval for a change amendment to a type certificate or supplemental type certificate for of an aircraft having an approved MMEL operational suitability data</u>, whose application for the modification has been submitted after {date of publication on the Official Journal + 6 months} <u>January 1st, 2025</u>, shall, before the operation of an aircraft having a Brazilian standard certificate of airworthiness with the embodied modification:</p>	<p>Justification of the version submitted to Public Consultation</p> <p>This requirement replaces §§21.5a-I(e) and 21.5b-I(b) of the version submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>The base text of §§21.107-I(a) and (b) was extracted from paragraph 21.5a-I(e) of the draft RBAC 21 submitted to Public Consultation 03/2023. The original text, applicable only to MMEL, was adapted to cover all OSDs. The text of §21.5b-I(b) of the draft RBAC 21 submitted to Public Consultation was no longer used.</p> <p>The terms “amendment to a type certificate” and “supplemental type certificate” were replaced by “approval for a change to a type certificate”, covering both cases and in line with the scope of Subpart D.</p> <p>The entry-into-force date for OSD impact assessment in changes to a type certificate MMEL moved from 6 months after the publication of the rule in the Official Journal of the Union to the beginning of 2025. This is due to the analysis of contributions No. 22, 26 and 27 of Public Consultation 03/2023, in which the inclusion of OSD in the type certificate brought greater complexity to the regulatory model. The new deadline will allow for a more flexible adaptation of the sector and will allow ANAC to issue new IS on the topic in a timely manner. The beginning of 2025 also aims to meet the decision of the ANAC Board of Directors in Public Consultation 03/2023, when it was requested that the entry-into-force date coincided with the beginning of the year, facilitating the use of the regulation.</p>

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		See §21.5a1(e)(1) of the version submitted to Public Consultation.	(1) demonstrate that the <u>operational suitability data remain valid to the aircraft with the embodied modifications</u> do not adversely affect the approved MMEL ; or	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.107-l(a)(1) was extracted from §21.5a-l(e)(1) of the draft RBAC 21 submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>The base text, originally applicable only to MMEL, was adapted to cover all OSDs.</p> <p>Furthermore, the requirement was rewritten so as not to use the term “do not adversely affect”, as:</p> <p>(1) a change to the type design, for example, incorporation of an auto-throttle, will have an impact on Flight Crew Data (FCD), however, it is not appropriate to characterize this impact as negative – there is just an impact that must be assessed, for example, regarding the need for difference training; and</p> <p>(2) even if an impact on the OSD can be considered positive, any benefit would depend on the complementation of those data.</p> <p>The new wording, however, does not change the original purpose of the requirement.</p>
		See §21.5a1(e)(2) of the version submitted to Public Consultation.	(2) <u>complement the change approval application with an update to the affected operational suitability data</u> obtain the approval of a MMEL Supplement covering the modifications .	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.107-l(a)(2) was extracted from §21.5a-l(e)(2) of the draft RBAC 21 submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>The base text was rewritten to cover all OSD and, especially, to be applicable to OSD either approved by ANAC (in case of MMEL) or issued by ANAC (in case of flight crew data). Thus, the term “obtain the approval” was replaced by “complement the change approval application”, covering both situations in a generic way.</p>

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		See §21.5a1(f) of the version submitted to Public Consultation.	(f) If the applicant does not comply with the provisions of paragraph (e) of this section, ANAC may limit the use of <u>the operational suitability data MMEL items</u> affected by the <u>modification</u> <u>change</u> .	<p>Justification of the version submitted to Public Consultation</p> <p>The base text of §21.107-l(b) was extracted from §21.5a-l(f) of the RBAC 21 draft submitted to Public Consultation. See justification for the text submitted to Public Consultation in the corresponding line of this Comparative Chart.</p> <p>Justification of the version after Public Consultation</p> <p>The base text was adapted to cover all OSDs.</p> <p>The replacement of “modification” by “change” is just an improvement in the translated text. Such distinction does not exist in the official version in Portuguese.</p>
			(c) <u>A minor change to operational suitability data is one that has no appreciable effect on those data. All other changes are major changes.</u>	<p>Justification of the version submitted to Public Consultation</p> <p>Requirement does not exist in the version submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of OSD in the type certificate, it was necessary to include classification and approval requirements for changes to OSDs in a similar way to the existing criteria for changes to the type design.</p> <p>This paragraph specifically refers to the classification of changes to the OSD. §21.93(a) of RBAC 21 was used as the base text to classify changes to OSD into minor and major ones.</p> <p>Detailing what is considered an appreciable effect on the OSD will be provided in IS.</p> <p>It is important to highlight that the classification of changes to OSD occurs separately from the classification of changes to the type design. A major change to the type design may result in a minor or major change to the OSD, or even no change at all. Likewise, a change to the OSD can be major even without changing the type design.</p>
			(d) <u>Minor changes to operational suitability data may be approved:</u>	<p>Justification of the version submitted to Public Consultation</p>

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			<p><u>(1) under a method acceptable to ANAC; or</u></p> <p><u>(2) through a design organization certified in accordance with Subpart J.</u></p>	<p>Requirement did not exist in the version submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of OSD in the type certificate, it was necessary to include classification and approval requirements for changes to OSDs in a similar way to the existing criteria for changes to the type design.</p> <p>This paragraph specifically refers to the approval of minor changes to OSD. Section 21.95 of RBAC 21 was used as the base text.</p> <p>In relation to the base text, the provision “without prior presentation of any supporting data”, which exists in §21.95(a), was not included in §21.107-I(d)(1). The method for approving minor changes to OSD will be detailed in IS and, especially at first, will not allow full approval of all changes to OSD by the applicant without prior presentation of any supporting data. Even in the case of minor changes, the proposal is that ANAC will be involved according to the complexity of the minor change and according to the maturity of the applicant in such approval process.</p> <p>Furthermore, considering that Flight Crew Data (FCD) will remain being issued by ANAC, it would be impossible for the applicant to approve all minor changes without presenting any data to the Agency.</p>
			<p><u>(e) An applicant for approval of a major change to operational suitability data must:</u></p> <p><u>(1) provide substantiating data and necessary descriptive data for inclusion in the type certificate;</u></p> <p><u>(2) show that the change and areas affected by the change comply with the applicable RBAC, and provide ANAC the means by which such compliance has been shown; and</u></p>	<p>Justification of the version submitted to Public Consultation</p> <p>Requirement did not exist in the version submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of OSD in the type certificate, it was necessary to include classification and approval requirements for changes to OSDs in a similar way to the existing criteria for changes to the type design.</p> <p>This paragraph specifically refers to the approval of major changes to OSD. §21.97(a) of RBAC 21 was used as the base text for the approval of major changes to OSD.</p>

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			<u>(3) provide a statement certifying that the applicant has complied with the applicable requirements.</u>	In subparagraph (1), the term “inclusion in the type design” contained in the base text was replaced by “inclusion in the type certificate”, in order to cover OSD.
			<u>(f) When the applicant is a certified design organization, the statement referred to in paragraph (e)(3) of this section shall comply with the provisions of Subpart J.</u>	<p>Justification of the version submitted to Public Consultation</p> <p>Requirement did not exist in the version submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the inclusion of OSD in the type certificate, it was necessary to include classification and approval requirements for changes to OSDs in a similar way to the existing criteria for changes to the type design.</p> <p>This paragraph specifically refers to a particularity of approving major changes to OSD when the applicant is a design organization. §21.97(a)(4) of RBAC 21 was used as the base text for the approval of major changes to OSD through a design organization.</p>
SUBPART J – DESIGN ORGANIZATION CERTIFICATE		SUBPART J – DESIGN ORGANIZATION CERTIFICATE	SUBPART J – DESIGN ORGANIZATION CERTIFICATE	<p>Justification of the version submitted to Public Consultation</p> <p>This Subpart was not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>Due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of operational evaluation were included in the type certificate. Consequently, requirements were included for the classification and approval of changes to OSD, with effect also in design organizations, demanding adjustments in section 21.263-I in Subpart J of RBAC 21.</p>
21.263-I Privileges	Commission Regulation (EU) No 748/2012 – Annex 1 (Part 21) 21.A.263 Privileges		21.263-I Privileges	

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RBAC 21 Amendment 9	Foreign reference regulation (when applicable)	Draft RBAC 21 Amendment 10 submitted to Public Consultation 03/2023	RBAC 21 Amendment 11* (final rule)	Rationale
(c) The holder of a design organization certificate may, in accordance with its terms of the certification and in accordance with the procedures of the design assurance system:	(c) The holder of a design organization approval shall be entitled, within the scope of its terms of approval issued under point 21.A.251 and under the relevant procedures of the design management system:		(c) The holder of a design organization certificate may, in accordance with its terms of the certification and in accordance with the procedures of the design assurance system:	
(1) classify changes to the type design as major or minor;	1. to classify changes to a type certificate or to a supplemental type certificate and repair designs as 'major' or 'minor';		(1) classify changes to the type design <u>or to the operational suitability data</u> as major or minor;	<p>Justification of the version submitted to Public Consultation</p> <p>Requirement not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>The text of this privilege was changed to include the classification of changes to OSD, included in the new § 21.107-l(c).</p> <p>It is important to highlight that the privileges in the reference EASA regulation refer to “changes to the type certificate”, with a broader scope than the text of amendment 9 of RBAC 21, limited to “changes to the type design”. This difference required section 21.263-l to be adjusted.</p>
(2) approve minor changes to the type design;	2. to approve minor changes to a type certificate or to a supplemental type certificate and minor repair designs under this Annex (Part 21) or under Annex Ib (Part 21 Light);		(2) approve minor changes to the type design <u>or to the operational suitability data</u> ;	<p>Justification of the version submitted to Public Consultation</p> <p>Requirement not affected in the draft submitted to Public Consultation.</p> <p>Justification of the version after Public Consultation</p> <p>The text of this privilege was changed to include the approval of minor changes to OSD, with specific provision for design organizations in the new § 21.107-l(d)(2).</p> <p>The highlight on the reference EASA regulation in the justification of the previous paragraph is also applicable to this one.</p>

* After submitting the process for Public Consultation, Amendment 10 of RBAC 21 was approved, with no impact on the changes implemented in this normative process.

RBAC No. 61 - Pilot licenses, ratings and certificates

RBAC 61 Amendment 14	Foreign reference regulation (when applicable)	Draft of RBAC 61 Amendment 15 submitted to Public Consultation 03/2023	RBAC 61 Amendment 15 (final rule)	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	61.215 Maintenance or re-establishment of the validity of type ratings	
<p>(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.</p> <p>*CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot</p>		<p>(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, <u>following a minimum syllabus established by ANAC, including. The training shall include, in such case,</u> 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.</p> <p>*CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot</p>	<p>(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 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.</p> <p>*CTAC – Civil Aviation Training Center *PC – Commercial Pilot *PLA – Airline Pilot</p>	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p> <p>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.</p> <p>Justification of the version after Public Consultation</p> <p>There were no changes due to the Public Consultation.</p>
61.217 Privileges and limitations to the type rating holder		61.217 Privileges and limitations to the holder of a type rating	61.217 Privileges and limitations to the holder of a type rating	
<p>(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</p>		<p>(b) When the type rating is applicable to more than one aircraft model <u>or configuration</u>, the privileges of the type rating holder are limited only to the aircraft model <u>or configuration</u> for which the proficiency check was done. To be qualified to operate another aircraft model <u>or configuration</u> pertaining to the same type rating, the rating</p>	<p>(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</p>	<p>Justification of the version submitted to Public Consultation</p> <p>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.</p>

Comparative chart – Changes to RBAC No. 01, 21, 61 and 90
Theme 1 of the 2023-2024 Regulatory Agenda – *Type design data with relevant effects to the operational context*
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RBAC 61 Amendment 14	Foreign reference regulation (when applicable)	Draft of RBAC 61 Amendment 15 submitted to Public Consultation 03/2023	RBAC 61 Amendment 15 (final rule)	Rationale
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.		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 <u>or configuration</u> . On the other hand, the familiarization training consists in reading technical materials covering the differences amongst aircraft models <u>or configurations</u> , not being required to obtain an additional endorsement or certificate.	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.	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. Justification of the version after Public Consultation There were no changes due to the Public Consultation.
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	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, <u>following a minimum syllabus established by ANAC, including The training shall include, in such case,</u> 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	(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 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	Justification of the version submitted to Public Consultation 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.

Comparative chart – Changes to RBAC No. 01, 21, 61 and 90
 Theme 1 of the 2023-2024 Regulatory Agenda – *Type design data with relevant effects to the operational context*
 Final rule version – Docket 00066.004388/2020-13

RBAC 61 Amendment 14	Foreign reference regulation (when applicable)	Draft of RBAC 61 Amendment 15 submitted to Public Consultation 03/2023	RBAC 61 Amendment 15 (final rule)	Rationale
		*PLA – Airline Pilot		Justification of the version after Public Consultation There were no changes due to the Public Consultation.

RBAC No. 90 - Requirements for the special operation of public aircraft

RBAC 90 Amendment 01	Foreign reference regulation (when applicable)	RBAC 90 Amendment 02 (final rule)	Justification
90.3 Definitions and acronyms		90.3 Definitions and acronyms	
(b) The following abbreviations and acronyms apply to this Regulation:		(b) The following abbreviations and acronyms apply to this Regulation:	
(56) OSD: <i>operational suitability data</i> .		(56) OSD: <i>operational suitability data</i> .	<p>No changes to RBAC 90 were submitted to Public Consultation No. 03/2023. However, due to the analysis of contributions No. 22, 26 and 27 of Public Consultation No. 03/2023, the Master Minimum Equipment List (MMEL) and the result of the operational evaluation activity were included in the type certificate. For this reason, the model adopted by ANAC was closer to that of the European Union Aviation Safety Agency (EASA), making it convenient to adopt the term “<i>Operational Suitability Data (OSD)</i>” employed by EASA</p> <p>A definition for OSD was included in RBAC 01. Considering that in RBAC 90 the term OSD was already used, but with a different translation to Portuguese, the text in the official Portuguese version was adjusted to harmonize with the term used in RBAC 01 and 21. Such change has no impact in this English version.</p>