



Airworthiness of type design

Doc #

PR.CERT.00001-002

Approval Date

02/09/2013

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PR.CERT.00001-002

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DOCUMENT CONTROL SHEET**Reference documents****a) Contextual documents**

Certification Specifications - Certification Specifications (EASA website)
Commission Regulation (EC) 2042/2003 - Commission Regulation (EC) 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
Commission Regulation (EU) 748/2012 - Commission Regulation (EU) of 3 August 2012 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 organisation
ED Decision 2012/020/R - 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 2014/116/E - On the delegation of powers of the Executive Director to certain staff members of the Agency's Certification Directorate
MB Decision 01-2011 - Decision of the Management Board of 15 March 2011 on adopting the guidelines for the allocation of certification tasks to NAAs and QEs
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)
PO.HR.00180 - Code of Conduct for the staff of EASA
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.CERT.00002 - Certification Handbook

b) Internal documents

FO.CERT.00095 - Technical visa for type certificate / restricted type certificate
FO.CERT.00096 - Technical visa for post TC design approval
TE.CERT.00037 - Certification project negative decision
TE.CERT.00074 - Certification Review Item (CRI)
TE.CERT.00075 - CRI consultation paper
TE.CERT.00076 - Final certification report
TE.CERT.00077 - List of post certification items
TE.CERT.00078 - EASA / NAA Expert Statement of Technical Satisfaction
TE.CERT.00079 - Certification Action Item (CAI)
TE.CERT.00080 - TCDS(N)
TE.CERT.00081 - CRI CRD
TE.CERT.00082 - Notification initial certification basis
TE.CERT.00083 - Notification final certification basis
UG.CERT.00002 - Certification Handbook
WI.CERT.00005 - Decisions and signatures for certification
WI.CERT.00012 - Electronic application review & task assignment
WI.CERT.00057 - Preparation and Issuance of Certification Memoranda
WI.IMS.00064 - Records management within P&A section
WI.IMS.00065 - Rotorcraft department records management
WI.IMS.00066 - General aviation & RPAS department records management





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WI.IMS.00067 - Propulsion section records management

WI.IMS.00068 - Large aeroplanes department records management

Abbreviations/Definitions

a) Abbreviations

CAI: Certification Action Item

CB: Certification Basis

CM: Responsible Certification Manager

CP: Certification Programme

CRI: Certification Review Item

DOA : Design Organisation Approval

EASA: European Aviation Safety Agency

EU: European Union

Certificates and Approvals Section

MS: Member State

NAA: National Aviation Authority

NORA: Notification Of Application Received

PCM: Project Certification Manager

QE: Qualified Entity

TCDS(N): Type Certificate Data Sheet (Noise)

WI: Work Instruction

b) Definitions

Task allocation meeting

Regular allocation meeting between Certification Directorate and Applications Management Section within the Resources and Support Directorate where a coordinated decision is taken with regard to the responsible party for the technical investigation.

Log of issues

Issue	Issue date	Change description
001	02/09/2013	This procedure consolidates, replaces and cancels the previous process descriptions for TC (PR.TC.00001), STC (PR.STC.00001), Approval of changes to TC (PR.TCCH.00001) and Approval of repair design (PR.TCCH.00002). The content of the document has been written by the Certification Procedures Working Group.
002	01/09/2014	Issue 002. Migration of PR.CERT.00001-001 in compliance with Convergence project.





INTRODUCTION

Purpose and scope

This document describes how EASA discharges its responsibilities for certification activities of aeronautical products within its remit.

This procedure describes the technical process; it excludes the purely administrative aspects.

This procedure applies to the type certification of EU aeronautical products and to changes/repairs thereto, in accordance with Annex - Part 21 to Commission Regulation (EU) No. 748/2012.

The scope of this procedure extends to Type Certificates (TC)/Restricted Type Certificates (RTC), Supplemental Type Certificates (STC), Major Changes, Minor Change Approvals, Major and Minor Repair Approvals and Stand Alone Flight Manual Changes.

The procedure does not explicitly include Validation projects, however, the principles as defined in this procedure should be followed.

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 process steps included in this procedure.

Basic Principles

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

The certification project process can generally be divided in the following phases:

> Phase 0 - Definition and agreement of the working methods with the applicant

The objective of this phase is to check applicant's eligibility and establish Team of experts.

> Phase I – Technical Familiarisation and establishment of the Initial Certification Basis

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

> Phase II – Agreement of the Certification Programme and Level of Involvement

The objective of this phase is the definition of and the agreement on the proposed means of compliance for each requirement of the Certification Basis and the identification of the Certification Team's Level of Involvement.

> Phase III – Compliance determination

The objective of this phase is to demonstrate compliance with the applicable Certification Basis and environmental protection requirements and provide the Agency with the means by which such compliance has been demonstrated and declare that compliance has been demonstrated.

> Phase IV- Technical closure and issue of the Approval

The objective of this phase is to technically close the investigation and issue the Certificate.

CRI and CAI are raised whenever it is foreseen in the procedure. However, CRI and CAI may also be raised in the course of a certification project whenever it deems necessary.

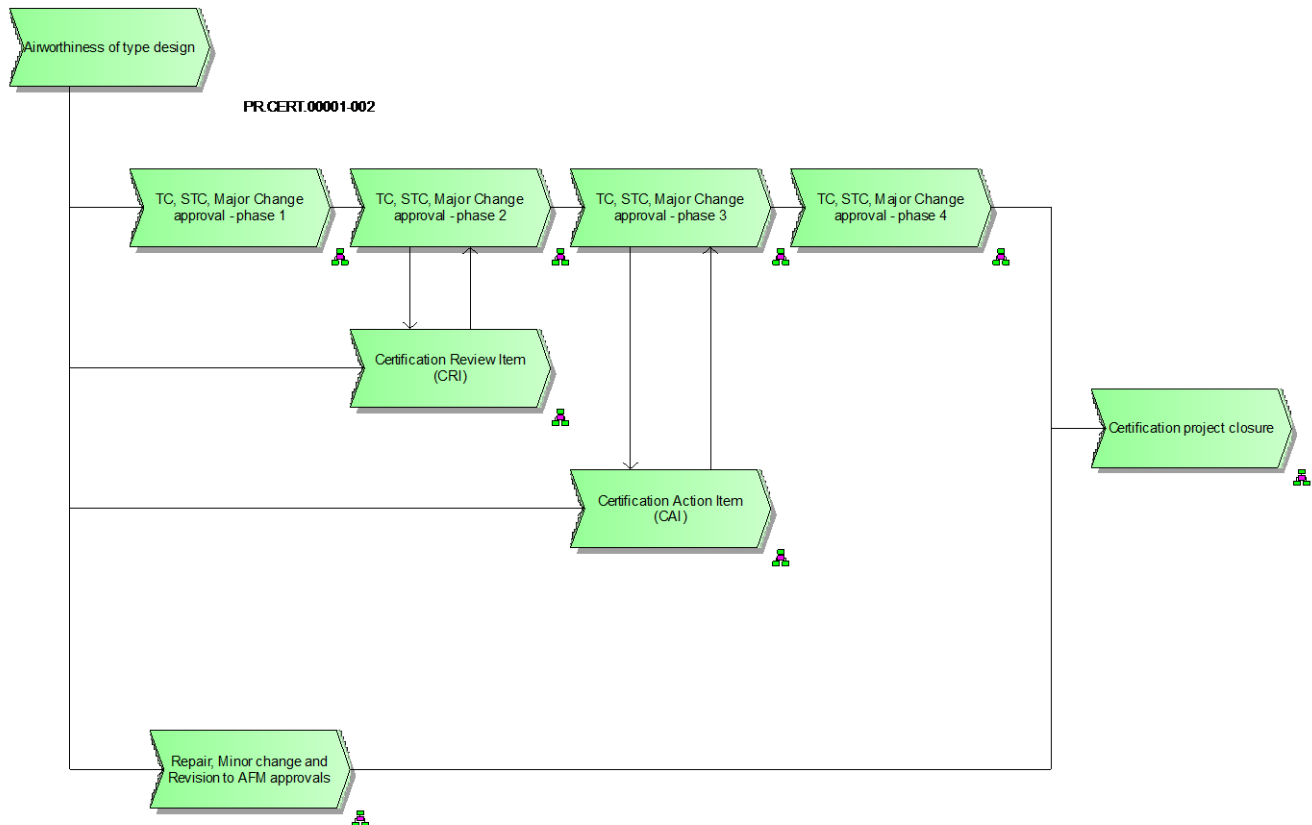
Procedure users are advised to consult the UG.CERT.00002 for additional guidance where necessary.





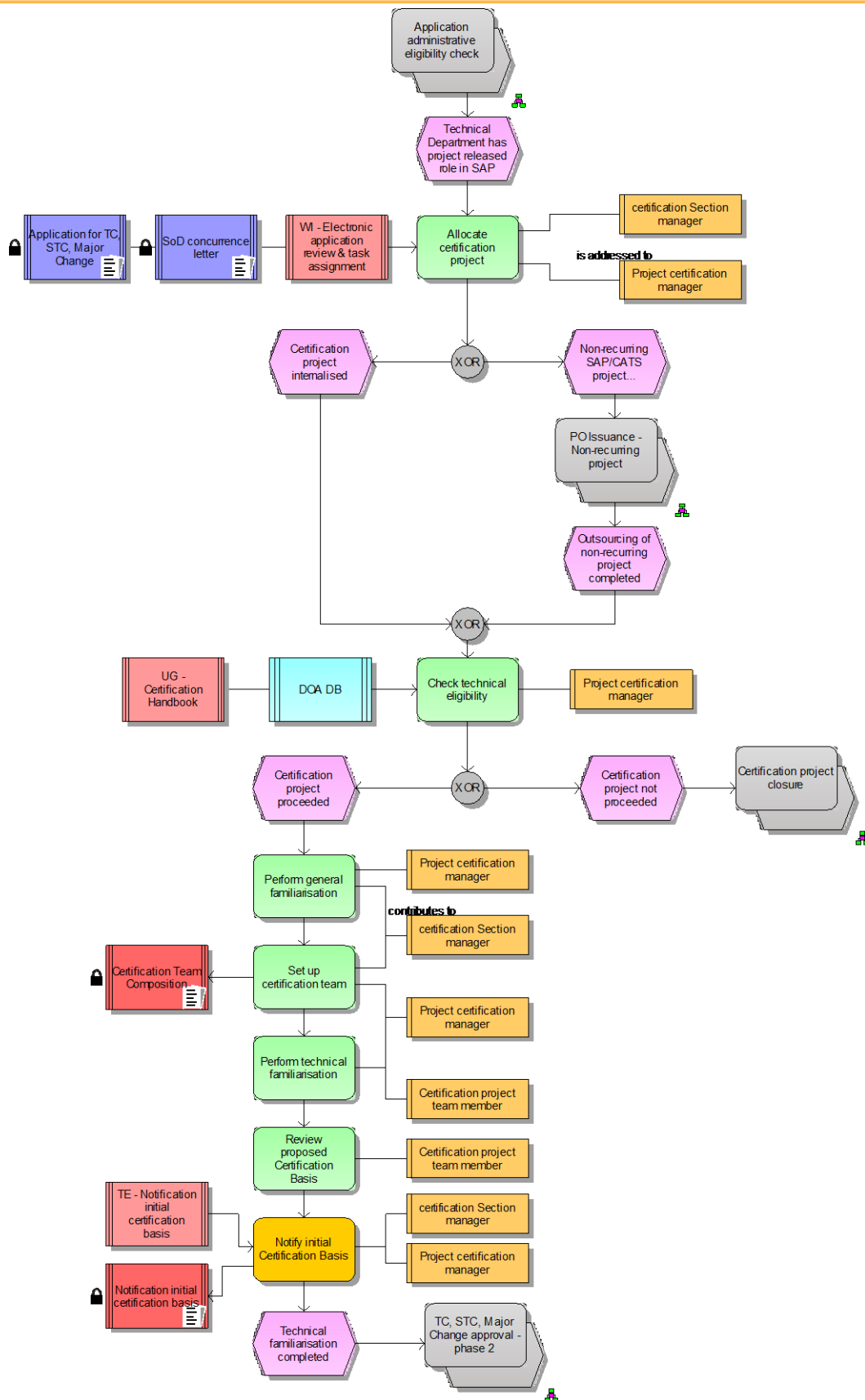
Structure of process charts

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TC, STC, Major Change approval - phase 1





Activity	Description to the process activity
Allocate certification project	Administrator of the responsible Department releases the task in SAP and provides support to the responsible Section Manager. Accreditation & Outsourcing section initiates a Purchase Order (PO) in case of task allocation to National Aviation Authority (NAA) or Qualified Entity (QE)
Check technical eligibility	<p>The application and other documents submitted by the applicant shall be reviewed. Contact the applicant and/or experts whenever necessary. Purpose of the check is to understand nature and complexity of the project. This includes checking of applicant's eligibility in accordance with 21.A.13 (TC) & or 21.A.92 (changes) or 21.A.112A (STC); checking Terms/Scope of DOA/ADOA approval (where necessary remind applicant to submit application for DOA/ADOA or extension of DOA/ADOA scope); if no application for DOA/ADOA or extension of DOA/ADOA scope in place, process cannot be proceeded.</p> <p>Checking applicability of Bilateral Agreement (BA), Working Arrangement (WA) and Implementing Procedure (IP). If there is no BA, WA, or EASA approved DOA/POA in place, the certification process cannot be proceeded.</p>
Perform general familiarisation	Applicant is requested to provide detailed descriptive information with application. This information is to be reviewed for completeness and sufficiency for decision on team and conditions. Contact applicant (preferably in writing) if further information, data, documents necessary. There is no need to contact applicant if no further information is necessary at this stage of the project.
Set up certification team	On basis of project complexity PCM is coordinating with responsible Section Manager about the necessary team size and panels and the team members. Agreed team is recorded and notified to applicant.
Perform technical familiarisation	Data should be sufficient to assess the certification basis proposed by the applicant. Data can be collected through documents provided by the applicant supplemented with briefings/meetings with the applicant whenever necessary. Concerning changes, assess design data that is necessary to assess nature of the change (significant vs. non-significant; substantial; affected areas) taking into consideration of any previous changes. If the data is not sufficient to determine the certification basis and the nature of the change (significant vs. non-significant; substantial) further data and/or further meetings can be requested from the applicant.
Review proposed Certification Basis	The proposed certification basis given by the applicant is reviewed by the Certification Team to establish the initial Certification Basis and determines the necessity to enter in the Certification Review Item (CRI) process. The PCM decides Team Member involvement.
Notify initial Certification Basis	CRIs changing the Certification Basis also need notification in accordance with MB Decision 12-2007 Article 7.3.

Internal Process Interfaces

Application administrative eligibility check
PO Issuance - Non-recurring project
Certification project closure





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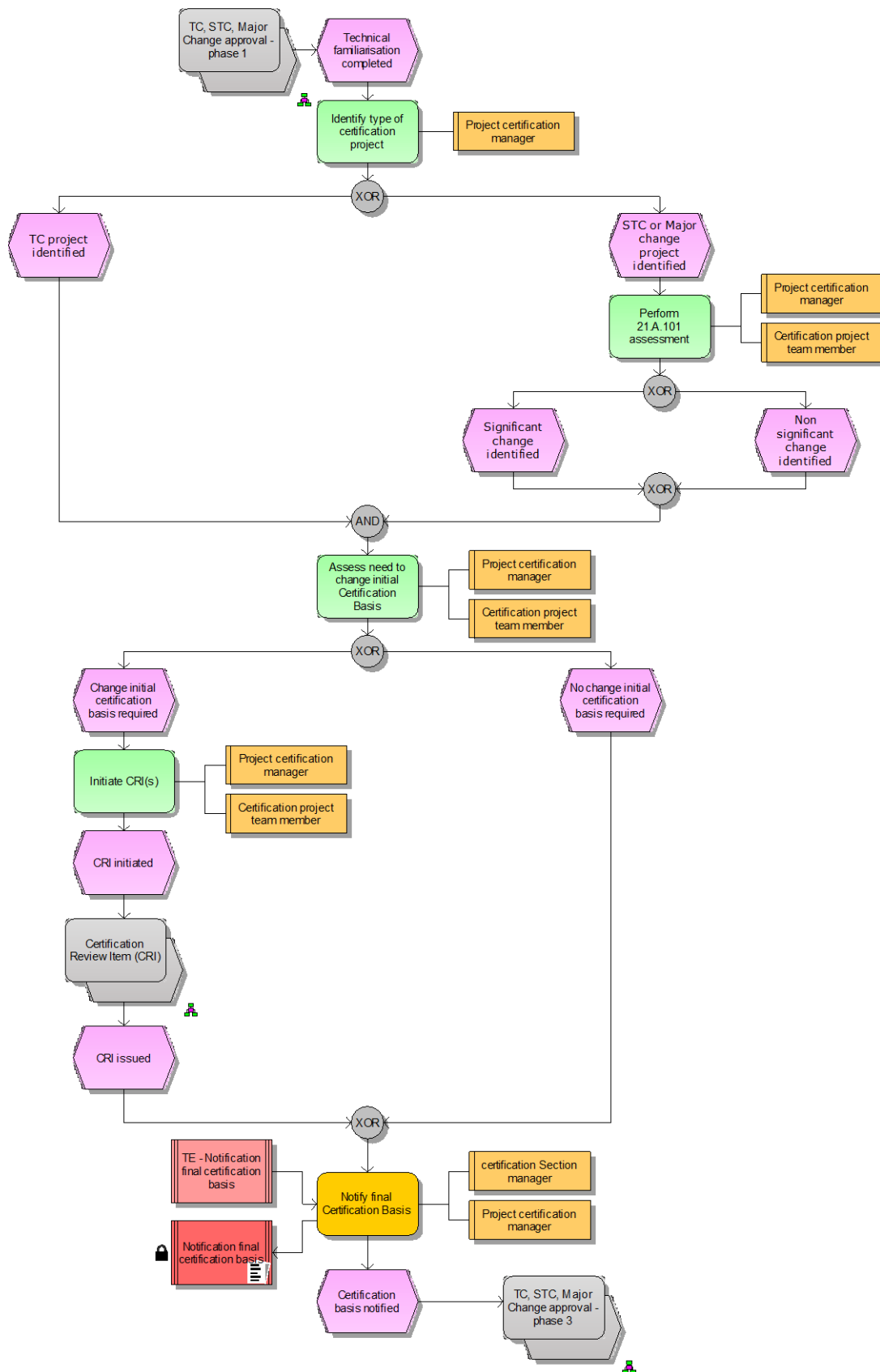
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TC, STC, Major Change approval - phase 2





TC, STC, Major Change approval - phase 2





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Activity	Description to the process activity
Identify type of certification project	---
Assess need to change initial Certification Basis	Assess the need for a new type certificate in accordance with 21.A.19 whenever necessary. Establish Certification Basis in accordance with Part 21.A.17 & 18 for TC and RTC and 21.A.101 for STC and Major Changes.
Initiate CRI(s)	---
Perform 21.A.101 assessment	Review and agreement of the applicant's assessment in line with Part 21.A.101 and Guidance Material to 21.A.101. Consider 21.A.19 when applicable.
Notify final Certification Basis	CRIs changing the Certification Basis also need notification in accordance with MB Decision 12-2007 Article 7.3. For complex projects, this step may take place at a later point in time during the certification project, e.g., prior to issuance TCDS(N).

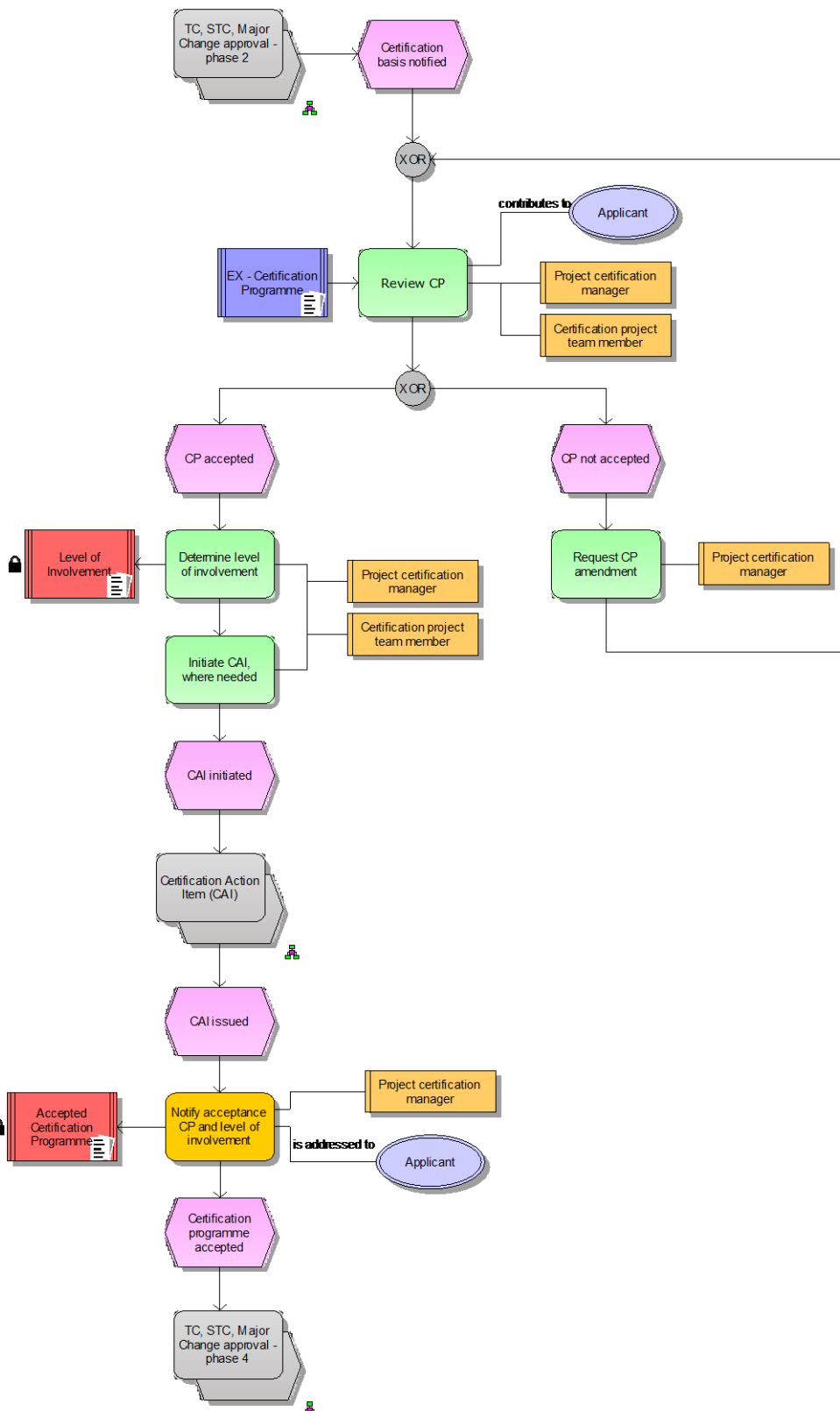
Internal Process Interfaces

TC, STC, Major Change approval - phase 1
Certification Review Item (CRI)
TC, STC, Major Change approval - phase 3





TC, STC, Major Change approval - phase 3





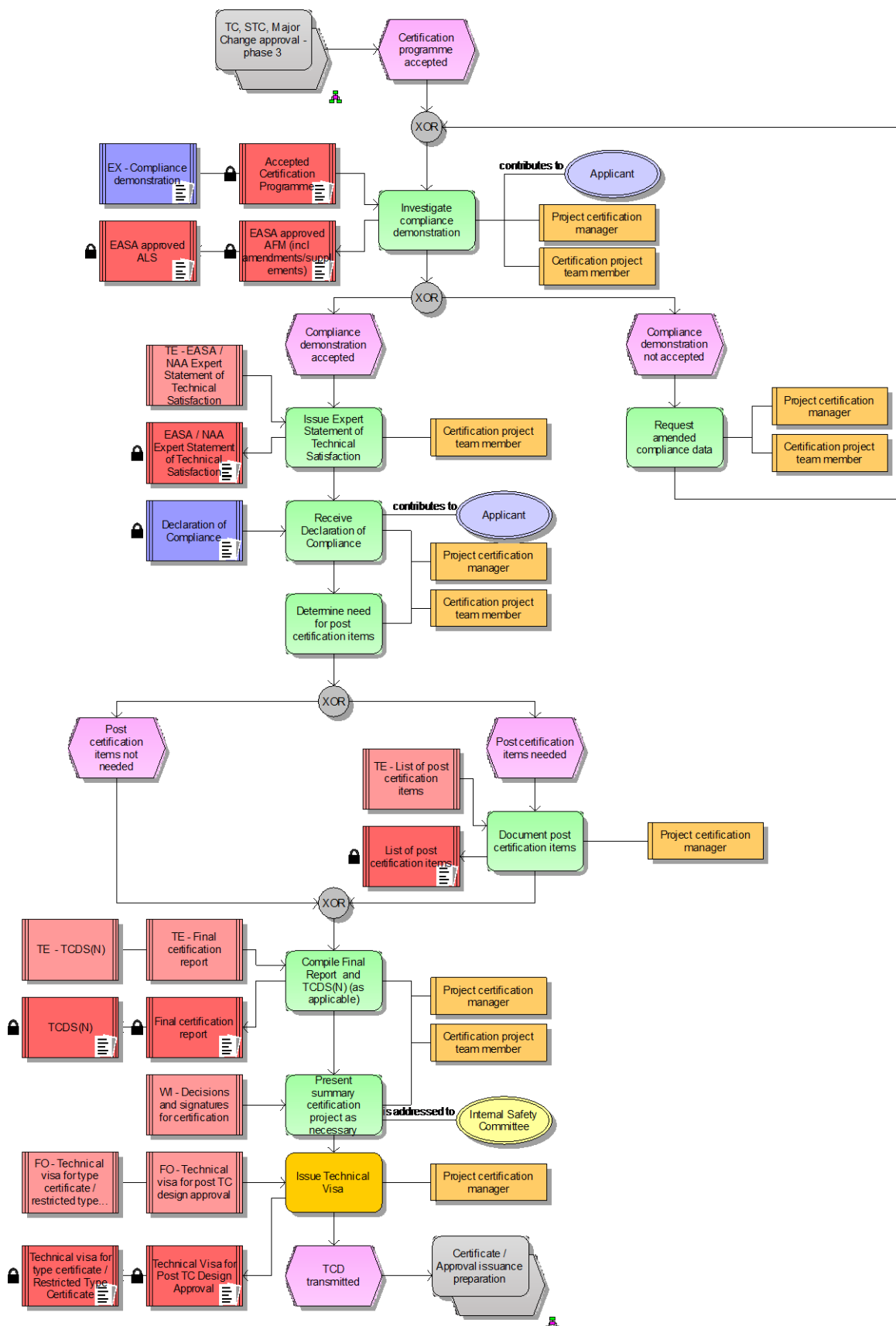
Activity	Description to the process activity
Review CP	All relevant team members should be involved in the review of the Certification Programme (CP) [incl. initial issue and amendments thereto]. Comment and/or acceptance (means no further comment) should be communicated to the PCM in writing. Compliance with 21.A.20 and AMC/GM 21.A.20 should be ensured. See further guidelines in the Certification Handbook.
Determine level of involvement	Each panel should determine its level of involvement in line with current practice.
Initiate CAI, where needed	Need can be identified by Project Certification Manager (PCM), Panel Member or applicant. Further guidelines are provided in the Certification Handbook.
Request CP amendment	The PCM consolidates team comments and communicates such to the applicant in writing. Team members may also engage in communication with the applicant but the PCM should be aware of that. PCM requests the applicant to amend the CP and provides justification/explanation whenever necessary.
Notify acceptance CP and level of involvement	Accept CP either directly through CP itself or in writing. Send accepted CP or letter/e-mail to the applicant and copy to all team members.

Internal Process Interfaces

TC, STC, Major Change approval - phase 2
Certification Action Item (CAI)
TC, STC, Major Change approval - phase 4



TC, STC, Major Change approval - phase 4





Activity	Description to the process activity
Investigate compliance demonstration	<p>Compliance demonstrations received from the applicant are the Certification Programme and compliance demonstration documents, i.e., compliance statements, calculations, assessments, test reports, etc. Other inputs to the review/witness stage of the process are the Airworthiness Code and associated guidance and interpretative material and Certification Review Items, as agreed between the applicant and the Agency.</p> <p>The compliance data is reviewed, taken the Level of Involvement into account, against the criteria of the agreed Certification Programme, the applicable Airworthiness Code and associated guidance and interpretative material as well as any criteria established in a CRI.</p> <p>Each certification team member assesses acceptability of the data. Assessment results are communicated to the applicant in writing.</p>
Issue Expert Statement of Technical Satisfaction	Each team member (or alternatively panel) issues a Expert Statement of Satisfaction to the PCM when the team member (or alternatively panel) is satisfied with the compliance demonstration.
Receive Declaration of Compliance	PCM shall verify that the applicant has issued the Declaration of Compliance.
Determine need for post certification items	Determine certification items that will not be completed before the issue of Certificate / Approval.
Request amended compliance data	In case the certification team determines that compliance demonstrations are inadequate and not acceptable, the team should inform the applicant about the reasons for the non-acceptance.
Document post certification items	---
Compile Final Report and TCDS(N) (as applicable)	For TC and RTC a Final Report should be compiled and presented to the Certification Management.
Present summary certification project as necessary	Certification Management will decide on the need to present a summary of the Certification Project to the Internal Safety Committee (ISC) i.a.w criteria laid down in Certification Handbook. Consult WI on Decisions and signatures for certification.
Issue Technical Visa	Before TV is signed check DOA Demonstration of Capability through DOA database or contact DOA TL when necessary. Forward signed TV to Applications Management Section.

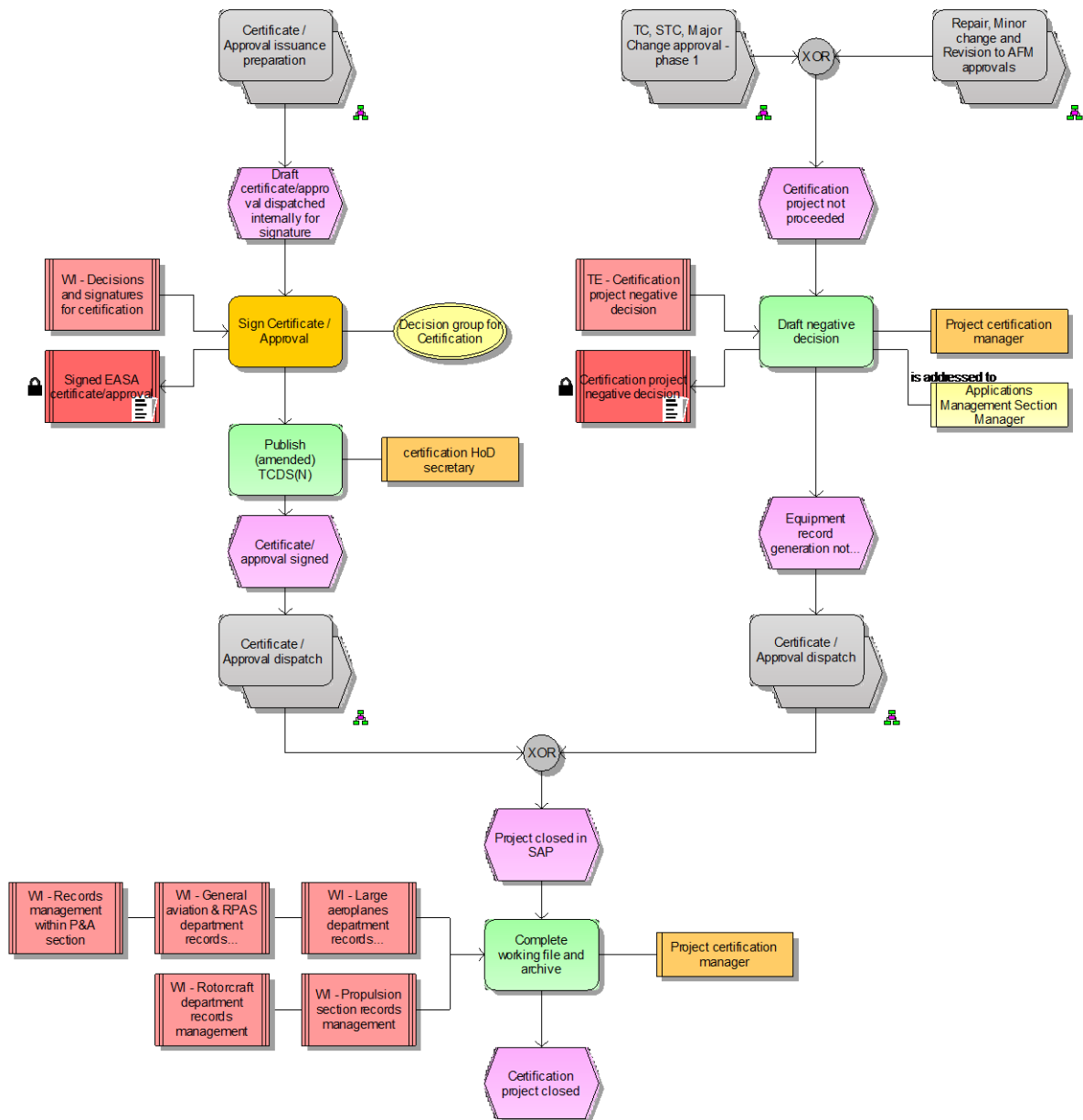
Internal Process Interfaces

TC, STC, Major Change approval - phase 3
Certificate / Approval issuance preparation





Certification project closure





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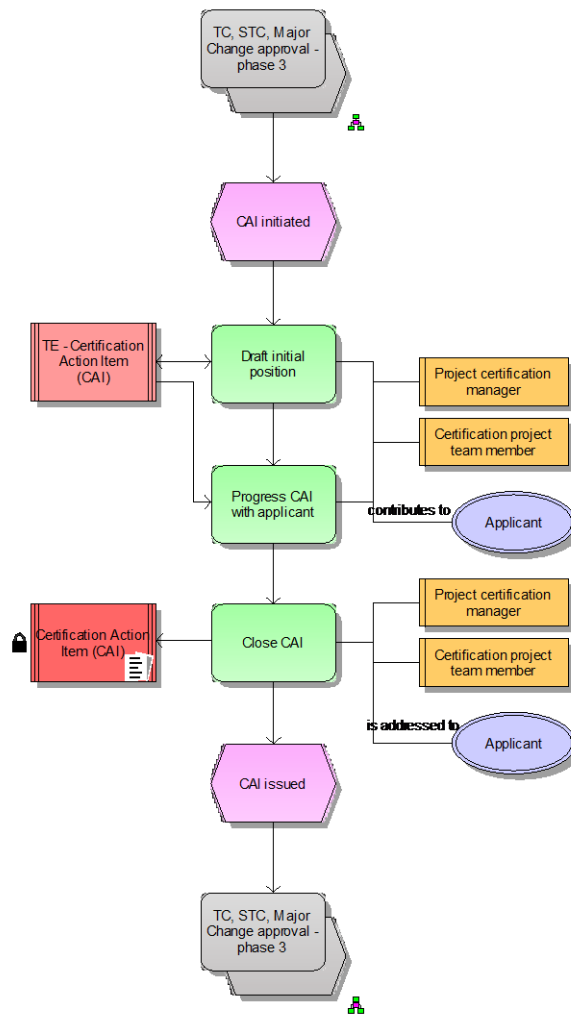
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Activity	Description to the process activity
Sign Certificate / Approval	Check plausibility before signing Certificate / Approval. For plausibility conditions refer to the Certification Handbook. The Certificate / Approval is signed by a person, other than the PCM signed the TV, having proper delegation. Consult WI on Decisions and Signatures for Certification.
Publish (amended) TCDS(N)	---
Draft negative decision	Justification shall be provided in writing. Justification should be sound supporting a negative Agency decision. Get legal support if deemed necessary. Negative Agency decision will be communicated by Applications Management Section. No need to archive, since application and negative Agency decision are retained by Applications Management Section in SAP. PCM may retain documents in working file.
Complete working file and archive	Collect and arrange all documents & records received and generated during the project under a specific project folder. Observe guidelines on 'working file' management. The PCM copies all 'legal records' to the project record folder, in line with WI on records management, and emails the Section Administrator upon completion.

Internal Process Interfaces

Certificate / Approval issuance preparation
 TC, STC, Major Change approval - phase 1
 Certificate / Approval dispatch
 Repair, Minor change and Revision to AFM approvals



**Certification Action Item (CAI)**



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Activity	Description to the process activity
Draft initial position	Panel member drafts Statement of Issue and initial position. PCM coordinates Certification Action Item (CAI) drafting and communicates formal positions to applicant.
Progress CAI with applicant	Multiple review between PCM, Panel Member and applicant until common agreement is reached (See resolution of disagreement).
Close CAI	The CAI closure shall be traceable (e.g. recorded notes of internal meeting, internal communication, e-mail). Communicate final closed CAI to the applicant in writing.

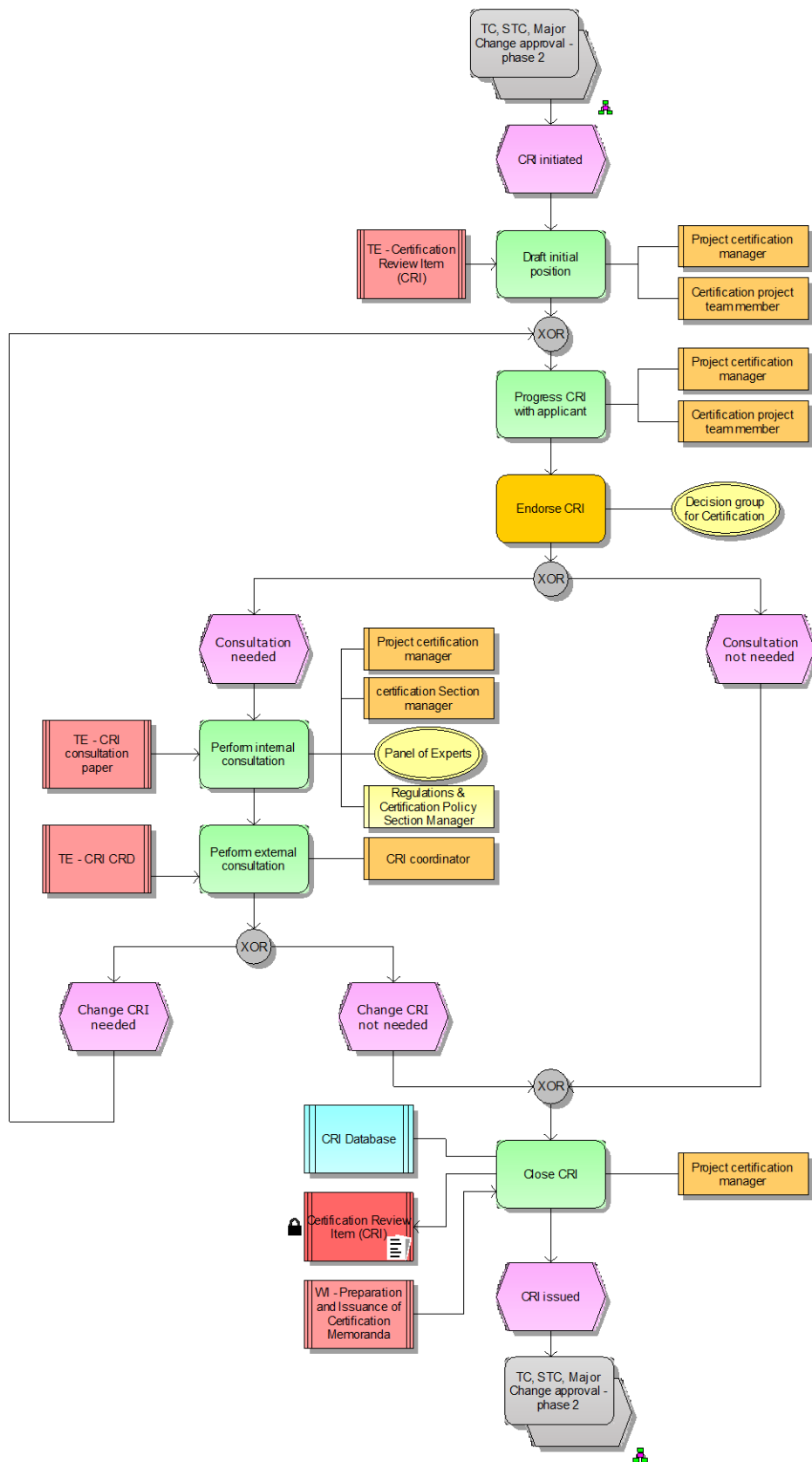
Internal Process Interfaces

TC, STC, Major Change approval - phase 3





Certification Review Item (CRI)





Activity	Description to the process activity
Draft initial position	Panel member drafts statement of issue and initial position. PCM coordinates Certification Review Item (CRI) drafting and communicates formal positions to applicant.
Progress CRI with applicant	Multiple review between PCM, Panel Member and applicant until common agreement is reached (See resolution of disagreement if required), including Primary Certifying Authority in case of Validation Project.
Endorse CRI	<p>For new TC projects and Significant Major Changes CRI A-01 shall be endorsed by the responsible Section Manager.</p> <p>Any CRI required for consultation (in accordance with Article 3.2 of MB decision 12-2007) shall be endorsed by the responsible Section Manager and Panel of Experts.</p> <p>The endorsement shall be traceable (e.g., recorded notes of internal meeting, internal communication, e-mail). In all other cases no CRI endorsement is necessary. Consult Certification Handbook for cases it is recommended to notify a CRI to internal parties.</p>
Perform internal consultation	PCM Coordinates with relevant stakeholders for agreement to CRI text.
Perform external consultation	Refer to MB Decision 12-2007 for the cases public consultation is necessary. CRI Coordinator publishes CRI text for Public Consultation. PCM, Team Member and CRI Coordinator produce Comment Response Document (CRD).
Close CRI	<p>The CRI closure shall be traceable (e.g. recorded notes of internal meeting, internal communication, e-mail). Communicate final closed CRI to the applicant. The CRI shall be signed by the PCM to indicate the closed status.</p> <p>For all new CRIs the concerned certification panel/expert and/or PCM should review the CRI content to decide on the need to establish a new (or update existing) Certification Memorandum.</p>

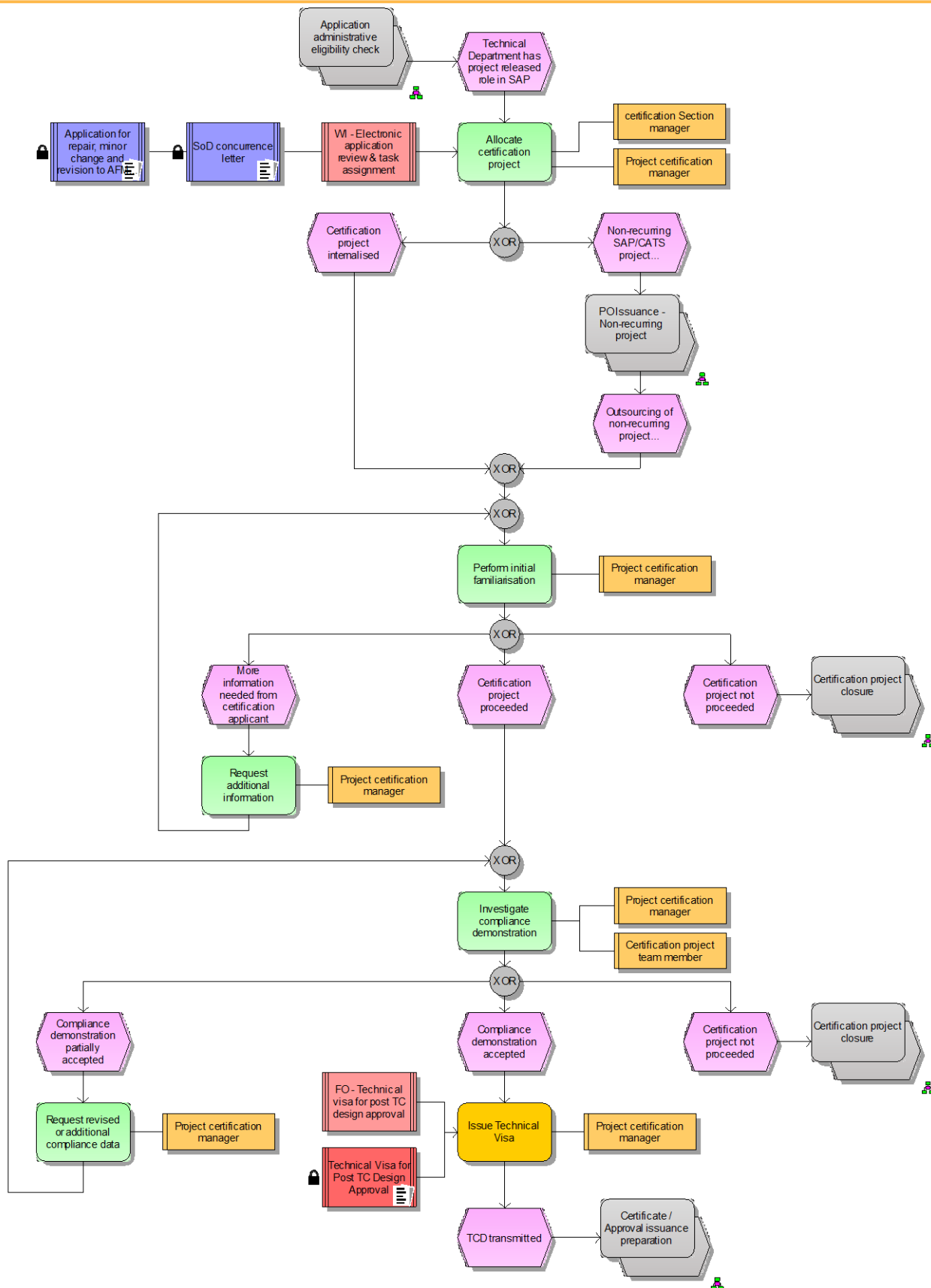
Internal Process Interfaces

TC, STC, Major Change approval - phase 2





Repair, Minor change and Revision to AFM approvals





Activity	Description to the process activity
Allocate certification project	Administrator of the responsible Department releases the task in SAP and provides support to the responsible Section Manager. Accreditation & Outsourcing section initiates a Purchase Order (PO) in case of task allocation to National Aviation Authority (NAA) or Qualified Entity (QE)
Perform initial familiarisation	PCM to confirm classification and need for support. In case of major repair check eligibility in accordance with 21.A.432(a) (remind applicant to submit application for extension of DOA scope); checking applicability of Bilateral Agreement (BA), Working Arrangement (WA) and Implementing Procedure (IP). For further guidelines refer to Certification Handbook.
Request additional information	PCM to contact applicant for further data and information.
Investigate compliance demonstration	Review certification programme or any applicable compliance document as appropriate. The PCM may involve experts checking certification programme or any applicable compliance document as necessary.
Request revised or additional compliance data	PCM to contact applicant for further / revised data.
Issue Technical Visa	In case of major repair ensure that Declaration of Compliance submitted by the applicant in line with 21.A.437 before Technical Visa (TV) is issued. Forward signed TV to Applications Management Section.

Internal Process Interfaces

Application administrative eligibility check
 PO Issuance - Non-recurring project
 Certification project closure
 Certificate / Approval issuance preparation





RECORDS

Appendix A : Operational Documents

TC, STC, Major Change approval - phase 1	
Record	Activity
Notification initial certification basis	- Notify initial Certification Basis
Certification Team Composition	- Set up certification team

TC, STC, Major Change approval - phase 2	
Record	Activity
Notification final certification basis	- Notify final Certification Basis

TC, STC, Major Change approval - phase 3	
Record	Activity
Level of Involvement	- Determine level of involvement
Accepted Certification Programme	- Notify acceptance CP and level of involvement

TC, STC, Major Change approval - phase 4	
Record	Activity
Technical visa for type certificate / Restricted Type Certificate	- Issue Technical Visa
Final certification report	- Compile Final Report and TCDS(N) (as applicable)
EASA / NAA Expert Statement of Technical Satisfaction	- Issue Expert Statement of Technical Satisfaction
Technical Visa for Post TC Design Approval	- Issue Technical Visa
EASA approved ALS	- Investigate compliance demonstration
List of post certification items	- Document post certification items
TCDS(N)	- Compile Final Report and TCDS(N) (as applicable)
EASA approved AFM (incl amendments/supplements)	- Investigate compliance demonstration

Certification project closure	
Record	Activity
Certification project negative decision	- Draft negative decision
Signed EASA certificate/approval	- Sign Certificate / Approval

Certification Action Item (CAI)	
Record	Activity
Certification Action Item (CAI)	- Close CAI

Certification Review Item (CRI)	
Record	Activity
Certification Review Item (CRI)	- Close CRI





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Appendix B : External Documents

TC, STC, Major Change approval - phase 1	
Record	Activity
Application for TC, STC, Major Change	- Allocate certification project
SoD concurrence letter	- Allocate certification project

TC, STC, Major Change approval - phase 4	
Record	Activity
Declaration of Compliance	- Receive Declaration of Compliance

Repair, Minor change and Revision to AFM approvals	
Record	Activity
SoD concurrence letter	- Allocate certification project
Application for repair, minor change and revision to AFM approval	- Allocate certification project

