



Type certification	Doc #	PR.TC.00001-002
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Type certification

PR.TC.00001-002

	Name	Validation	Date
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DOCUMENT CONTROL SHEET

Process Area	Product airworthiness/ environment certification
Main Process	Type certification
Main Process Owner	Alain LEROY

Reference documents**a) Contextual documents**

Commission Regulation (EC) 1356/2008 - Regulation of 23 December 2008 amending Regulation (EC) No 593/2007 on the fees and charges levied by the European Aviation Safety Agency

Commission Regulation (EC) 1702/2003 - Regulation of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

Commission Regulation (EC) 2042/2003 - Regulation of 20 November 2003 laying down implementing rules for the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L315, 28.11.2003)

Commission Regulation (EC) 593/2007 - Regulation of 31 May 2007 on the fees and charges levied by the European Aviation Safety Agency Regulation (OJ L140, 01.06.2007)

ED Decision 2003/02 - On the implementation of airworthiness directives for products, parts and appliances designed in third countries and repealing ED Decision 1/2003

ED Decision 2003/1/RM - On AMC and GM for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

ED Decision 2003/10/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for European Technical Standard Orders (« CS-ETSO »)

ED Decision 2003/11/RM - On definitions and abbreviations used in certification specifications for products, parts and appliances (« CS-Definition »)

ED Decision 2003/12/RM - On general acceptable means of compliance for airworthiness of products, parts and appliances (« AMC-20 »)

ED Decision 2003/13/RM - On Certification Specifications Including Airworthiness Code and Acceptable Means of Compliance, for sailplanes and powered sailplanes (« CS-22 »)

ED Decision 2003/14/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Normal, Utility, Aerobatic and Commuter Category Aeroplanes (« CS-23 »)

ED Decision 2003/15/RM - On Certification Specifications for Small Rotorcraft (« CS-27 »)

ED Decision 2003/16/RM - On Certification Specifications for Large Rotorcraft (« CS-29 »)

ED Decision 2003/17/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Very Light Rotorcraft (« CS-VLR »)

ED Decision 2003/18/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Very Light Aeroplanes (« CS-VLA »)

ED Decision 2003/2/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Large Aeroplanes (« CS-25 »)

ED Decision 2003/3/RM - On Certification Specifications, providing for Acceptable Means of Compliance for Aircraft Engine Emissions and Fuel Venting (« CS-34 »)

ED Decision 2003/4/RM - On Certification Specifications, providing for Acceptable Means of Compliance for Aircraft Noise (« CS-36 »)

ED Decision 2003/5/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Auxiliary Power Units (« CS-APU »)

ED Decision 2003/6/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for All Weather Operations (« CS-AWO »)

ED Decision 2003/7/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Propellers (« CS-P »)

ED Decision 2003/9/RM - On Certification Specifications, Including Airworthiness Code and Acceptable Means of Compliance, for Engines (« CS-E »)

ED Decision 2009/009/E - On the delegation of powers of the Executive Director to certain staff members of the Certification Directorate, and repealing ED Decision 2008/001/E

ED Decision 2009/078/E - Adopting the Code of Good Administrative Practice for the staff of the European Aviation Safety Agency in their relations with the public (repealing ED Decision No 2006/02/E)

MB Decision 01-2004 - Decision of the Management Board concerning the arrangements to be applied by the Agency for public access to documents



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MB Decision 04-2009 - Decision of the Management Board on guidelines for the allocation of certification tasks to national aviation authorities and qualified entities
 MB Decision 12-2007 - Decision of 1 Oct 07 of the Management Board concerning the general principles related to the certification procedures to be applied by the Agency for the issuing of certificates for products parts and appliances (hereinafter referred to as PCP Decision)
 Regulation (EC) 1049/2001 - Regulation of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents
 Regulation (EC) 216/2008 - Regulation of European Parliament and of Council of 20 Feb. 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency and repealing Council Directive 91/670/EEC, Regulation (EC) 1592/2002 and Directive 2004/36/EC
 UG.TC.00002 - Certification general user guide

b) Internal documents

EASA Form NR 121 - Expert statement of technical satisfaction
 EASA Form NR 90A - Type certificate
 EASA Form NR 90B - Type Certificate (Propeller)
 EASA Form NR 95 - Technical visa for type certificate
 FO.TC.00032 - Type Certification Review Item
 FO.TC.00035 - Compliance statement
 FO.TC.00038 - Record of the certification team composition
 TE.TC.00016 - Final certification report
 TE.TC.00029 - TCDSN
 TE.TC.00037 - Type Certificate Data Sheet
 UG.TC.00002 - Certification general user guide
 WI.ASALL.00050 - Terms of reference for task allocation and staff secondment
 WI.APMAN.00008 - Morning meeting terms of reference
 WI.DRM.00040 - Records management within P&A section
 WI.DRM.00041 - Rotorcraft section record management
 WI.DRM.00042 - General aviation records management
 WI.DRM.00043 - Propulsion section records management
 WI.DRM.00044 - Large aeroplanes section records management
 WI.TC.00006 - Request for legal advice for product safety oversight
 WI.TC.00036 - Decisions and signatures for product safety oversight

Abbreviations/Definitions

a) Definitions:

Allocation

Means the assignment of the performance of a technical task including the technical management function.

Attribution

Assignment of a task internally (using EASA staff or NAA seconded staff) or its allocation to an NAA.

Certification Maintenance Requirements

Means the imposition of a maintenance task arising from the certification process, necessary to satisfy the airworthiness requirements.

Certification Review Items

Means a document recording Deviations, Special Conditions, new Means of Compliance or any other certification issue which requires clarification and interpretation, or represents a major technical or administrative issue.

Deviation

Means any deviation from the applicable airworthiness codes, environmental protection specifications and/ or acceptable means of compliance with Commission Regulation (EC) No. 1702/2003, Annex Part 21.

EASA Member State



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EU Member States and Norway, Liechtenstein, Iceland and Switzerland- European Third Countries defined in accordance with Article 66 of the Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008.

Third Countries
Non-EASA Member State

Equivalent Safety Finding
see Commission Regulation (EC) No. 1702/2003, Annex Part 21, Section A, 21A.21(c)(2)

Imported Product
Means a product originating from a non-EU country to be imported into one or more of the countries of the European Union.

Secondment
The assignment of an NAA employee to perform certain technical tasks for the Agency on a temporary basis under the direct technical management of the Agency.

Special Conditions
Are Agency prescribed special detailed technical specifications for a product as stated in Commission Regulation (EC) No. 1702/2003, Annex Part 21, Section A, 21A.16B

Type Design
Means the Type Design definition (see Commission Regulation (EC) No. 1702/2003, Annex Part 21, Section A, 21A.31) presented by the applicant and for which compliance is demonstrated with the EASA Type Certification Basis.

Type Validation
Type Certification of Third Country products under a recognition agreement or working arrangement in accordance with Article 12 or Article 27 of Regulation (EC) No. 216/2009.

SAP Related terminology:

Involvement Notification
E-mail sent out automatically by SAP to a project team member once his participation has been requested by the PCM.

Project No.
SAP Project No. or EASA Project No. for ongoing projects

Task Assignment e-mail
E-mail sent out automatically by SAP to the project certification manager once his task assignment has been requested by the CM during the morning meeting.

Purchase Order
A commercial document issued by EASA (buyer) to a National Aviation Authority (supplier) with which a Framework Service Contract has been signed to purchase their services (task allocation or secondment).

Technical Closure Notification
E-mail sent out automatically by SAP to all team members and PCM to inform them that they should book their last hours against the project



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b) Abbreviations:

A&P

Applications & Procurement Services Dept.(F.1)

ADOA

Alternative Procedure to Design Organisation Approval

AFM

Aircraft Flight Manual

AMC

Acceptable Means of Compliance

A&P

Applications and Procurement Services Department – Products Applications Management Section

CM

EASA Certification Manager (Section Manager Products Department)

CMR

Certification Maintenance Requirements

CRI

Certification Review Item

CS

Certification Specification (Airworthiness Code)

DOA

Design Organisation Approval

EA

Exporting Authority

ED

EASA Executive Director

EP

Environmental Protection Section

ESF

Equivalent Safety Finding

ETSO

European Technical Standard Order

MoC

Means of Compliance

M MEL

Master Minimum Equipment List

MRB

Maintenance Review Board

NAA

National Aviation Authority

OEB

Operations Evaluation Board

PE

Panel of Experts

PCM

Project Certification Manager

POA

Production Organisation Approval

RTA

Request for Technical Advice Panel of Experts



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RTC
Restricted Type Certificate
SC
Special Condition
SoD
State of Design
STC
Supplemental Type Certificate
TC
Type Certificate
TCP
Type Certification Procedure
TCDS
Type Certificate Data Sheet
TCD
Technical Closure Document (e.g. EASA Form NR 95, EASA Form NR. 96, etc.)
TVP/PTVP
Type Validation Principles/Post Type Validation Principles

Log of issues		
Issue	Issue date	Change description
001	01/07/2010	First issue, Migration of C.P008-002
002	09/07/2010	Second issue accounts for the replacement of the Work Instruction on Records Management at department level with Work Instructions at section level



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INTRODUCTION

Purpose and scope

This document describes how the Certification Directorate of the European Aviation Safety Agency will internally handle type certification of aeronautical products and related tasks.

This procedure shall be followed in order to achieve standardised processes within the Agency.

This procedure describes all technical aspects related to the type certification of aeronautical products; it excludes the purely administrative aspects as processing the applications and determination of fees.

This procedure applies to the type certification of EU aeronautical products and to changes thereto, in accordance with Annex Part 21 to Commission Regulation (EC) No. 1702/2003.

This procedure also includes the performance of type certification of non-EU products and describes how EASA will handle the suspension or revocation of certificates according to Annex Part 21 to Commission Regulation (EC) No. 1702/2003.

Legal framework

1. Issuance of Type Certificates

According to Articles 53(1), 18 (d) and 20(1) (f) & (j) of Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency repealing Regulation (EC) No 1592/2002 (hereinafter referred to as "the Basic Regulation"), the EASA Management Board shall establish transparent procedures for taking individual decisions for airworthiness and environmental certification.

Under these provisions[1], the Management Board has adopted Decision No. 12/2007 of 01 October 2007 of the Management Board amending Decision No. 07/2004 of the Management Board concerning the general principles related to the certification procedures to be applied by the Agency for the issuing of certificates for products, parts and appliances (hereinafter referred as to "MB Decision 12/2007").

According to its Article 1(1), the objective of the "MB Decision 12/2007" is "to establish the general principles to be followed by the Agency to perform environmental and airworthiness certification of aeronautical products, parts and appliances, including post certification activities, in accordance with the applicable implementing rules of the Basic Regulation".

Article 15 of the MB Decision 12/2007 mandates the Executive Director to "establish the necessary associated detailed procedures for the implementation of this Decision [...]".

This procedure has been adopted under this mandate.

Type Certificates shall be issued in accordance with the provisions of:

- a) Regulation (EC) No. 216/2008 in particular its Annex I;
- b) Commission Regulation (EC) No. 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, in particular Subpart B of its Annex Part 21, and the related Acceptable Means of Compliance ("AMC") and related Guidance Material ("GM");
- c) related ED Decisions on the applicable Certification Specifications and Acceptable Means of Compliance
- d) MB Decision 12/2007
- e) This Type Certification Procedure (TCP)

Rights and obligations derived from applicable bilateral agreements as specified in Article 12 of the Basic Regulation shall not be affected.

2. Applicable Fees

Applicants for Type Certificates will be charged in accordance with the Commission Regulation on the fees and charges levied by the European Aviation Safety Agency in force at the time of receipt of the application by the Applications and Procurement Services Department.



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Further details on the applicable fees can be found on the EASA website as follows:

http://www.easa.europa.eu/ws_prod/g/rg_regulations_fnc.php

[1] According to Article 69(1) of Regulation 216/2008 references made to the repealed Regulation shall be construed as being made to Regulation 216 and should be read in accordance with the correlation table set out in Annex VI.

Basic Principles

1. Application

Applications for an EASA Type Certificate (EASA Form NR 30) shall be sent to the Applications and Procurement Services Department and made in accordance with Article 21A.15 of Annex Part 21 to Commission Regulation (EC) No. 1702/2003 and MB Decision 12/2007.

The application form can be found on the EASA website as follows:

http://www.easa.europa.eu/ws_prod/c/c_app_forms.php

2. Attribution of Technical Investigation Tasks

After eligibility has been fully assessed and the application has been accepted by the Agency, the responsible Certification Manager (CM) will decide, whether the technical investigation will be further processed internally or if the technical investigation should be allocated to a National Aviation Authority (NAA).

Furthermore, it is the responsibility of the responsible CM to select the party that should carry out the certification tasks incumbent upon the Agency and to check its availability.

In principle, the Agency shall perform itself all tasks incumbent upon it, to the extent allowed by its staffing level, the ability of its staff to perform the task and the number of tasks to be dealt with.

Where the application is further processed internally, the technical investigation is performed by the EASA Products Certification Department, using EASA staff and/or NAA seconded staff. Individual NAA staff, selected by the EASA Products Certification Department, may be invited to participate in a specific technical task under the direct technical management of the Agency, when there is a framework service contract concerning the provision of services in place between the Agency and the NAA seconding staff*.

The selected PCM/ team members (EASA staff or NAA seconded staff) will be informed by A&P in writing of the total/ individual workload estimate. A tolerance of 30% overbooking of the total estimated number of working hours is provided for EASA staff. For NAA seconded staff, no tolerance is provided regarding the maximum number of the working hours specified in the purchase order (Request for Secondment Letter). Where more work is required by the NAA seconded staff team member (TM) to complete the task than specified, the TM must request an amendment of the purchase order before proceeding with the task.

Where the technical investigation is allocated to a NAA, the allocation of tasks will be performed in accordance with MB Decision No. 04/2009 of 10 February 2009 of the Management Board on guidelines for the allocation of certification tasks to national aviation authorities and qualified entities (hereinafter referred to as "MB Decision 04/2009").

Pursuant to Article 3(2) and 5(3) of MB Decision No. 04/2009, the Agency may only allocate the technical investigation task to the NAAs of EASA Member States that have been accredited for this task and when there is an appropriate legal arrangement[1] in place between that NAA and the Agency. The selected NAA will be informed in writing of its selection and the workload estimate.

No tolerance is provided regarding the maximum number of working hours specified in the purchase order (Task Allocation Letter). Where more work is required by the NAA to complete the task than specified, the NAA must request an amendment of the purchase order before proceeding with the task.

When executing allocated certification tasks, the NAA is accountable to the responsible CM who shall make the final decisions in relation to the issuing, modification, suspension or revocation of certificates, including the issuing of airworthiness directives or the granting of exemptions or the adoption of certification bases.

All certification tasks, irrespective whether they are performed internally or allocated to an NAA shall be executed following the provisions of this EASA Type Certification Procedure.



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* Note: A framework service contract concerning the provision of services between the NAA and the Agency or a EASA Executive Director Letter on Allocation of Tasks to the NAA.

2.1 EU Products

A product type certification task for which the Agency is responsible shall preferably be performed by the Agency itself. The following cases can occur:

A)

In case the Agency does not perform a product type certification task itself, this task shall be allocated to the NAA of the State of Design.

B)

Should it not be possible to allocate the certification task to the NAA of the State of Design for reasons which may include inadequate scope of accreditation, inability or unwillingness to provide services in accordance with the Agency's procedures or within the allocated timeframe, internalisation of the certification task may be reconsidered or the certification task may be allocated instead to an alternative NAA that is suitably accredited. The alternative NAA shall be selected in accordance with the following criteria:

a) The product type and/or model in question already appears in Annex II of the Framework Service Contract of the alternative NAA;

or

b) The alternative NAA has particular experience and competence for this task, i.e. if the NAA has built up the necessary expertise in a particular field, domain or category of product, and is accredited to perform tasks in such area(s).

2.2 Non EU Products

For imported products designed by foreign organisations, if the Agency cannot perform the task by itself, NAAs of EU Member States may be allocated type certification tasks in accordance with the criteria listed in section 2.1 B) "EU Products" in order of importance.

3 Certification Team

3.1 General

The investigation process for type certification of an aviation product is performed by a team of experts, led by a PCM. The PCM is accountable to the responsible EASA CM.

3.2 Determination of the Certification Team

In order to establish an appropriate certification team, the applicant, if deemed necessary by the responsible EASA CM, will organise an initial briefing for general familiarisation with the project. This briefing will take place at a convenient and cost effective location. The attendance at the initial briefing will normally include at least a representative of the EASA Certification Directorate and the PCM, if already appointed.

A presentation to the applicant about content and use of EASA TCP will be provided if the applicant is not familiar with the procedures.

Following the general familiarisation the responsible EASA Products CM together with the Experts Head of Department, the Certification Environmental Protection Section Manager and the appointed PCM will select the members of the Certification Team from EASA and/or NAA staff from NAAs with which EASA has appropriate contractual arrangements.

The composition and size of certification teams can vary and is dependent on the product which needs to be type certificated. Where the extent of the investigation does not justify the need for a team, one person may perform the investigation.

A certification team for a Propeller may consist of only one specialist, whereas a new Large Transport Aircraft for example may likely need more experts covering the disciplines of:



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Flight (including Performance), Human factors, Structures, Hydro-mechanical systems, Electrical systems, Avionic systems, Powerplant, Transmissions, Cabin safety, Environmental Control systems Electronic Controls & Software, Noise & Environmental protection.

The PCM will record the team composition using the EASA form "Record of the certification team composition" FO.TC.00038" in accordance with the form's completion instructions.

Trainees may be involved in the investigation, at no direct cost to the applicant.

In cases where the technical investigation is allocated to an external party, the certification team will be appointed by this party taking into account the principles of this EASA TCP.

3.3 Management of the Certification Team

The responsible CM through monitoring, coordination and management of PCMs, will aim to ensure equal treatment of applicants across certification projects. For this, the responsible EASA CM shall organise regular co-ordination meetings with all PCMs, where also cross fertilisation of administrative and technical standardisation across certification projects is achieved. Technical training should be provided on these occasions on a regular basis.

In cases where the technical investigation is allocated to an external party, the responsible PCMs of those parties shall be invited to the co-ordination meetings.

4 Certification Procedures

4.1 EU Products

Once an application has been accepted and a certification team is established, the EASA type certification process can generally be divided in the following phases.

Phase I – Technical Familiarisation and establishment of the Type Certification Basis

The objective of this phase is to provide technical information about the project to the Team experts to enable the definition of and the agreement on the initial EASA Type Certification Basis.

Phase II – Agreement of the Certification Programme

The objective of this phase is the definition of and the agreement on the proposed means of compliance with each paragraph of the Certification Basis and the identification of the Team involvement.

Phase III – Compliance determinations

The objective of this phase is the demonstration of compliance with the Certification Basis and the acceptance of the compliance demonstration.

Phase IV- Final Report and issue of a Type Certificate

The objective of this phase is the establishment of a project final report recording details of the type investigation and, based on approval of the final report by the responsible CM, the issue of the EASA Type Certificate.

These phases are further detailed in the Flow Chart and in the Process Steps tables.

4.2 Non-EU Products

4.2.1 General

For type certification of aviation products originating from applicants whose principal place of business is located outside the territory of the member states, other procedures than those described above may apply depending on the content of bilateral agreements or working arrangements with the State of Design.

4.2.2 Type Certification under a bilateral (recognition) agreement with the State of Design

In the case of a formal bilateral (recognition) agreement between the Community and a third country in accordance with Article 12 of Regulation (EC) No 216/2008, this agreement including the associated implementing procedures may supplement, change or supersede any applicable European legislation and related procedures.

In this case the EASA certification may be called validation and it is assumed that the imported product shall meet, with the same level of confidence, a level of safety equivalent to that required for a comparable product designed and manufactured within EASA Member States.



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In cases where there are known differences in the regulations and interpretations, these differences are covered by means of Validation Items and CRIs (certification review item).

As long as the Community has not concluded own bilateral (recognition) agreements, according to Article 12 of the Basic Regulation, existing bilateral (recognition) agreements - including their implementation procedures (IPA) - between EU Member States and third countries, may be used for the validation of non EU Type Certificates. This includes Type validation principles/post type validation principles (TVP/PTVP) as agreed with the FAA.

4.2.3 Type Certification under a working arrangement with the Civil Airworthiness Authority of the State of Design

In the case of a working arrangement (WA) between EASA and the competent authority of a third country in accordance with article 27 of the Basic Regulation, the provisions of the WA shall apply.

In accordance with Article 3(2) of Regulation (EC) No 1702/ 2003, the need for a third country applicant to hold a Design Approval Organisation may be alleviated through the direct involvement of the competent authority.

Using provisions of the working arrangement the PCM may use the foreign certification system, which has been demonstrated to offer the same level of independent checking function (under Article 3.2 of 1702/2003), to find compliance with the EASA certification basis.

5 Interface with other activities

5.1 General

Co-ordination will be required with a number of other activities. These activities include:

- a) Aircraft/Engine/Propeller interactions
- b) Environmental protection
- c) Equipment approval
- d) Design Organisation approval
- e) Production Organisation approval
- f) Maintenance interactions
- g) Operations interactions

5.2 Aircraft/Engine/Propeller interactions

The applicant for an aircraft TC is responsible for the installation of the engine/propeller within the aircraft and has to show compliance with installation requirements that apply to over and above those required for the separate type certification of the engine/propeller. The engine/propeller manufacturer is expected to support the aircraft manufacturer in this process.

The EASA aircraft certification team has to recognise that there are potential interfaces between the relevant certification specifications and has to ensure proper interface communication.

5.3 Environmental protection

The applicant for an aircraft TC has to show compliance with the applicable aircraft noise and fuel venting requirements and the applicant for an aircraft engine TC has to show compliance with the applicable engine emissions requirements.

The responsible PCM for that product has to coordinate with the CM EP to provide for the necessary expertise and communication for the environmental certification of the product.

5.4 Equipment Approval

For the approval of equipment to be certified as part of the Product, the applicant for the TC/STC is responsible for the approval of the equipment and its installation. An acceptable means of providing compliance data in support of the equipment and its installation is to show that the equipment meets the appropriate ETSO standard.

When equipment is not certified as part of the product, the equipment manufacturer is responsible for obtaining ETSO Authorisation.

The ETSO Authorisation is the recognition by EASA that the equipment meets predefined qualification and performance criteria.



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ETSO Approval of the equipment will be treated as a separate process for which the procedures listed in EASA European Technical Standard Order Authorisation Procedure (ETSOAP) PR.ETSO.00001 shall apply.

5.5 Design and Production Organisation Approval

The PCM shall ensure appropriate communication with the responsible DOA team leader in order to exchange any findings by the Certification team which may affect the continuous validity of the organisational approvals of the applicant.

If necessary, the PCM will contact the NAA focal point responsible for the POA in order to ensure appropriate communication.

5.6 Maintenance interactions

In accordance with Article 21A.61 of Annex Part 21 to Commission Regulation (EC) No. 1702/2003 instructions for continued airworthiness shall be furnished by the applicant. These instructions comprise, but are not limited to, the approved airworthiness limitation section*.

The airworthiness limitation section and the general ICA compliance of the instructions for continued airworthiness shall be reviewed by the certification team to ensure compliance with the Type Certification Basis.

Commission Regulation (EC) No 2042/2003, Part M requires the aircraft operator to provide an aircraft maintenance programme for each aircraft type operated.

EASA Acceptable Means of Compliance to M.A.302(d) ED Decision No 2008/13/R

12/12/2008 makes reference to the possibility that the aircraft maintenance programme should normally be based on the Maintenance Review Board Report (MRBR) where applicable.

The MRBR outlines the initial minimum maintenance requirements to be used for the development of an approved maintenance programme for derivative or newly type certified aircraft and as such meets part of the requirement laid down in CS 25.1529 and CS 25 Appendix H, CS 23.1529 and CS 23 Appendix G, CS 29.1529 and Appendix A, CS 27.1529 and CS 27 Appendix A.

The development of the MRBR process from which the aircraft maintenance programme can be produced is not an EASA Certification Team Activity. However, it needs to be coordinated with the certification team, as one element of compliance to CS XX.1529, scheduled maintenance instructions.

In order to develop initial minimum scheduled maintenance requirements as part of required Instruction for Continued Airworthiness (ICA), the TC applicant may implement a Maintenance Review Board (MRB) process.

The Agency's procedure PR.MRB.00001 Maintenance Review Board and Work Instruction WI.MRB.00002 Maintenance Review Board Team provide guidelines that may be used by the TC applicant during the development and revision of the initial minimum scheduled maintenance requirements for derivative or newly type-certified aircraft.

In accordance with the procedure, the applicant should apply for Approval of MRBR or MRBR Supplement, using EASA Form NR 40. The application will be handled under the above-mentioned procedures.

This activity is regarded as a service within the meaning of Article 10 of the Fees and Charges Regulation and gives rise to charges which shall be equal to the real cost of the service provided. These charges will be invoiced separately in addition to the fees due in exchange for the issuance of the Type Certificate.

The TC Applicant / Holder is responsible for distributing the approved initial and revised MRB Reports, and any supporting documents to the EASA Type Certification Team.

Note*

The approved Airworthiness Limitations Section might also contain several mandatory documents resulting from structural review like, Safe Life Airworthiness Limitation Items (SLI), Damage-Tolerant Airworthiness Limitation Items (ALI) and Corrosion Prevention and a Control Program (CPCP) (which may be included in the ALS by reference, only), and other subjects/sections/documents usually retained in the ALS like EWIS and Fuel Airworthiness Limitations, Certification Maintenance Requirements (CMR), Life Limited Parts, System (LLP) and Ageing Systems Maintenance (as applicable).

5.7 Operation interactions



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If the applicant requests to establish an operations evaluation board (OEB) the responsible EASA CM shall inform the EASA Certification Flight Standards Head of Department, who will ensure that an OEB is formed with appropriate representation covering airworthiness, operational and licensing aspects.

The responsible EASA CM shall ensure appropriate representation on the OEB from the certification team.

The OEB process will be handled under separate procedures by the Certification Flight Standards department.

5.8 Continuing Airworthiness

The PCM shall organise continuing airworthiness actions in accordance with Article 12 of MB Decision 12/2007. For further details, refer to EASA Procedures on Continuing Airworthiness of Type Design: PR.CAP.00001, PR.CAP.00007, PR.CAP.00008.

For non-EU products, continuing airworthiness actions will be performed in accordance with the procedures of the relevant bilateral agreement with the State of Design, if any.

5.9 Approval of Flight Conditions

Some flight conditions are approved, amongst others, for the purpose of developing a type design and for showing of compliance with regulations and certification specifications; the approval of flight conditions shall be done in accordance with Article 21A.710 of Annex Part 21 of Commission Regulation (EC) No. 1702/2003.

For further details, refer to EASA Procedure on "Approval of Flight Conditions for a Permit to Fly (Technical Process)" and EASA Work Instruction "Approval of Flight Conditions Outside of Working Hours".

5.10 Reporting System

Article 21A.3 of Annex Part 21 of Commission Regulation (EC) No. 1702/2003 details the Type Certificates holders responsibilities regarding reporting to EASA.

For further details, reference is made to EASA Procedures PR.CAP.00001, PR.CAP.00007, PR.CAP.00008 (former "Continuing Airworthiness of Type Design CAP").

Such reports need to be made in a form and a manner as defined in the approved company procedure contained in the Organisation Exposition of the Design Organisation Approval holder (DOA), Alternative Procedure to Design Organisation Approval holder (ADOA) or Production Organisation Approval holder (POA).

6 Additional Provisions

6.1 Panel of Experts

A Panel of Experts (PE) which comprises experts with extensive technical knowledge and experience in all technical disciplines necessary for type certification of aviation products has been established by EASA in accordance with Article 16 of MB Decision 12/2007. For detailed information on the panel of Experts please consult the Certification Handbook.

The Panels of Experts is available for advice on technical certification principles and technical interpretation of the implementing rules of the Basic Regulation, technical standardisation and technical training ensuring appropriate technical certification knowledge within EASA. They may also act as PCM or Team members, however respecting then that their roles do not conflict.

The experts shall notify any possible conflict of interest. In such cases they shall abstain from participating in the deliberations of the PE.

6.2 Resolution and Disagreements

According to Article 18(1) of MB Decision 12/2007, every effort shall be made to resolve any disagreements between the Applicant and the EASA at the lowest possible level.

The EASA Team will be the primary decision maker in the process under the supervision of the PCM. The EASA Team shall have the ability and power to take the first decisions to the largest possible extent.

If the Applicant does not agree with the EASA Team decision, the CM as a first step, and the responsible Head of Department of the Certification Directorate afterwards, will try to reach a mutually acceptable resolution.



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If an agreement still cannot be reached, the CM will bring the matter to the Certification Director who will take a decision thereto.

Following Article 18(2)(3)(4) of MB Decision 12/2007, if further escalation is necessary the final decision will be made by the EASA Executive Director, following consultation with the PE. In this case the Applicant shall have the right to be heard by the PE. The opinion of the PE will be communicated to the Applicant together with the final decision.

6.3 Involvement of the Legal Department

The CM shall consult the EASA legal service at the earliest possible stage:

- a) before the adoption of a negative decision taken during the certification process which is subject to appeal according to Articles 44 to 50 of the Basic Regulation, the provisions of the MB Decision 12/2007 of 11 September 2007 (amending the products certification procedure MB Decision 07-2004 "Products Certification Procedure") or this internal working procedure;
- b) when an applicant or certificate holder requests that a disagreement shall be formally handled according to Art. 18(2)-(4) of the Products Certification Procedure;
The CM should consult the EASA legal service at the earliest possible stage:
- c) when there is a disagreement with the applicant on a significant decision affecting the result of the certification process outside the scope of Art. 18(2)-(4) of the Products Certification Procedure;
- d) in any other case when deemed necessary.

For further details refer to Certification Work Instruction WI.TC.00006 Request for Legal Advice for Product Safety Oversight.

6.4 Interaction with the Applications and Procurement Services Department (A&P) within the Finance and Business (F&B) Services Directorate

The direct handling of administrative and financial aspects of the projects is carried out by the Applications and Procurement Services Department, in particular by the Products Applications Management Section. These tasks are performed in support of the core process.

Of great importance is the reciprocal communication during the life of a project of events with significant impact on the financial and administrative status of the project.

For each project that needs to be set up, the CM/PCM will provide A&P with a minimum of information necessary for the administrative handling of the project addressing project set-up, recording of working time for team members, financial management and outsourcing management.

Once the task allocation decision process is complete and the project certification manager for the task identified, A&P will send a task assignment e-mail to the selected internal PCM or issue a purchase order (task secondment-/task allocation letter). Both will include an overall project work volume estimate.

For internalised tasks, the selected PCM will review and, if necessary amend and complete the estimated project work volume using the Assignment Request Form. This form shall also be used by the PCM to inform A&P on the team composition and the involvement of the team members.

For tasks allocated to an NAA, the selected NAA will review the estimated project work volume and where necessary, request A&P to amend the work volume specified in the purchase order. Where the certification tasks require the involvement of EASA experts, the NAA must request their involvement to the CM. The CM shall then use the Assignment Request Form to inform A&P accordingly.

During the technical investigation, the PCM should ensure the correctness of all project planning data. Based on the team members' feedback, team composition, team member's involvement and planning data may be revised by the PCM at any time. The PCM should communicate these changes to A&P using the Assignment Request Form.

Until the definition of roles in the SAP system will allow staff of the C Directorate to independently access planning and financial data, the Head of Product Certification Department, the CM and the PCM will receive on a quarterly basis feedback from A&P to enable them to substantiate and document any core activity management decision.

Upon request, and until the system allows the independent extraction of data the PCM will also be provided with the project's financial status report at the closure of the technical investigation.



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The expected content of the financial status report will include the project start date, dates/ amounts/ payment status of all sent invoices and any due invoices.

Additionally, the Accounting Department will notify the responsible CM and PCM whenever the due fee remains unpaid after receipt of the second reminder and invite the Head of Product Certification Department and the responsible CM and PCM to take part in related discussions in the Debt Recovery Committee (DRC). Further to these discussions the DRC will recommend follow-up actions to the Certification Director and to the Finance & Business Services Directorate.

The Certification General User Guide (former Certification Handbook), document UG.TC.00002, describes in detail the interaction between the responsible CM, PCM and the Applications and Procurement Services during the type certification process.

6.5 Documentation

6.5.1 General

Some documentation, manuals or sections of manuals require EASA approval. The PCM, on behalf of EASA, shall approve the documentation identified below once reviewed and agreed by the appropriate certification team experts. The approval is documented by reference in the EASA approval certificate/ data sheet.

6.5.2 Documents associated with Aircraft Type Certification

6.5.2.1 Aircraft Flight Manual

The Aircraft Flight Manual (AFM) will be reviewed and agreed by the certification team. The Team will determine whether the limitations, operational procedures and performance contained in the AFM provides for safe operations and are compatible with the EASA Type Design, and the EASA Type Certification Basis.

6.5.2.2 Airworthiness Limitations Items and Certification Maintenance Requirements

The documents containing Airworthiness Limitations and Certification Maintenance Requirements arising from the certification process shall be reviewed and agreed by the EASA certification team.

6.5.3 Documents associated with Engine and/or Propeller Type Certification

The Airworthiness Limitations section, which itself requires formal approval, is usually, as a repository, contained in one of the following official documents:

- a) Engine and/or Propeller Installation Drawing and Manual
- b) Engine and/or Propeller Operating Instruction Manual
- c) Engine and/or Maintenance and Overhaul Manual

6.5.4 Limitation, Suspension and Revocation

When a Type Certificate shall be limited, suspended or revoked in accordance with Article 20(1)(i) of the Basic Regulation and Article 13 of MB Decision 12/2007, the Agency shall notify by letter the holder of the Type Certificate and all States of Registry of its decision and the reasons for limitation, suspension or revocation. This letter will make reference to the possibility for appeal as specified in Articles 44 to 50 of the Basic Regulation.

For further details, refer to EASA Procedure PR.SLR.00001 – Limitation, Suspension and Revocation of Certificates and Approvals.

6.5.5 Transfer and Surrender

The request for transfer or surrender of a product certificate shall be made by the certificate holder. For transfer of certificates EASA Form NR 38 is available through the Internet. For surrendering a certificate there is no dedicated EASA form available.

For further details, refer to EASA Procedure PR.TOC.00001 – Transfer and Surrender of Certificates.

6.5.6 Communication and Publication

Significant decisions affecting the result of the certification procedure shall be communicated by EASA to the Applicant in writing, including a reference to the possibility for appeal according to Articles 44 to 50 of the Basic Regulation, as established in MB Decision 12/2007.



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Pursuant to Article 14 of MB Decision 12/2007, EASA decisions related to the issuing, modification, limitation, suspension or revocation of Type Certificates shall be published in the EASA Official Publication.

The following lists are published in the EASA Official Publication:

- a) Type Certificates issued since 28 September 2003
- b) List of all Products under EASA responsibility
- c) Surrendered Type Certificates
- d) Type Certificates Datasheets
- e) Type Certificates Datasheets for Noise
- f) Certification - Current Consultations (Public consultations on Deviations, Equivalent Safety Findings and Special Conditions)
- g) Suspended Type Certificates

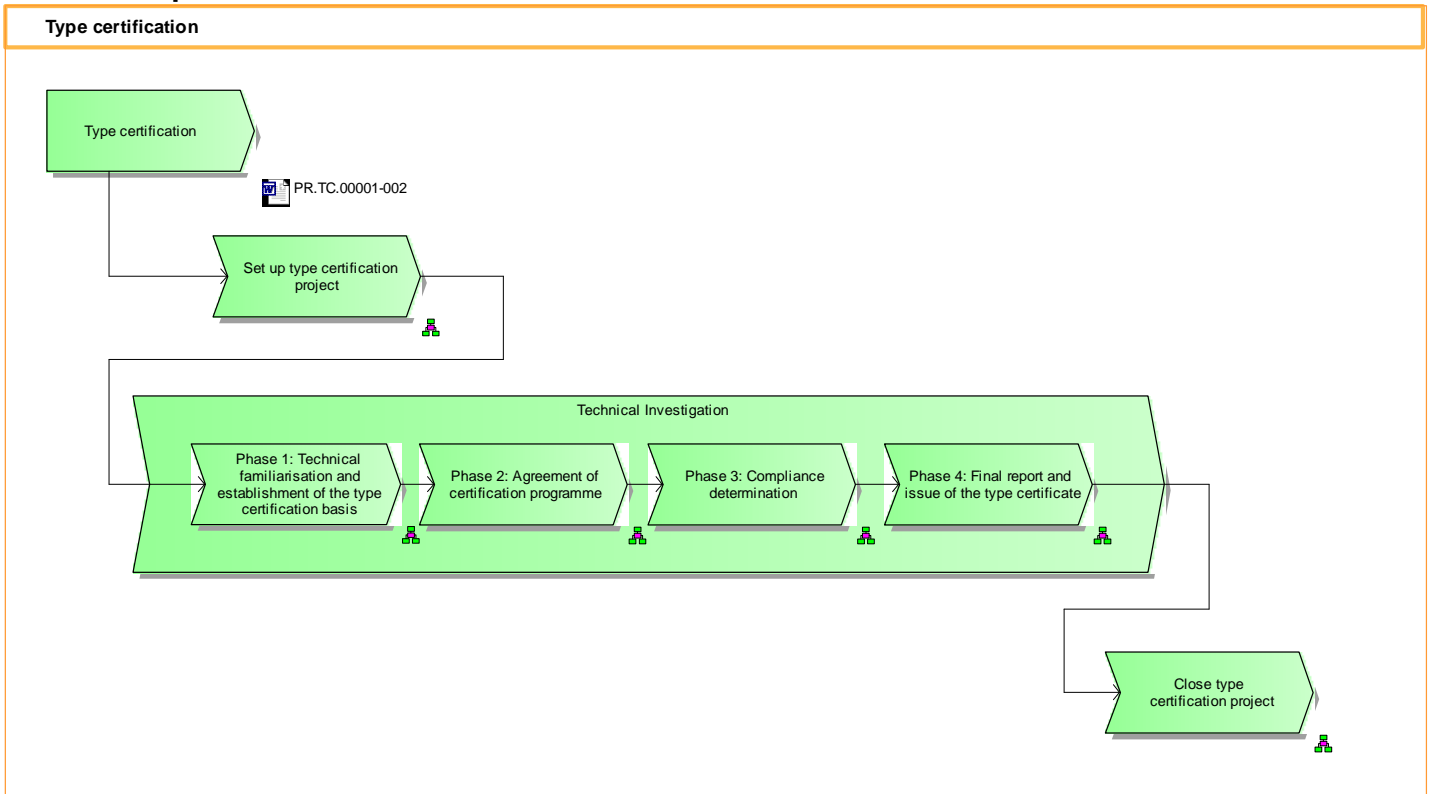
6.6 Confidentiality of Documents

All documents and information received and held by EASA related to the certification procedure which originates from the Approval Holder/Applicant or a third party will be handled in accordance with:

- a) Basic Regulation,
- b) Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents,
- c) Decision No. 1/2004 of 3 February 2004 of the Management Board concerning the arrangements to be applied by the Agency for public access to documents and
- d) Regulation (EC) No. 45/2001 of the European Parliament and of the Council of 18 December on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data.

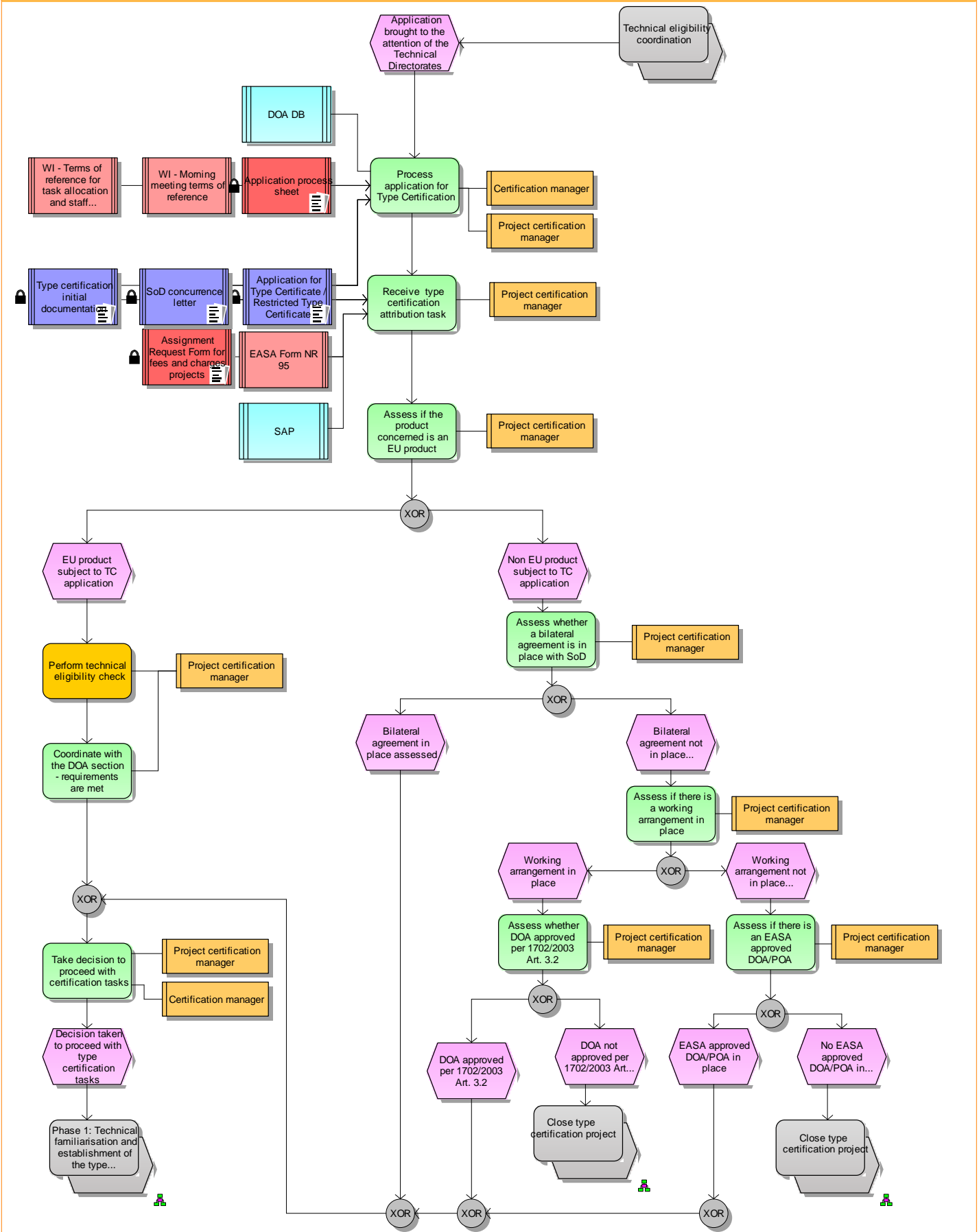


Structure of process charts





Set up type certification project





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Activity	Description to the process activity
<p>Process application for Type Certification</p>	<p>Applications for a Type Certificate (EASA Form NR 30) shall be sent to the EASA Applications and Procurement Services Department of the Products Applications Management Section (A&P) and made in accordance with Article 15 of Annex Part 21 and MB Decision 12/2007.</p> <p>Further details about format and address can be found on the EASA website.</p> <p>The A&P will process the application in accordance with Procedure PR.APMAN.00003 Application Registration and Acceptance. An automated e-mail (Notification of Application Received) will be sent to the functional mailbox of the technical operational department when an application is registered and the responsible Certification Manager (CM) identified.</p> <p>The CM or a designated Project Certification Manager (PCM) will review at the Morning Meeting with A&P staff all applications received on the previous working day.</p> <p>The details are specified in Plans & Programmes/ Products Department Daily Morning Meeting – Terms of Reference, Work Instruction number PR.APMAN.00008.</p> <p>The CM or a designated PCM will estimate the working hours necessary to perform the technical investigation and will select the EASA PCM (using EASA or NAAs seconded staff) or allocate the technical investigation to the NAAs in accordance with Decision No 04-2009 of 10 February 2009 of the Management Board on guidelines for the allocation of certification tasks to national aviation authorities and qualified entities, and work instruction WI.ASALL.00050 Terms of Reference for Task Allocation and Staff Secondment.</p> <p>In principle, the CM or the designated PCM also performs a first eligibility check of an applicant.</p> <p>A DOA database that lists the approved DOAs, their full scope of the design activities that can be performed, DAO Team Leader, etc. is maintained on the Agency's Intranet site and it is available for consultation.</p>
<p>Receive type certification attribution task</p>	<p>After the morning meeting when the PCM has been identified and the project total work volume has been estimated and entered in SAP, an e-mail is sent to the appointed internal PCM.</p> <p>Should the selected PCM be an NAA employee, then a purchase order (request for secondment) will be sent to the relevant NAA. Should the task be completely allocated to an NAA a purchase order (task allocation) shall be sent to the relevant NAA.</p> <p>The appointed PCM receives the task attribution by e-mail together with the following documents: EASA Form NR 30, EASA application process sheet, initial documentation, State of Design (SoD) concurrence letter, if applicable, prefilled EASA Form NR 95, if possible, and assignment request form that contains the planned working hours for the project.</p>
<p>Assess if the product concerned is an EU product</p>	<p>The selected PCM will review the application and determine if the product concerned is an EU product or not.</p>



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	<p>If the product concerned is an EU product go to the next step, if it is not an EU product proceed to activity 'Assess whether a bilateral agreement is in place with SoD'.</p>
Perform technical eligibility check	<p>The PCM managing the project will assess the applicant's eligibility in accordance with Article 13 of Annex Part 21 of Commission Regulation (EC) No. 1702/2003.</p> <p>For EU products applications for the type certification can only be submitted by appropriately approved organisations with Design Organisations Approval (DOA and APDOA) unless the DOA /APDOA approval process is concurrent with the certification, either under Annex Part 21 or a non-EU system acceptable to EASA as being equivalent to Annex Part 21.</p> <p>Each DOA is issued with Terms of Approval containing the list of products covered by the approval. The DOA Handbook of the Organisation must also detail the full scope of the design activities that can be performed.</p> <p>In the case that the applicant it is not eligible and unable to acquire the required privileges, the certification process is stopped. A&P will be notified to cancel the project.</p> <p>In the case that the applicant is eligible or able to acquire the required privileges, the certification process is continued.</p>
Coordinate with the DOA section - requirements are met	<p>When activities start on a new product, or more generally on tasks (Major Changes or STCs), outside the Terms / Scope of Approval, a DOA review is necessary. Compliance with the Part-21 Subpart J-DOA requirements by the organisation, procedures and personnel must be checked with respect to the new activities. The extent of the review will be highly dependent on the impact on the Design Organisation resulting from novelties or specific aspects of the new product, Major Change or STC or from the new Scope of Work.</p> <p>Therefore, when an application for new or amended TC or new STC is received, the PCM may contact the DOA Team Leader for the applicant to ensure that the appropriate work will be performed to extend the DOA Terms / Scope of Approval.</p> <p>Alternative procedures to DOA may be used in accordance with Part 21 Subpart J and Advisory Material. See also Internal Working Procedure for Alternative Procedures for Design Organisation Approval.</p> <p>In order to ensure consistent use of this clause, the PCM may co-ordinate with the EASA Organisation Management before any decision is made.</p> <p>Where an application for DOA / AP DOA is being processed concurrently with a design approval the DOA Team Leader and PCM need to coordinate their activities in order that the DOA approval be granted ahead of the closure of the technical investigation and with the appropriate terms of approval.</p>
Assess whether a bilateral agreement is in place with SoD	<p>From activity: 'Assess if the product concerned is an EU product'</p> <p>If the concerned product is not an EU product, the PCM will investigate if there is a Bilateral Agreement in place with the SoD.</p>



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	<p>The certification tasks will be performed in accordance with the applicable Bilateral Agreements with the State of Design (SoD).</p> <p>As long as the Community has not concluded own recognition agreements, existing agreements of EU Member States, including their implementation procedures (IPA), shall be used for the certification of non EU Type Certificates.</p>
Take decision to proceed with certification tasks	<p>If there is a Bilateral Agreement, or a WA in place, or if the applicant holds an approved DOA/ POA, the CM together with the PCM take the decision to proceed with the type certification process.</p> <p>The PCM and his team will ensure the SoD Authority's concurrence (Confirmation Letter and/ or Statement of Compliance)</p> <p>The PCM in concurrence with the CM will take the decision to perform the certification tasks in accordance with the either the BA or WA in place with the SoD, or in accordance with EASA Type Certification Procedure if no BA or WA is in place, but the applicant holds a DOA/ POA approval. (follow with Activity Receive initial briefings for familiarisation).</p>
Assess if there is a working arrangement in place	<p>Assess whether a bilateral agreement is in place with SoD --> Bilateral agreement not in place</p> <p>If no BA is in place with the SoD, the PCM will investigate further, if there is a WA in place between EASA and the Airworthiness Authority of the SoD.</p> <p>In the case that there is a WA between EASA and the competent authority of a third country in accordance with Article 27 of the Basic Regulation, the WA certification procedures shall apply.</p> <p>Based on the WA the PCM may use the foreign certification system, which has been demonstrated the same level of independent checking function, to find compliance with the EASA certification basis.</p> <p>If there is no WA in place, go to EPC Set up project - Assess if there is an EASA approved DOA/POA.</p> <p>If there is a WA, go to EPC Set up project - Take decision to proceed with certification task.</p>
Assess whether DOA approved per 1702/2003 Art. 3.2	<p>The PCM shall make the assessment whether the Non-EU applicant organisation has demonstrated its capability by holding a certificate issued in accordance with 1702/2003 Article 3.2</p>
Assess if there is an EASA approved DOA/POA	<p>If a project is considered to be outside the scope of the WA or BA the PCM will contact the Organisations Department in order to establish if the applicant has an EASA approved organisation. In the case of a DOA and POA, the certification tasks will be performed in accordance with this Type Certification Procedure.</p> <p>If no DOA/POA is in place the certification process stops. The PCM will inform A&P, who will notify the applicant of the rejection of the application and recommend the applicant to contact the EASA organisation department and make applications for DOA and POA.</p>



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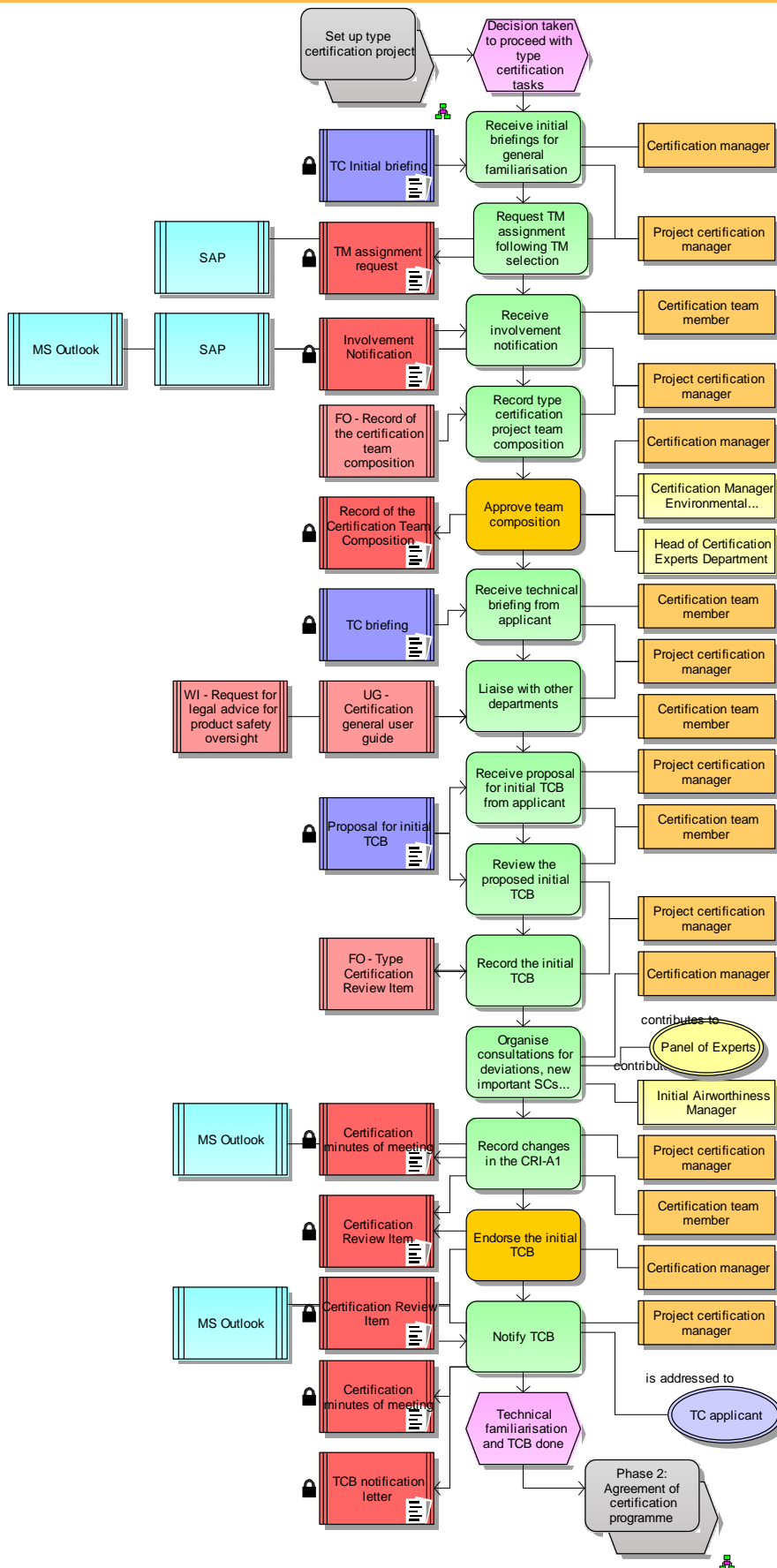
All documents received to date will be filed in accordance with WI.DRM.00038 Certification Directorate records keeping and archiving.

Internal Process Interfaces

Technical eligibility coordination
Phase 1: Technical familiarisation and establishment of the type certification basis
Close type certification project



Phase 1: Technical familiarisation and establishment of TCB





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Activity	Description to the process activity
Receive initial briefings for general familiarisation	The CM/ PCM will receive initial briefings for general familiarisation from the applicant.
Request TM assignment following TM selection	<p>The PCM, CM and the Head of Experts Department will coordinate for the establishing of the necessary team. The certification team may consist of EASA staff and/or staff from NAAs with which EASA has appropriate contractual arrangements.</p> <p>The PCM is accountable to the responsible EASA CM.</p> <p>The PCM will fill in Form (Assignment Form) with the team members and number of allocated hours and return it to A&P requesting the team members' assignment.</p> <p>The terms of use of the assignment form (limitations, categories of projects and threshold hours) are mentioned in A&P Work Instruction WI.APMAN.00008 Morning Meeting Terms of Reference.</p>
Receive involvement notification	<p>Each EASA team member selected to participate in the project will receive an Involvement Notification automated e-mail generated by SAP.</p> <p>Each new member will also receive an Involvement Notification. In case the work volume is amended – an e-mail is sent again to the affected team members.</p>
Record type certification project team composition	<p>The PCM will record the team composition using the EASA form FO.TC.00038 following the form's Completion Instructions.</p> <p>For projects managed by an EASA PCM, the PCM is responsible for proposing, managing and issuing this form, and for filing it.</p> <p>For projects allocated to an NAA, the CM is responsible for managing and issuing this form, upon PCM team definition from the NAA, and for filing it.</p> <p>Maintenance of the team composition form is detailed in the Certification General User Guide (former Certification Handbook) document UG.TC.00002.</p>
Approve team composition	The Record of the Certification Team Composition form FO.TC.00038 will be approved (when needed) by the CM and by the Head of Experts department. The need and the purpose of these signatures is detailed in the Certification General User Guide (former Certification Handbook) document UG.TC.00002.
Receive technical briefing from applicant	<p>The EASA certification team needs to receive thorough technical briefings from the applicant about the product in order to fully understand the design, including new used technologies and any unique or unconventional features or intended unconventional usage of the product.</p> <p>These design features, which cannot be addressed by the usual applicable certification specification, might affect the establishment of the EASA Type Certification Basis with the inclusion of dedicated Special Conditions.</p>



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Liaise with other departments	<p>During the certification process the PCM and his team will interface with other departments as necessary (Aircraft/Engine/Propeller, Equipment approval, Environmental protection, Maintenance, Operations, Legal department, Applications and Procurement Services and Finance Services departments).</p> <p>Procedures and Work Instructions relevant to the process interfaces with other departments should be followed.</p>
Receive proposal for initial TCB from applicant	<p>The applicant will propose the initial Type Certification Basis (TCB) to the PCM.</p> <p>For non-EU products the level of involvement will be shared between the Applicant, EASA and the Certification Authority based on the Bilateral Agreement or Working Arrangement.</p>
Review the proposed initial TCB	<p>On the basis of applicant's proposal and supported by the certification team the PCM shall establish the initial Type Certification Basis which consists of applicable certification specifications (airworthiness code) and environmental protection requirements and any deviations if applicable (in accordance with Articles 17 and 18 of Annex Part 21A)</p> <p>Special Conditions, where properly justified, may also form part of the Type Certification Basis. The applicant may also elect to comply to a later amendment of the applicable certification specifications which will then become part of the Type Certification Basis.</p> <p>New Special Conditions, if considered as important by the responsible EASA CM, will need to undergo a consultation process in accordance with procedures described in the the Certification General User Guide (former Certification Handbook) document UG.TC.00002.</p>
Record the initial TCB	<p>The EASA Type Certification Basis will be recorded by the PCM in a Certification Review Item (CRI) document.</p> <p>Any Deviation, Special Condition, Equivalent Safety Finding will be detailed in a separate CRI and recorded in CRI-A1 when forming part of the Type Certification Basis.</p> <p>Detailed CRI-procedures are defined in Certification General User Guide (former Certification Handbook), document UG.TC.00002</p>
Organise consultations for deviations, new important SCs and ESFs	<p>Before initiating the public consultation, the CM will organise consultations for Deviations, important new SCs and ESFs with the panel of experts and Rulemaking Department.</p> <p>The final decision shall be published in the Official Publication of the Agency.</p>
Record changes in the CRI-A1	---
Endorse the initial TCB	<p>The initial Type Certification Basis may need to be changed along the course of the certification process due to new applied technologies, introduction of design changes, discovery of unsafe conditions or compliance demonstration results.</p> <p>The responsible EASA CM will review the Type Certification Basis as proposed by the PCM and will endorse at least its initial and final content.</p> <p>The endorsement of the CM shall be traceable (e.g. recorded notes of internal meeting; internal communication; e-mail).</p>



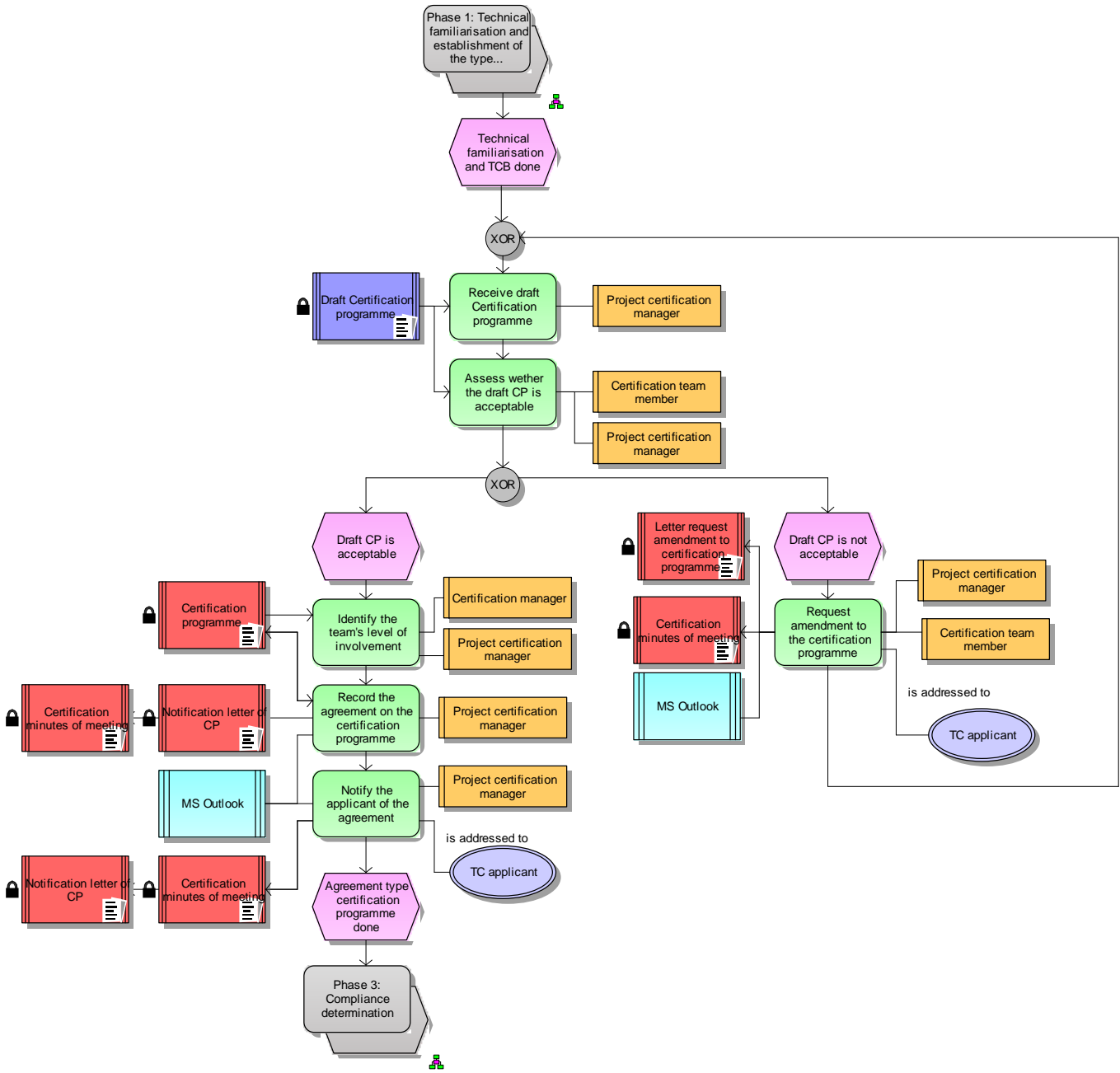
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Notify TCB	The PCM will notify the applicant of the agreed TCB, making reference to the possibility of appeal under Article 44 of the Basic Regulation as mentioned in Management Board Decision MB 12- 2007 Amending the Products Certification Procedures MB Meeting 04-2007 (11 September 2007)
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Internal Process Interfaces
Set up type certification project Phase 2: Agreement of certification programme



Phase 2: Agreement of certification programme





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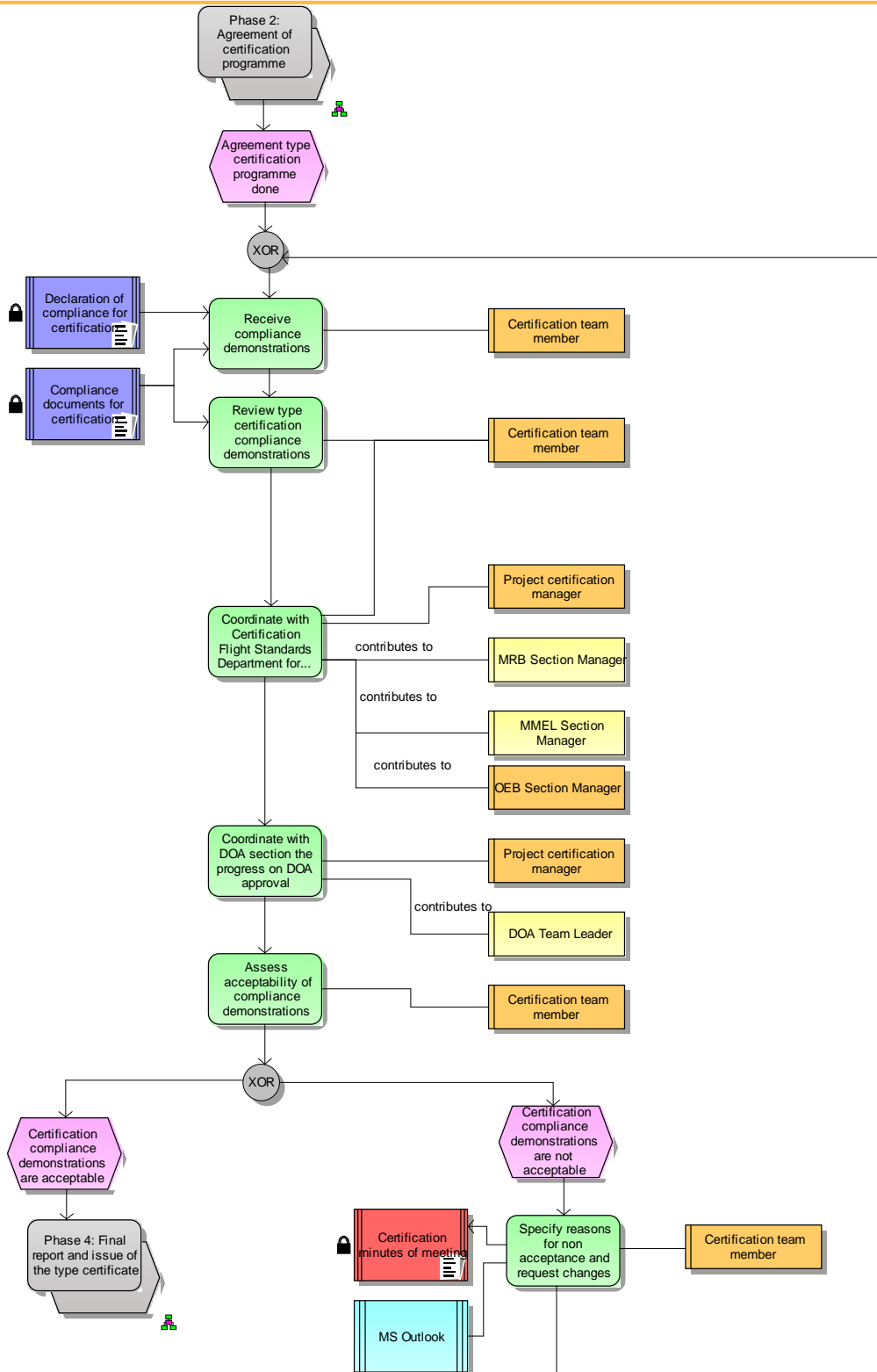
Activity	Description to the process activity
Receive draft Certification programme	<p>The applicant will submit a proposed Certification Programme which:</p> <ul style="list-style-type: none"> a) Describes the proposed means of compliance with the type certification basis to the level and with the details appropriate to the complexity of the project and accounting for the applicant DOA procedures. b) Identifies (also by reference to other documents) all the activities intended to be carried out for compliance demonstration and the related documents <p>All documents required to show compliance with the applicable requirements and their scheduled date of availability will be identified in the Certification Programme for each subject.</p>
Assess whether the draft CP is acceptable	The certification team shall review the proposed Certification Programme and advise the PCM accordingly.
Identify the team's level of involvement	<p>The PCM (and where applicable together with the CM) will identify on the Certification Programme the Team Members' Level of Involvement.</p> <p>For EP, the PCM will coordinate with the EP CM to identify on the Team Members' Level of Involvement.</p> <p>When defining the certification team involvement, full use should be made of the applicants Design Organisation Approval (DOA) privileges under Article 263 (b) of Annex Part 21A. Particularly all compliance documents to be accepted without further verification by the certification team shall be agreed with the applicant according to the scheduled level of involvement.</p>
Record the agreement on the certification programme	The PCM and his team shall discuss and agree the Certification Programme with the applicant. The PCM shall record his agreement with the Certification Programme in a traceable way (e.g. minutes of meeting; e-mail; letter)
Notify the applicant of the agreement	The PCM shall notify the applicant of his agreement on the Certification Programme including LoI in a traceable way (e.g. minutes of meeting; e-mail; letter).
Request amendment to the certification programme	Request amendment to the certification programme to include all documents via letter, e-mail, meeting minutes.

Internal Process Interfaces

Phase 1: Technical familiarisation and establishment of the type certification basis
 Phase 3: Compliance determination



Phase 3: Compliance determination





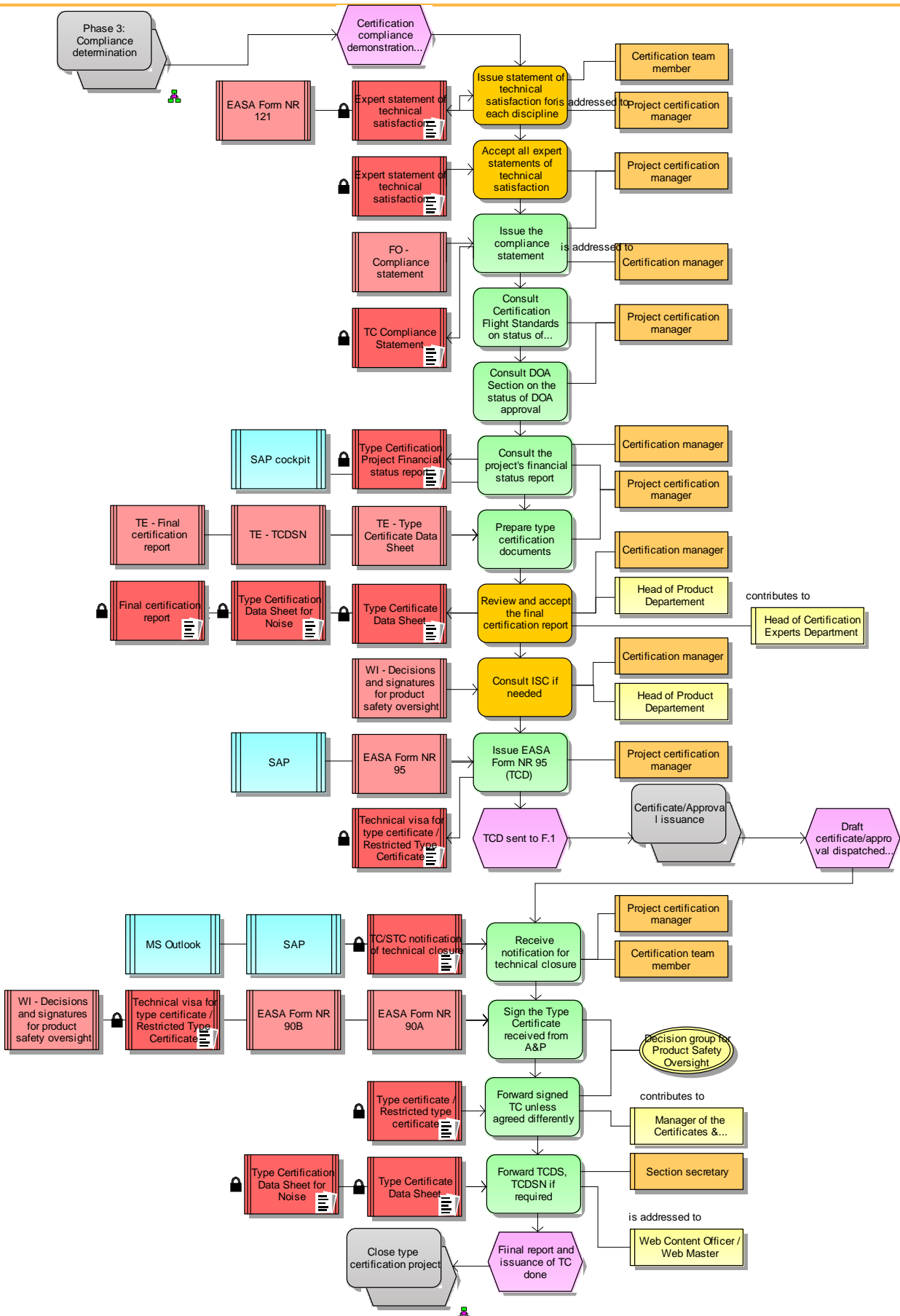
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Activity	Description to the process activity
Receive compliance demonstrations	---
Review type certification compliance demonstrations	---
Coordinate with Certification Flight Standards Department for MMEL, MRB, OEB interactions	---
Coordinate with DOA section the progress on DOA approval	Coordinate with DOA section the DOA approval in the case where the application for DOA is being processed concurrently with the design approval.
Assess acceptability of compliance demonstrations	---
Specify reasons for non acceptance and request changes	---

Internal Process Interfaces
Phase 2: Agreement of certification programme Phase 4: Final report and issue of the type certificate



Phase 4: Final report and issuance of TC





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Activity	Description to the process activity
Issue statement of technical satisfaction for each discipline	If the compliance demonstrations are acceptable, the Team Members shall issue to the PCM statements of satisfaction with the applicants' compliance declaration of the discipline involved using EASA Form NR 121, Expert Statement of Technical Satisfaction.
Accept all expert statements of technical satisfaction	---
Issue the compliance statement	On acceptance of all necessary statements of satisfaction received from the EASA certification team, the PCM shall issue a compliance statement to the responsible EASA CM confirming that the Type design of the product complies with the Type Certification Basis.
Consult Certification Flight Standards on status of MMEL, MRB, OEB interactions	---
Consult DOA Section on the status of DOA approval	The PCM shall consult with the DOA Team Leader on the status of the DOA approval, which needs to be granted ahead of the closure of the technical investigation.
Consult the project's financial status report	<p>The PCM will request from the Finance and Business Services Directorate (F&B) or to the Certification Directorate staff authorised to extract data from SAP the project's final financial status report for consultation.</p> <p>The expected content of the financial status report will include the project start date, dates/ amounts/ payment status of all sent invoices and any due invoices.</p> <p>The Accounting Department or staff of the Certification Directorate authorised to extract data from SAP will notify the responsible CM and PCM whenever the due fee remains unpaid after receipt of the second reminder and will invite the Head of Product Certification Department and the responsible CM and PCM to take part in related discussions in the Debt Recovery Committee (DRC). Further to these discussions the DRC will recommend follow-up actions to the Certification Director and to the Finance & Business Services Directorate.</p>
Prepare type certification documents	<p>The PCM, in conjunction with the Team, shall produce a report which will record the Type Design on which the type investigation process is based, the significant subjects investigated, the details of that investigation, the process followed and the conclusions regarding compliance with the Type Certification Basis.</p> <p>Certification General User Guide (former Certification Handbook), document UG.TC.00002 defines working procedures addressing the content and presentation of such Final Report.</p> <p>Note: In case of certification under a Bilateral Agreement the Final Report contains the State of Design Statement of Satisfaction with delegated compliance findings.</p> <p>Based on the Final Report, the PCM will draft the Type Certificate Data Sheet. The format and content of TC and TCDS will be defined in detailed Agency guidance.</p>
Review and accept the final	The PCM shall present the final draft report to the responsible EASA CM for



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certification report	approval. For transport category aircraft the Head of Product Department and the Head of Certification Experts Department participate to the review of the Final Certification Report.
Consult ISC if needed	In accordance with WI.TC.00036 Decisions and Signatures for Products Safety Oversight. For new CS-25 and CS-29 TCs the PCM must present the final report to the Internal Safety Committee for their review.
Issue EASA Form NR 95 (TCD)	<p>After approval of the final report the responsible PCM shall fill in the Technical Visa, EASA Form NR 95 (based on the Experts' Statements of Technical Satisfaction), sign and forward it to A&P.</p> <p>In the case of concurrent application of the design approval with a DOA approval, the PCM shall verify that the DOA approval is granted before the issuance of the Type Certificate.</p> <p>The Technical Visa is the EASA approved document on the basis of which a certificate or approval is issued and is also used to report the hours worked by the Team and missions undertaken for planning and budgetary purposes. This document enables both, the technical and administrative closure of the project.</p> <p>The Technical Visa is also forwarded to the departments supporting the administrative and financial follow-up of the projects and used, as appropriate, in the processing of invoices, the verification of payments, and at a higher level, in the budget planning/execution and closure activities.</p> <p>Before forwarding the Technical Visa to A&P, the PCM and the team members shall ensure that the applicable hours are booked under the the relevant codes in the timetracking system (CATS) and that the missions are booked under the appropriate codes in the Missions Management tool (MiMa).</p> <p>Upon receiving the completed Technical Visa from the PCM, the A&P shall ensure that all necessary steps for the administrative and financial project closure are performed.</p>
Receive notification for technical closure	Upon the registration of the Technical Visa in SAP, an automated e-mail "Notification of Technical Closure" is created and sent to the PCM and to the TM in order to inform them that the project will be available only for a limited period of time and that they should book the last hours against the project.
Sign the Type Certificate received from A&P	A&P will also prepare the TC, (EASA Form NR 90A or 90B (propellers only)) to be signed by the responsible EASA CM (or Head Of Department, Director or Executive Director).
Forward signed TC unless agreed differently	<p>The person who signed the certificate (in accordance with Work Instruction WI.TC.00036) will forward the signed TC to A&P for mailing it to the applicant (unless agreed differently with the Certification Directorate).</p> <p>The certificate will be accompanied by a transmittal letter drafted by the CM/PCM which will mention the TCHolder's rights and obligations.</p> <p>The hand over of the certificate will be coordinated with the A&P department in order to ensure that all due fees for the technical investigation have been paid by the applicant prior to receiving the certificate.</p>



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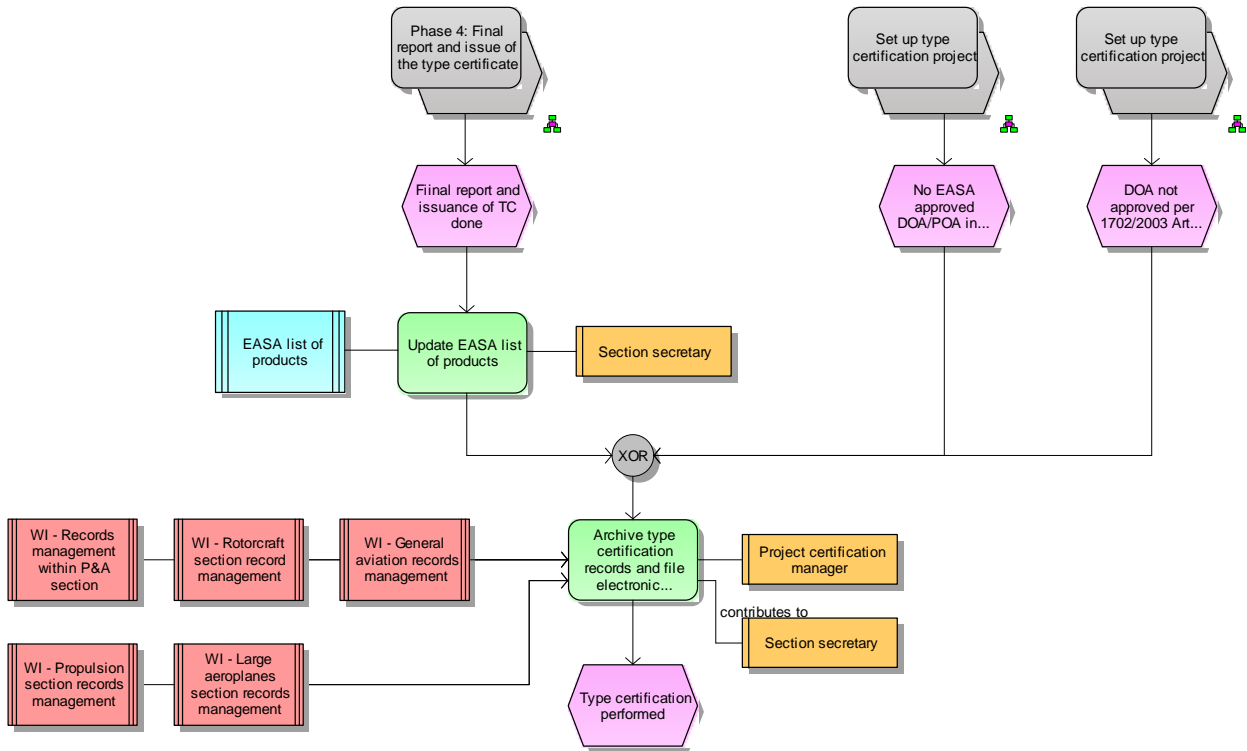
Forward TCDS, TCDSN if required	The Products Sections Secretaries, under the PCM's direction, shall forward the TCDS to the EASA Webmaster with the request to update the Agency's Internet site. They will also file the scanned copy of the signed TC together with the TCDS on the common drive under a designated folder.
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Internal Process Interfaces

Phase 3: Compliance determination
Certificate/Approval issuance
Close type certification project



Close type certification project





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Activity	Description to the process activity
Update EASA list of products	The Products Sections Secretaries, under the CM's direction, will update the EASA List of Products (Excel spreadsheet located on the common drive) with the newly approved product.
Archive type certification records and file electronic documents	The PCM together with the section Secretary shall archive the relevant records and file the electronic records (if applicable) in accordance with existing internal working instructions on records management at section level.

Internal Process Interfaces
Phase 4: Final report and issue of the type certificate Set up type certification project



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RECORDS

Appendix A : Operational Documents

Phase 1: Technical familiarisation and establishment of TCB	
Record	Activity
Certification minutes of meeting	- Record changes in the CRI-A1
TCB notification letter	- Notify TCB
TM assignment request	- Request TM assignment following TM selection
Certification minutes of meeting	- Notify TCB
Certification Review Item	- Record changes in the CRI-A1 - Endorse the initial TCB
Record of the Certification Team Composition	- Approve team composition

Phase 2: Agreement of certification programme	
Record	Activity
Notification letter of CP	- Notify the applicant of the agreement
Letter request amendment to certification programme	- Request amendment to the certification programme
Certification minutes of meeting	- Record the agreement on the certification programme - Request amendment to the certification programme - Notify the applicant of the agreement
Certification programme	- Record the agreement on the certification programme

Phase 3: Compliance determination	
Record	Activity
Certification minutes of meeting	- Specify reasons for non acceptance and request changes

Phase 4: Final report and issuance of TC	
Record	Activity
Type Certification Project Financial status report	- Consult the project's financial status report
Technical visa for type certificate / Restricted Type Certificate	- Issue EASA Form NR 95 (TCD)
Type Certificate Data Sheet	- Review and accept the final certification report
Final certification report	- Review and accept the final certification report
Expert statement of technical satisfaction	- Issue statement of technical satisfaction for each discipline
TC Compliance Statement	- Issue the compliance statement
Type Certification Data Sheet for Noise	- Review and accept the final certification report

Appendix B : External Documents

Set up type certification project	
Record	Activity
Application for Type Certificate / Restricted Type Certificate	- Process application for Type Certification - Receive type certification attribution task
Type certification initial documentation	- Process application for Type Certification - Receive type certification attribution task
SoD concurrence letter	- Process application for Type Certification - Receive type certification attribution task

Phase 1: Technical familiarisation and establishment of TCB



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Record	Activity
TC Initial briefing	- Receive initial briefings for general familiarisation
Proposal for initial TCB	- Receive proposal for initial TCB from applicant - Review the proposed initial TCB
TC briefing	- Receive technical briefing from applicant

Phase 2: Agreement of certification programme	
Record	Activity
Draft Certification programme	- Receive draft Certification programme - Assess whether the draft CP is acceptable

Phase 3: Compliance determination	
Record	Activity
Declaration of compliance for certification	- Receive compliance demonstrations
Compliance documents for certification	- Receive compliance demonstrations - Review type certification compliance demonstrations