

# Technical Implementation Procedures

For

Airworthiness and Environmental Certification

Between the

Federal Aviation Administration of the United States of America

and the

European Union Aviation Safety Agency

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## Section 1 General

These Technical Implementation Procedures are for Design Approvals, Production Activities, Export Airworthiness Approvals, Post Design Approval Activities and Technical Support.

### 1.1 Authorization

These Technical Implementation Procedures (TIP) are authorized by Article 5 and Annex 1 of the Agreement between the Government of the United States of America (U.S.) and the European Union (EU) on Cooperation in the Regulation of Civil Aviation Safety (“the Agreement”). In accordance with Article 5 of the Agreement, the Federal Aviation Administration (FAA) and the European Aviation Safety Agency (EASA) have determined that the aircraft certification systems of each Authority for the design approval, design related operational approval, production approval, airworthiness approval, environmental protection compliance, and continuing airworthiness of the civil aeronautical products and articles identified in this document, are sufficiently compatible in structure and performance to support these procedures.

### 1.2 Purpose

The purpose of the TIP is to define the procedures for approving the design of civil aeronautical products and articles eligible for import into the U.S. and the EU, the process for obtaining eligibility for import, and the means for providing continued support of those civil aeronautical products and articles after import.

### 1.3 Principles

- 1.3.1 The TIP is based on continuous communication and mutual confidence in the FAA’s and EASA’s technical competence and ability to perform regulatory functions within the scope of the TIP. The FAA and EASA, when acting as the Authority for the importing State, shall give the same validity to the certification made by the other, as the Authority for the exporting State, as if they were made in accordance with its own applicable laws, regulations, and requirements. When a recommendation for a finding is made by one Authority in accordance with the laws and regulations of the other Authority and the TIP, that recommendation is given the same validity as if it were made by the other Authority. Therefore, the fundamental principle of the TIP is to maximize the use of the exporting Authority’s aircraft certification system to ensure that the airworthiness and environmental protection requirements of the validating Authority are satisfied.
- 1.3.2 The FAA and EASA agree that all information, including technical documentation, exchanged under the TIP will be in the English language. EASA will ensure that any translated documents will have the same legal interpretation as the original documents.
- 1.3.3 The FAA and EASA mutually recognize each other’s aircraft certification systems (including the related operational aspects) which includes EASA’s recognition of FAA’s designee system and FAA recognition of EASA’s design and production organization system.
- 1.3.4 The FAA and EASA understand there may be occasional situations where, upon prior notification to the other Authority, either Authority may interact directly with a non-governmental individual who is recognized by the other Authority as either an individual designee (FAA) or authorized representative of an organizational designee (FAA) or a

member of a design or production organization (EASA). Unless otherwise agreed for specific projects the FAA and EASA will not routinely notify the other of such individuals' activities in advance of any of those persons traveling to the U.S. or the EU to witness tests, to perform conformity inspections, and/or to make determinations of compliance.

## 1.4 Changes in the Authority Aircraft Certification Systems

- 1.4.1 The TIP is based upon sufficiently compatible aircraft certification systems being in place at the time of signing. Therefore, the FAA and EASA will keep each other informed of significant changes within those systems, such as:
- 1.4.1.1 Statutory responsibilities.
  - 1.4.1.2 Organizational structure (e.g., key personnel, management structure, technical training, office location);
  - 1.4.1.3 Revisions to airworthiness, certification, environmental protection standards and procedures, and associated policies and guidance.
  - 1.4.1.4 Production quality system oversight, including oversight of out-of-country production of products and articles; or
  - 1.4.1.5 Delegated functions or the kinds of organizations to which functions have been delegated.
- 1.4.2 The FAA and EASA recognize that revision by either Authority to its regulations, policies, procedures, statutory responsibility, organizational structure, production quality system oversight, or delegation system may affect the basis and scope of the TIP. Accordingly, upon notice of such changes by one Authority, the other Authority may request a meeting to review the need for amendment to the TIP.
- 1.4.3 To the extent practicable and in accordance with applicable laws, the FAA and EASA will notify each other of relevant draft policy and guidance material prior to issuance of policy and guidance and will consult on new article performance standards or proposed changes to these standards.

## 1.5 Governance

As required by the Agreement, the FAA Aircraft Certification Service and EASA Certification Directors have established the Certification Oversight Board (COB), consisting of management representatives from each Authority. The COB shall be responsible for the effective functioning, implementation, and continued validity of these procedures, including revisions and amendments thereto. The COB shall establish its own rules of procedure, its membership, and meeting schedules. The frequency of these meetings will be mutually agreed upon by the COB and will depend on the number and significance of the issues to be discussed between the authorities. These meetings will also be used to discuss and harmonize any major differences in standards and their interpretation that are identified during certification projects between the FAA and EASA. The COB will invite management from the responsible policy office to participate on all discussions focused on operational issues (e.g. Maintenance Review Board and Operational Suitability Data).

- 1.5.1 In order to achieve the objectives of the Bilateral Enhancement Roadmap to reduce the level of involvement of the validating authority, the following metrics shall be established by both parties:

1.5.1.1 For Basic projects, the Validating Authority (VA) shall record:

- (a) The number of projects received from the Certifying Authority (CA) classified as Basic; and
- (b) The time between receipt of application from the CA and the VA's issuance of its approval.

1.5.1.2 For Non-Basic projects, the VA shall record:

- (a) The number of projects received from the CA classified as Non-Basic;
- (b) The working hours spent by the VA to issue its approval. In order to measure the reduction of involvement, the baseline shall be established, shared and agreed upon by both parties;
- (c) In addition to (a) and (b), for Non-Basic TC projects:
  - (1) Validation familiarization flight test hours;
  - (2) Operational evaluation flight test hours;
  - (3) The number of new Certification Review Items (CRIs) or Issue Papers (IPs) issued by the VA; and
- (d) The time between receipt of application from the CA and the VA's issuance of its approval.

1.5.2 The COB shall annually review the metrics.

## 1.6 Continued Maintenance of Confidence

### 1.6.1 Introduction

1.6.1.1 To avoid unnecessary duplication of efforts, the FAA and EASA need to establish and maintain confidence in each Authority's technical ability to make recommendations for findings to the other Authority. At the same time consistent application by the FAA, EASA and the EU member state Aviation Authorities (AA) of the Agreement in all areas covered by Annex 1 of the Agreement has to be ensured as part of the COB mandate.

1.6.1.2 The general principles guiding the development and implementation of an oversight model that monitors each other's system and technical competency, health in the different areas covered by Annex 1 of the Agreement, and at the same time promotes continued understanding and compatibility with each other's systems, are described hereafter.

### 1.6.2 General Principles

1.6.2.1 In order to maintain confidence in each other's system and promote continued understanding and compatibility with each other's systems with regards to the areas covered by Annex 1 of the Agreement, the FAA and EASA shall establish an oversight model covering at least the following elements:

- (a) A desktop sampling system to verify approvals and findings post-validation. The sampling system should include provisions for optional sampling visits based on the results of the desktop exercise;

- (b) Sharing of relevant information on standardization and quality management activities; and
- (c) When deemed necessary by the COB establishment of a participation program of the FAA as an observer in EASA standardization inspections or EASA internal quality audits (EU), and of EASA as observer FAA internal quality audits (U.S.).

1.6.2.2 As part of the continued maintenance of confidence in each other's system, the FAA and EASA will develop procedures to share and exchange information regarding airworthiness and environmental protection standards, certification systems, quality management and standardization systems.

1.6.2.3 When developing the procedures to share information between EASA and the FAA (e.g., production, MRB, TSO/ETSO) the following elements should be addressed:

- (a) Defining the relevant data to be shared/ exchanged between EASA and the FAA;
- (b) Early identification of concerns by either EASA or the FAA;
- (c) Steps for EASA and the FAA to work together to evaluate the concerns; and
- (d) Agreement on how the concerns will be addressed to assure appropriate level of compliance, safety, and environmental protection (EP).

### 1.6.3 Certification Activities

EASA and the FAA shall establish a sampling system to check that the Agreement is being implemented by both parties in accordance with its terms and in a manner consistent both in the U.S. and in the EU.

Results of those sampling audits should support discussions between the CA and VA in order to make decisions regarding revisions to the TIP, to update the Safety Emphasis Items (SEI) list, the list of Environmental Protection Basic/ Non-Basic examples, and for training requirements needed for personnel involved in validation projects. The results should not be used to question a previously issued certificate/ approval unless an unsafe condition or a non-compliance with the Environmental Protection requirements is identified.

#### 1.6.3.1 Basic Classifications of design changes, STCs and TCs.

CA approvals that are subject to Streamlined Validation shall be checked through audits by the VA. Implementation of a desktop sampling audit system will allow post approval check by the VA of the CA classifications and ensure common understanding of the Basic/ Non-Basic criteria and non-significant classification. The audits shall be done at the VA's premises and does not need coordination with the CA to complete the audit. However, at the VA's request, the CA will provide the complete application package to the VA so that the VA can assess compliance to the TIP for the sampled projects.

#### 1.6.3.2 Approvals accepted without review

CA approvals that are accepted by the VA without issuance of its own approval (refer to "Acceptance" at paragraph 3.2) shall be subject to sampling audits by the VA on an annual basis. To support the VA audits, the CA shall provide a list of approvals subject to acceptance by the VA. It shall cover all approvals covered by paragraph 3.2. From the CA's list, the VA will select an appropriate number of projects for desktop review. The CA will provide appropriate data as requested by the VA so that the VA can assess compliance to the TIP.



#### 1.6.4 Production

1.6.4.1 EASA and FAA shall establish a sampling system of production systems in accordance with paragraph 1.6.2.1(a).

1.6.4.2 Findings resulting from the sampling system audits performed by the Authority, or a Technical Agent shall be shared with the other Authority or Technical Agent. Resolution and follow-up of these findings shall also be agreed upon between EASA and FAA. The results of the audits will be presented yearly during the COB meetings. Any concerns deriving from the results obtained during the audits are to be discussed during the COB meetings.

#### 1.6.5 Maintenance Review Board (MRB)/ Maintenance Type Board (MTB)

1.6.5.1 EASA and FAA shall establish a sampling system, using selected MRB/ MTB programs as samples, to check that Acceptance is being implemented by both parties in accordance with its terms and in a consistent manner in the U.S. and in the EU. The established sampling system shall include provisions to perform optional sampling visits at Authority level.

1.6.5.2 Results from sampling audits performed by either EASA (or AA) or the FAA shall be shared with the other. Results that require resolution or follow-up activity shall be agreed between EASA and FAA. The results of the sampling audits will be presented yearly during the COB and Joint Maintenance Coordination Board (JMCB) meetings. Any concerns deriving from the results obtained during the sampling audits are to be discussed during the COB and JCMB meetings.

### 1.7 Reserved

### 1.8 Applicable National Requirements, Procedures and Guidance Material

1.8.1 The implementation of the TIP is supported by policy and guidance documentation issued by each Authority, which are referenced in Appendix B. If conflicts are found between existing policy and guidance and the TIP, the TIP will take precedence. In these cases, any conflict must be immediately documented and presented to the appropriate Certification Authority Group (CAG) identified in 1.9.3 to determine the course of resolution.

1.8.2 The FAA's procedures and standards for product airworthiness and environmental protection certification include, but are not limited to, Title 14 of the Code of Federal Regulations (14 CFR), parts 21, 23, 25, 26, 27, 29, 31, 33, 34, 35, and 36. The FAA also uses European Aviation Safety Agency (EASA) Certification Specifications (CS)-22, CS-VLA (Very Light Airplanes), Joint Aviation Requirements (JAR)-22, and JAR-VLA for some special class aircraft. Guidance material, policy, and procedures are contained in FAA Advisory Circulars, Airworthiness Directives, Orders, Notices, and Policy Memoranda.

Note: Under Incorporation by Reference, US requirements and guidance for environmental protection certification (14 CFR parts 34 and 36), as applicable, make direct reference to parts of ICAO Annex 16, Volumes I and II and the associated International Civil Aviation Organization (ICAO) Environmental Technical Manual.

1.8.3 The EU requirements for product airworthiness and environmental protection certification are contained in regulation (EU) 2018/1139 of the European Parliament and of the Council of 04 July 2018(including all subsequent amendments), Commission Regulation (EU) 748/2012,

(including all subsequent amendments and hereafter referred to as EASA Part 21). EASA also uses Certification Specifications (CS 22, 23, 25, 26, 27, 29, 31, 34, 36, CO<sub>2</sub>, APU, E, ETSO, LSA, P, VLA, VLR, STAN, ACNS, AWO and OSD related CSs), Airworthiness Directives, Acceptable Means of Compliance (AMC), Guidance Material, and Certification Memoranda.

Note: EU requirements and guidance for environmental protection certification make direct reference to ICAO Annex 16, Volumes I, II and III and the associated ICAO Environmental Technical Manual.

## 1.9 Interpretations and Resolution of Conflicts between the FAA and EASA

- 1.9.1 In the case of conflicting interpretations by the FAA and EASA of the laws, airworthiness or environmental protection regulations/ standards, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under the TIP, the interpretation of the Authority whose law, regulation, standard, requirement, or acceptable means of compliance is being interpreted shall prevail.
- 1.9.2 The FAA and EASA agree to resolve issues through consultation or any other mutually agreed-upon means. Every effort should be made to resolve issues at the lowest possible level before elevating issues to higher management. To resolve conflicts, the FAA and EASA shall use the processes listed in paragraphs 1.9.3 and 1.9.4.
- 1.9.3 Resolution of Conflicts Process
  - 1.9.3.1 When an FAA Project Manager (PM) and an EASA Project Certification Manager (PCM) cannot agree on an issue, the issue shall be raised to their respective managers for resolution. If the managers cannot reach agreement, the issue will be raised to the next level of management for resolution. This process shall continue up through one level of management below the COB. If resolution has not been achieved by this point, the issue should be raised to the COB. The COB may choose to address the issue directly, or may task the issue to the responsible FAA and EASA representatives of the Certification Authorities Group (CAG) under the Certification Management Team (CMT).
  - 1.9.3.2 The FAA and EASA representatives on the CAGs should be utilized whenever possible to resolve issues that could lead to standardization or harmonization of policy and help to prevent the issue from arising on future projects. The FAA and EASA representatives on the CAGs should work to provide harmonized feedback to the PM and PCM on the application of regulatory or guidance material applicable to the specific project without delaying the issuance of the approval.
  - 1.9.3.3 If the issue is not appropriate for the FAA and EASA representatives of the appropriate CAG, the issue can be elevated to the COB.
  - 1.9.3.4 Issues elevated to the COB will be reviewed and a determination will be made on how to address the conflict.
- 1.9.4 Issues that are worked through the resolution of conflicts process between the FAA and EASA should be evaluated to determine if coordination to the CMT is appropriate. The CMT consists of the FAA, EASA, Transport Canada Civil Aviation and the Brazilian Agência Nacional de Aviação Civil and is chaired by the Directors of each Authority's certification group. Coordination to the CMT should be considered if resolution of the issue would help to harmonize how all four Authorities address the issue in a consistent manner on future

projects. Where harmonization is not possible, the differences should be clearly identified. The CMT strives to work certification issues common to all four Authorities in a collaborative manner to provide harmonized solutions that work for each Authority. Therefore, when a certification issue requires resolution at the policy level to standardize or harmonize among all four Authorities, it is recommended that the issue be elevated through the CMT structure.

## 1.10 Notification of Investigation or Enforcement Action

Both the FAA and EASA agree to mutual cooperation and mutual assistance in the investigation of any alleged or suspected violation of the FAA or EASA laws or regulations. Both Authorities will cooperate in sharing information needed for any investigation or enforcement action, including its closure.

## 1.11 Revisions, Amendments, and Points of Contact

1.11.1 The designated focal points for the TIP are:

1.11.1.1 For the FAA: Aircraft Certification Service International Office (AIR-40); and

1.11.1.2 For EASA: the Office of the Certification Director (CT0.1)

1.11.2 Contact information for the identified offices are listed in Appendix A.

1.11.3 The TIP may be amended by mutual consent of the FAA and EASA. Such amendments will be made effective by signature of the duly authorized representative of the FAA and EASA.

1.11.4 Reserved

1.11.5 All of the approvals issued under previous TIP remain valid.

## 1.12 Reserved

## 1.13 Definitions

For the purpose of the TIP, the following definitions are provided. Additional definitions can be found in Article 1 of the Agreement.

Definition	Description
Acceptance	The Certifying Authority (CA) has granted an approval or finding of compliance and the Validating Authority (VA) will accept that approval or finding as satisfactory evidence that a product and/ or design complies with the Validating Authority's (VA's) applicable standards and will not issue its own equivalent approval.
Acoustical Change	For EASA, a change in the type design of an aircraft or aircraft engine that may result in a change (increase or decrease) in the noise level(s) of that aircraft beyond the no-acoustical change limits as defined in ICAO Doc 9501 Vol. I.  For the FAA, an acoustical change is defined by 14 CFR 21.93.

Definition	Description
Airworthiness Directive (AD)	Legally enforceable rules issued by the FAA in accordance with 14 CFR part 39 or mandatory airworthiness action issued by EASA in accordance with Part 21.A.3B.
Airworthiness Standards	Regulations, requirements, airworthiness codes or other certification specifications governing the design and performance of civil aeronautical products and articles.
Amended Type Certificate	A design change that requires an amendment to the type certificate (TC) and to the Type Certification Data Sheet (TCDS).
Appliance	Any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, engine, or propeller.
Approved Manuals	Manuals, or sections of manuals, requiring approval by the FAA or EASA as part of a certification program. These include the approved sections of the Flight Manual, the Airworthiness Limitations Section of the Instructions for Continued Airworthiness (ICA), the engine and propeller installation and operating instructions manuals, and the certification maintenance requirements where applicable.
Article	A material, part, component, process, or appliance.
Aviation Authority (AA)	A responsible government agency or entity of an EU member state that exercises legal oversight on behalf of the European Community over regulated entities and determines their compliance with applicable standards, regulations, and other requirements within the jurisdiction of the European Community.
Certificating Authority (CA)	The FAA when fulfilling State of Design (SoD) functions for design approvals in the U.S.  EASA when fulfilling State of Design (SoD) functions for design approvals in the EU.
Certification Basis	Consists of the applicable airworthiness and environmental protection requirements established by a certificating or validating authority as the basis by which the type design for a civil aeronautical product, or a change to that type design was approved, or accepted. The certification basis may also include special conditions, equivalent level of safety findings, and exemptions or deviations when determined to apply to the type certificate. For EASA the certification basis includes Operational Suitability Data (OSD) requirements.
Certification Review Item (CRI)	A document describing an item that requires disposition prior to the issuance of Type Certificate (TC), change to TC approval or Supplemental Type Certificate (STC) by EASA.

Definition	Description
Civil Aeronautical Product or Product	Any civil aircraft, aircraft engine, or propeller or appliance, part or component to be installed thereon.
Compliance Determination	The determination, by either the certifying authority's (CA's) system or the validating authority's (VA's) system, that the applicant has demonstrated compliance with identified, individual airworthiness and environmental protection standards.
Critical Component	A part identified as critical by the design approval holder (DAH) during the product certification process or otherwise by the Authority for the State of Design (SoD). Typically, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section or certification maintenance requirements of the manufacturer's maintenance manual or Instructions for Continued Airworthiness.
Design Approval	A type certificate (TC), including Amended TCs and STCs, or the approved design under a Parts Manufacturer Approval (PMA), Technical Standard Order Authorization (TSOA), letter of TSO design approval, or other approved design. This includes OSD constituents for EASA.
Deviation	For FAA when used with respect to Technical Standard Order (TSO) articles means a difference from any performance standard of a TSO and requires factors or design features providing an equivalent level of safety to compensate for the standards from which a deviation is requested. Deviation for EASA is a grant of relief from the requirements of a certification specification when processed through the appropriate regulatory procedure.

Definition	Description
Emissions Change	<p>A change in the type design of an airplane or engine that may result in either:</p> <p>an effect on the fuel system during engine shutdown and subsequently on the prevention of fuel venting;</p> <p>For EASA, a change in the airplane CO<sub>2</sub> emissions metric values beyond the prescribed no-CO<sub>2</sub> change criteria as defined in ICAO Annex 16 Vol. III and Doc 9501 Vol. III;</p> <p>For EASA, a change (increase or decrease) to the engine exhaust emissions levels beyond the prescribed no-change criteria as defined in ICAO Doc 9501 Vol. II;</p> <p>For FAA, it is a voluntary change in the type design of an airplane or engine that may result in one or more of the following:</p> <ul style="list-style-type: none"> <li>- Fuel to vent to the atmosphere after engine shut down,</li> <li>- A change in airplane CO<sub>2</sub> emissions beyond the prescribed no-change limits for airplane CO<sub>2</sub> emissions,</li> <li>- A change to the engine exhaust emissions beyond the prescribed no-change limits for each engine exhaust regulated pollutant.</li> </ul>
Environmental Protection Approval	The outcome of an Environmental Protection Compliance Demonstration where a civil aeronautical product has been found to comply with standards concerning noise, fuel venting, engine exhaust emissions and/or airplane fuel efficiency (CO <sub>2</sub> emissions).
Environmental Protection Standards	Regulations or certification specifications governing designs with regard to noise characteristics, fuel venting, engine exhaust emissions, and airplane fuel efficiency (CO <sub>2</sub> emissions) of civil aeronautical products and articles.
Environmental Testing	A process by which the design or change to a design of a civil aeronautical product is evaluated for compliance with applicable standards and procedures concerning noise, fuel venting, or exhaust emissions.
Equivalent Level of Safety Finding (ELOS)	For the FAA, or Equivalent Safety Finding (ESF) for EASA. A finding that alternative action taken provides a level of safety equal to that provided by the standards for which equivalency is being sought.
European Technical Standard Order (ETSO)	A minimum performance standard used to evaluate an article. Each EASA Technical Standard Order "ETSO" covers a certain type of article. When authorized to manufacture an article to an ETSO standard, this is referred to as an ETSO Authorization (ETSOA).
European Technical Standard Order Authorization (ETSOA)	A design and production approval issued to the manufacturer of an article that has been found to meet a specific ETSO. An ETSOA is not an approval to install and use the article in the aircraft. It means that the article meets the specific ETSO and the applicant is authorized to manufacture it.

Definition	Description
Exemption	A grant of relief from a standard of a current regulation when processed through the appropriate regulatory procedure by the FAA.
Export	The process by which a product or article is released from a civil aviation authority's regulatory system for subsequent use in another civil aviation authority's regulatory system.
Exporting Civil Airworthiness Authority	<p>The organization within the exporting State charged by the laws of the exporting State, to regulate the airworthiness and environmental protection certification, approval, or acceptance of civil aeronautical products, parts, and articles. The exporting civil airworthiness Authority will be referred to herein as the exporting Authority.</p> <ul style="list-style-type: none"> <li>• For the U.S., the exporting Authority is the FAA; and</li> <li>• For the EU, the exporting Authority is:</li> <li>• EASA, for:           <ul style="list-style-type: none"> <li>○ The functions and tasks of the State of Design, Manufacture or Registry when related to design approval; and</li> <li>○ The approval of certain production organizations and their export airworthiness approvals.</li> </ul> </li> <li>• The AA, for:           <ul style="list-style-type: none"> <li>○ The approval of production organizations within its State;</li> <li>○ The issuance of corresponding Certificate of Airworthiness; and</li> <li>○ Export airworthiness approvals.</li> </ul> </li> </ul>
Finding	A determination of compliance or non-compliance to the applicable airworthiness and/or environmental protection standards as the result of the FAA's review, investigation, inspection, test, and/or analysis. Refer to "Verification of Compliance" for EASA.
Import	The process by which a product or article is accepted into a civil aviation authority's regulatory system for subsequent use in that civil aviation authority's regulatory system.
Importing Civil Airworthiness Authority	<p>The organization within the importing State charged by the laws of the importing State with regulating the airworthiness and environmental protection certification, approval, or acceptance of civil aeronautical products, parts, and articles. The importing civil airworthiness Authority will be referred to herein as the importing Authority.</p> <ul style="list-style-type: none"> <li>• For the U.S., the importing Authority is the FAA.</li> <li>• For the EU, the importing Authority is:           <ul style="list-style-type: none"> <li>○ EASA for the functions and tasks related to design approval; and</li> <li>○ The AA for all other issues related to the import of a product, part or article.</li> </ul> </li> </ul>

Definition	Description
Issue Paper (IP)	A document describing an item that requires disposition prior to the issuance of Type Certificate (TC), Change to TC approval or Supplemental Type Certificate (STC) by FAA.
Licensing Agreement	A commercial agreement between a TC or STC holder and a production approval holder (or applicant) formalizing the rights and duties of both parties to use the design data for the purpose of manufacturing the product or article.
Letter of Design Approval (LODA)	A Letter of Design Approval issued by the FAA for an article manufactured outside the U.S. that meets a specific Technical Standard Order (TSO).
Maintenance	The performance of any one or more of the following actions: inspection, overhaul, repair, preservation, or the replacement of parts, materials, appliances, or components of a civil aeronautical product to assure the continued airworthiness of such a product; or the installation of previously approved alterations or modifications carried out in accordance with requirements established by the appropriate Technical Agent.
Major Design Change	A change other than a minor design change.  For EASA, a design change is classified as major if it may lead to an acoustical change <u>or</u> an emissions change.  For FAA, the minor/major design change determination [Part 21.93(a)] is independent from that of acoustical [Part 21.93(b)] or emissions change [Part 21.93(c)].
Major Repair	A repair that, if improperly done, might appreciably affect weight, balance, structural strength, performance, power plant operation, flight characteristics, or other qualities affecting airworthiness; or a repair that is not done according to accepted practices or cannot be done by elementary operation.
Manufacturer	The person who, by FAA or EASA regulation, is responsible for showing that all products or articles thereof produced within the quality system conform to an FAA or EASA-approved design or established government or industry standard and are in a condition for safe operation.
Minor Design Change	A change that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product.  For EASA, a design change can only be classified as minor if it cannot lead to an acoustical change <u>or</u> an emissions change.  For FAA, the minor/ major design change determination [Part 21.93(a)] is independent from that of acoustical [21.93(b)] or emissions change [Part 21.93(c)].
Minor Repair	A repair other than a major repair.



Definition	Description
Multi-National Consortium	A group of companies from multiple countries who have agreed to form a single company for the design and/or production of a particular product.
New Aircraft	An aircraft that is still owned by the manufacturer, distributor, or dealer, if there is no intervening private owner, lease, or time-sharing arrangement, and the aircraft has not been used in any pilot school and/or other commercial operation.
Non-TSO Function	A function that is not covered by a TSO-approved minimum performance standard, does not support, or affect the hosting article's TSO function(s), and could technically be implemented outside the TSO article.
Operational Suitability Data (OSD)	<p>The suite of data required to be established by aircraft manufacturers, under EASA Part 21, that is considered important for the safe operation of aircraft type. OSD is approved by EASA under the type certificate to be used by operators and training organizations. The data consists of 5 elements:</p> <ul style="list-style-type: none"> <li>• Minimum Syllabus of pilot type rating training,</li> <li>• Aircraft Reference data to support the qualification of simulators,</li> <li>• Minimum Syllabus of maintenance certifying staff type rating training,</li> <li>• Type-Specific data for cabin crew training, and</li> <li>• Master Minimum Equipment List (MMEL).</li> </ul> <p>OSD are only applicable to aircraft operated in EASA member states. OSD does not exist in the FAA system, only the MMEL element has an FAA equivalent for validation.</p>
Parts Manufacturer Approval (PMA)	For FAA: means a combined design and production approval issued for modification and replacement articles. It allows a manufacturer to produce and sell these articles for installation on type certificated products.
Person	An individual, firm, partnership, corporation, company, association, joint stock association, or government entity, and includes a trustee, receiver, assignee, or other similar representative of any of them.
Product	Refer to "Civil Aeronautical Product."
Production Approval	A document issued by the FAA, EASA or an EU member state (AA) to a person that allows the production of a product or article in accordance with its approved design and approved quality system. For the FAA it can take the form of a Production Certificate, a Parts Manufacturer Approval, or a Technical Standard Order Authorization; for an AA or EASA it takes the form of a Production Organization Approval (POA)
Production System	A systematic process that meets the requirements of the Authority for the State of Manufacture (SoM) and ensures that products and articles will conform to the approved design and will be in a condition for safe operation.

Definition	Description
Rebuilt Engine	An engine that has been disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item by the production approval holder in accordance with 14 CFR part 43.
Restricted Category Aircraft	An aircraft that meets airworthiness requirements for special purpose operations if it shows compliance to applicable noise and emissions requirements, shows no feature or characteristic that makes it unsafe when it is operated under the limitations prescribed for its intended use, and/or is the type that has been manufactured in accordance with the requirements of and accepted for use by, an Armed Force of the U.S. or the Department of National Defense and the EU Armed Forces and has been later modified for a special purpose.  <b>Note:</b> Only the FAA has restricted category aircraft [Part 21.25]; EASA issues restricted type and airworthiness certificates.
Safety Emphasis Items (SEI)	Areas of VA interest for all products of a certain class. SEIs are defined in paragraph 3.5.10.4.
Significant Standards Difference (SSD)	A VA airworthiness standard that either differs significantly from the CA standard or has no CA equivalent, as defined in Paragraph 3.5.13.
Special Condition	An additional airworthiness standard(s) prescribed by the FAA or EASA when the airworthiness standards for the category of product do not contain adequate or appropriate safety standards due to novel or unusual design features. Special Conditions contain such safety standards as the FAA or EASA find necessary to establish a level of safety equivalent to that established in the applicable regulations.
Standard Airworthiness Certificate	An airworthiness certificate issued in accordance with Article 31 of the Convention on International Civil Aviation for a normal, utility, acrobatic, commuter, or transport category of aircraft, or for a manned free balloon, airship, very light aircraft (VLA), or a glider.
Standard Part	A part that is manufactured in complete compliance with an established government or industry-accepted specification, which contains design, manufacturing, and uniform identification requirements. The specification must include all information necessary to produce and conform the part, and must be published so that any person or organization may manufacture the part.
State of Design (SoD)	The State or territory having jurisdiction over the organization responsible for the type design and continued airworthiness of the product or article.
State of Manufacture (SoM)	The State or territory having regulatory authority over the organization responsible for the production and airworthiness of a civil aeronautical product or article.

Definition	Description
State of Registry (SoR)	The State on whose register the aircraft is entered.
Supplier	A person at any tier in the supply chain who provides a product, article, or service that is used or consumed in the design or manufacture of, or installed on, a product or article.
Suspension	A lapse in the effectiveness of a certificate, approval, or authorization as ordered by the airworthiness authority
Technical Standard Order (TSO)	A minimum performance standard used to evaluate an article. Each TSO covers a certain type of article. When authorized to manufacture an article to a TSO standard, this is referred to as a TSO Authorization (TSOA).
Technical Standard Order Authorization (TSOA)	A design and production approval issued to the manufacturer of an article that has been found to meet a specific TSO. A TSOA is not an approval to install and use the article in the aircraft. It means that the article meets the specific TSO and the applicant is authorized to manufacture it.
Type Design	The drawings and specifications necessary to define the product shown to comply with the airworthiness standards, environmental protection requirements, information on dimensions, materials, and processes necessary to define the structural strength of the product; and the Airworthiness Limitations section of the Instructions for Continued Airworthiness (ICA) [FAA's Part 21.31].
Used Aircraft	Each aircraft that is not a new aircraft, as defined above.
Validating Authority (VA)	The organization within the importing State, charged by the laws of the importing State, with regulating the design, production, and airworthiness approval and environmental protection certification of civil aeronautical products and articles.
Validation	The importing Authority's approval process of an approval or certificate issued by the other.
Validation Work Plan	Hereinafter referred to as "work plan", means the document used for Non-Basic validations that outlines VA level of involvement.
Verification of Compliance	The involvement done by EASA when reviewing compliance to the applicable airworthiness standards and environmental protection requirements. This verification can be a desk review (certification documents review), an inspection, participation in flight or ground tests, and participation in audits. Refer to "Finding" definition for the FAA.

## Section 2 Scope of These Technical Implementation Procedures

### 2.1 General

- 2.1.1 All products and articles as listed in Paragraph 2.2 are eligible for import to the U.S. from EASA and each EU member state (AA) equally. Section 2 of the TIP provides the scope of how EASA exercises the State of Design (SoD) functions for an individual EU Member State (AA). All products and articles as listed in Paragraph 2.3 are eligible for import to the EU from the U.S.
- 2.1.2 The TIP covers the products and articles identified below, their approvals, and the provisions set forth in the following paragraphs. In any case of conflict or ambiguity between the TIP and the Agreement (including Annex 1), the Agreement takes precedent.
- 2.1.3 In accordance with Article 16.C of the Agreement, the FAA and EASA shall continue to recognize and accept design approvals and data certified by the FAA, EASA, and AAs, and validated by the FAA, EASA or an AA prior to the date of this TIP under the Agreement and Bilateral Airworthiness Agreements listed in Attachment 1 of the Agreement until such approvals are replaced or cancelled. These design approvals include TCs, Amended TCs, STCs, Letters of TSO Design Approval, ETSO/ Joint Technical Standard Order Authorizations or National Article Approvals, and FAA PMA parts.

### 2.2 Design Approvals, Design Data, and Certificates Recognized by the U.S. under the TIP

- 2.2.1 FAA recognizes, as within the scope of this agreement, the following EASA Design Approvals as the Basis for FAA Design Approval:
  - 2.2.1.1 Type Certificates (TCs) for all products for which EASA functions as the SoD;
  - 2.2.1.2 All Supplemental Type Certificates (STC) and subsequent amended STCs and amended TC's for products that have been issued both an EASA and FAA type design approval;
  - 2.2.1.3 All STCs issued before 28 September 2003, in accordance with the scope defined in Appendix E, from applicants in France, Germany, Italy, Netherlands and Sweden; and
  - 2.2.1.4 Any other EASA-approved design changes for products and articles that have been issued both an FAA and EASA type-design approval.
- 2.2.2 FAA recognizes, as within the scope of this agreement, EASA approved design data used in the support of repairs as identified in paragraph 3.3.5 for products and articles of:
  - 2.2.2.1 EU member state SoD;
  - 2.2.2.2 U.S. SoD; or
  - 2.2.2.3 A third country SoD, when both the FAA and EASA have issued a type design approval for the product.
- 2.2.3 FAA recognizes, as within the scope of this agreement, EASA Export Certificates of Airworthiness for Aircraft that Conform to a Type Design Approved under an FAA Type Certificate including:

2.2.3.1 New and used aircraft for which EASA functions as the SoD;

2.2.3.2 New and used aircraft for which the U.S. is the SoD; and

2.2.3.3 New and used aircraft for which a third country is the SoD, when that third country has a bilateral agreement or arrangement with both the U.S. and the EU covering the same class of product.

**Note:** Aircraft manufactured in a country or territory other than its SoD requires either the development of a special arrangement per SECTION 9 of the TIP or FAA review and acceptance of an existing arrangement established between the SoD and SoM.

2.2.4 FAA recognizes, as within the scope of this agreement, EASA Authorized Release Certificates for the Following Products and Articles:

2.2.4.1 Engines and Propellers that Conform to a Type Design Approved under an FAA TC including:

- (a) New aircraft engines for which EASA functions as the SoD;
- (b) New aircraft engines manufactured in the EU for which a third country is the SoD, when that third country has a bilateral agreement with both the U.S. and the EU covering engines;
- (c) New propellers for which EASA functions as the SoD; and
- (d) New propellers manufactured in the EU for which a third country is the SoD, when that third country has a bilateral agreement with both the U.S. and the EU covering propellers.

**Note:** Products manufactured in a country or territory other than its SoD requires either the development of a special arrangement per SECTION 9 of the TIP or FAA review and acceptance of an existing arrangement established between the SoD and SoM.

2.2.4.2 Articles and replacement parts for articles that conform to an EASA ETSOA and benefit from Acceptance under the TIP.

2.2.4.3 Articles and Replacement Parts that Conform to an FAA Design Approval.

(a) New replacement and modification parts that conform to FAA approved design data and that are eligible for installation in a product or article which has been granted a FAA design approval, as follows:

- (1) Replacement parts manufactured by the original production approval holder (PAH) for all products and articles regardless of the SoD; and
- (2) Modification parts manufactured by the original PAH for all products and articles regardless of the SoD.

(b) Reserved.

2.2.5 FAA recognizes, as within the scope of this agreement, EASA Authorized Release Certificates or Manufacturer's Certificate of Conformity for Standard Parts.

The FAA will recognize, as within the scope of this agreement, Standard Parts for products covered under the TIP when they conform to established U.S. or EU government or industry-accepted specifications.

## 2.3 Design Approvals, Design Data, and Certificates Recognized by EASA under the TIP

- 2.3.1 EASA recognizes, as within the scope of this agreement, the Following FAA Design Approvals as the Basis for EASA Design Approval:
- 2.3.1.1 TCs for all products for which the U.S. is the SoD;
  - 2.3.1.2 All STCs and subsequent Amended STCs and Amended TC's for products that have been issued both an FAA and EASA type design approval; and
  - 2.3.1.3 Any other FAA-approved design changes for products and articles that have been issued both an FAA and EASA type-design approval.
- 2.3.2 EASA recognizes, as within the scope of this agreement, the following FAA Approved Design Data:
- 2.3.2.1 FAA-approved design data used in the support of repairs and alterations (except for alterations on critical components) as identified in paragraphs 3.3.5 and 3.3.6 for products and articles of:
    - (a) U.S. SoD;
    - (b) EU SoD; or
    - (c) A third country SoD, when both the FAA and EASA have issued a type design approval for the product.
  - 2.3.3 EASA recognizes, as within the scope of this agreement, FAA Export Certificates of Airworthiness for:
    - 2.3.3.1 Aircraft that Conform to a Type Design Approved under an EASA Type Certificate including:
      - (a) New and used aircraft for which the U.S. is the SoD;
      - (b) New and used aircraft for which EASA is the SoD; and
      - (c) New and used aircraft for which a third country is the SoD, when that third country has a bilateral agreement/arrangement with both the U.S. and the EU covering the same class of product.
- Note:** Aircraft manufactured in a country or territory other than its SoD requires either the development of a special arrangement per SECTION 9 of the TIP or EASA review and acceptance of an existing arrangement established between the SoD and SoM.
- 2.3.4 EASA recognizes, as within the scope of this agreement, FAA Authorized Release Certificates for the Following Products and Articles:
- 2.3.4.1 Engines and Propellers that Conform to a Type Design Approved under an EASA TC including:
    - (a) New and rebuilt aircraft engines for which the U.S. is the SoD;
    - (b) New aircraft engines manufactured in the U.S. for which a third country is the SoD, when that third country has a bilateral agreement/ arrangement with both the U.S. and the EU covering engines;
    - (c) New propellers for which the U.S. is the SoD; and

- (d) New propellers manufactured in the U.S. for which a third country is the SoD, when that third country has a bilateral agreement/ arrangement with both the U.S. and the EU covering propellers.

**Note:** Recognition, as within the scope of this agreement, of products manufactured in a country or territory other than its SoD requires either the development of a special arrangement per SECTION 9 of the TIP or EASA review and acceptance of an existing arrangement established between the SoD and SoM.

2.3.4.2 Articles and replacement parts for articles that conform to an FAA TSOA and benefit from Acceptance under the TIP.

2.3.4.3 Articles and Replacement Parts that conform to an EASA Design Approval:

- (a) New replacement and modification parts that conform to EASA approved design data and that are eligible for installation in a product or article which has been granted an EASA design approval, as follows:
  - (1) Replacement parts manufactured by the original PAH for all products and articles, regardless of the SoD; and
  - (2) Modification parts manufactured by the original PAH for all products and articles, regardless of the SoD.
- (b) New Parts Manufacturer Approval (PMA) parts accepted by EASA under paragraph 3.3.4.

2.3.5 EASA recognizes, as within the scope of this agreement, FAA Authorized Release Certificates or Manufacturer's Certificates of Conformity for Standard Parts.

EASA will recognize, as within the scope of this agreement, Standard Parts for all products and articles covered under the TIP when they conform to established EU or U.S. industry or government specifications, including U.S. parts under FAA TSO-C148 (fasteners), TSO-C149 (bearings), and TSOC150 (seals).

2.3.6 EASA recognizes, as within the scope of this agreement, a part or appliance accompanied by a 'Prototype' FAA Form 8130-3 (issued before the approval of the design data) if accompanied in addition by a statement from the corresponding Design Approval Holder (issued after the approval of the design data) attesting that the design data according to which the part or appliance was manufactured has not changed and is approved. This statement should include:

'This document certifies the approval of the design data [insert Design Change/STC/TC number, revision level], dated [insert date if necessary for identification of the revision status], according to which the [specify the part or appliance] covered by the FAA Form 8130-3 [Form Tracking Number] dated [date of the FAA Form 8130-3] was manufactured.'

## 2.4 Special Airworthiness Certification

The FAA and EASA have agreed to recognize, as within the scope of this agreement, aircraft type-certificated in the restricted category that are not eligible for a standard airworthiness certificate. Aircraft for which a special airworthiness certificate is to be issued will be dealt with on a case-by-case basis through the Special Arrangements provision in SECTION 9 of the TIP.

2.4.1 For the FAA, restricted category aircraft will be accepted when they are in compliance with the requirements of 14 CFR sections 21.25 and 21.185.

2.4.2 For EASA, restricted category aircraft will be accepted when they are in compliance with the requirements of Part 21.A.21.

## 2.5 Provisions for Technical Support

The types of technical support activities within the scope of this TIP between the FAA and EASA are specified in Section 8.

## 2.6 Provisions for Special Arrangements

The TIP provides for designated officials within the FAA and EASA to make Special Arrangements (that may be in the form of Management Plans) with respect to design approval, production activities, export airworthiness approval, post design approval, or technical support in unique situations that have not been specifically addressed in the TIP, but which are anticipated in Annex 1 of the Agreement. All special arrangements between the Authorities are published on the EASA and FAA Websites as listed in Appendix C.



## Section 3 Design Approval Procedures

### 3.1 General

- 3.1.1 The principles and procedures of this Section apply to the acceptance or validation of the initial design approval of each other's civil aeronautical products and articles, of subsequent design changes to those products/articles, including STCs, and approval of design data used in support of repairs and alterations.
- 3.1.2 This TIP is based on continuous communication and mutual confidence between the FAA and EASA and establishes the process for implementing the acceptance of each other's compliance determinations and approvals on civil aeronautical products and articles. The procedures in this Section are not intended to diminish the responsibilities of either the FAA or EASA, or of their right to type design information.
- 3.1.3 Certificates and design approvals are accepted or approved by the validating Authority (VA) by using one of three procedures. The procedures described in this paragraph, and the paragraphs they reference, are applicable to the airworthiness and environmental protection certification and validation process.
- 3.1.3.1 Acceptance (see paragraph 3.2)
- Acceptance of the CA approvals by the VA without issuance of its own approval and, therefore, no application for validation is required.
- 3.1.3.2 Streamlined Validation (see paragraph 3.5.4)
- An approval by the VA without any technical involvement, with the issuance of a VA approved document.
- 3.1.3.3 Technical Validation (see paragraph 3.5.5)
- Technical Validation of the certificate or design change will be performed by the VA using criteria to define their level of involvement. The VA will issue an approval document.

### 3.2 Acceptance

The FAA and EASA conclude that certain approvals are eligible for acceptance by the VA. There are specific CA approvals (further described in paragraph 3.3) that will be accepted by the VA without issuance of its own approval, and therefore no application for validation is required for:

- 3.2.1 Any design change by the TC or STC holder classified as Basic per the criteria of paragraph 3.5.3.1 that does not require the CA or VA to issue a new or revised TC, Type Certificate Data Sheet (TCDS), Type Certificate Data Sheet for Noise (TCDSN), or STC.
- Note: When the design change impacts the EASA official noise database (see Appendix A), the data listed in paragraph 3.5.4.2(g) must be sent to EASA noise mailbox (see Appendix A)
- 3.2.2 All design changes classified as minor in accordance with 14 CFR section 21.93(a) or EASA Part 21.A.91;
- 3.2.3 Any TSO/ ETSO article (see paragraph 3.3.3);
- 3.2.4 PMA Parts under the conditions of paragraph 3.3.4;

- 3.2.5 Design data for a repair (approved in accordance with paragraph 3.3.5); and
- 3.2.6 Design data for an alteration except for critical components (see paragraph 3.3.6).
- 3.2.7 Data developed for a repair, design change, STC or alteration in compliance with CFR 14 Part 26 or Commission Regulation (EU) 2015/640 Annex I (Part-26), when specified in Appendix G (see paragraph 3.3.7).

### 3.3 Procedures for Accepted Design Approvals

3.3.1 There is no need for application and the design change will be accepted by the VA without any review. In these cases, the CA will approve these design changes in accordance with its own procedures against the certification bases of both the CA and the VA. These design changes are considered approved by the VA, and are included in the DAH type design data and shall be made available to the VA upon request to the CA.

#### 3.3.2 Minor Design Changes.

Where a design change is introduced that would be classified as minor in accordance with 14 CFR Section 21.93(a) or EASA Part 21.A.91, it shall be accepted by the VA without further review.

#### 3.3.3 TSO/ ETSO Articles

##### 3.3.3.1 General.

Acceptance requires that the importing Authority shall accept the exporting Authority's TSOA or ETSOA and will not issue its own approval.

- (a) Acceptance will be applicable to all current and future TSOA's and ETSOA's issued by the FAA or EASA. Acceptance is also applicable to article authorizations issued by EASA's predecessor European AA's.

Note: Article 12 of the Agreement defines the territorial applicability of this agreement.

- (b) The TSO or ETSO authorization is an approved article within the respective FAA or EASA system, but does not imply installation approval.
- (c) When the exporting Authority does not have a corresponding TSO or ETSO to that of the importing Authority, an applicant may obtain an approval from the exporting Authority using the provisions of 14 CFR section 21.8(d) or EASA part 21.A.305. If the exporting Authority's approval is based on assessment of the TSO or ETSO of the importing Authority, and the production system and marking requirements are assured by the exporting Authority's approval, then the exporting Authority's approval is eligible for Acceptance.
- (d) Acceptance of such articles, under the Agreement, shall be based on the following conditions:
  - (1) The article meets the TSOs or ETSOs, as evidenced by a statement or declaration of conformity by the TSOA or ETSOA; and
  - (2) If applicable, deviations or exemptions from the TSO or ETSO or other standard accepted by the FAA and EASA are substantiated and have been approved by the exporting authority.

- (e) All accepted TSOAs and ETSOAs and validations issued by the importing Authority prior to the acceptance of TSOAs and ETSOAs remain valid unless the approval holder surrenders or the responsible Authority suspends or revokes the respective approval.

#### 3.3.3.2 Procedures for Changes to Articles by the Design Approval Holder (DAH)

All design changes to articles accepted under the Acceptance procedures described above, as well as for articles validated under previous revisions of this TIP, are managed under the procedures of the exporting Authority and automatically accepted by the importing Authority under the terms of Acceptance.

#### 3.3.3.3 Acceptance of Non-TSO Functions.

- (a) FAA and EASA shall accept, without further validation, data related to unapproved non-TSO functions that are integrated into a TSO or ETSO article and accepted in accordance with the procedures of the exporting Authority. The following conditions must be met:
  - (1) The non-TSO functions included in the article do not interfere with the article's functionality and/or ability to comply with the TSO or ETSO standard;
  - (2) The data provided with the article relative to non-TSO functions is valid data as processed by the FAA's or EASA's system in accordance with the applicable importing authority policy; and
  - (3) The non-TSO functions must be covered under the applicant's quality system.
- (b) The acceptance of this additional data does not constitute installation approval.

#### 3.3.4 PMA Parts

EASA shall directly accept all FAA PMA approvals, without further showing, for modification and/ or replacement parts for installation on products certified or validated by EASA in the following cases:

##### 3.3.4.1 The PMA part is not a "critical component" (see definition, paragraph 1.13) and the PMA design was approved via:

- (a) Identity without a licensing agreement per 14 CFR section 21.303; or
- (b) Test reports and computations per 14 CFR section 21.303.

##### 3.3.4.2 The PMA part conforms to design data obtained under a licensing agreement from the TC or STC holder according to 14 CFR section 21.303 and the TC or STC has been validated by EASA.

##### 3.3.4.3 The PMA part is a "critical component" and the PMA design was approved via:

- (a) An FAA-issued STC and EASA has validated the STC; or
- (b) Identity without a licensing agreement per 14 CFR section 21.303 and EASA has issued an equivalent STC; or
- (c) Test reports and computations per 14 CFR section 21.303 and EASA has issued an equivalent STC.

### 3.3.5 Design Data for Repairs

#### 3.3.5.1 Acceptance of Design Data Used in Support of Repairs

- (a) Design data used in support of repairs must be approved or accepted, as appropriate, by the exporting Authority/ SoD. The following describes the process that shall be followed by FAA and EASA so that repair design data can be approved or accepted. Repair designs requiring the production of new parts that would constitute a design change, are not eligible for Acceptance under this TIP. However, it is permissible to fabricate parts that will be used in the repair of the individual aircraft, engine, propeller, or article.
- (b) FAA shall approve design data in support of major repairs in accordance with FAA Order 8110.4 Type Certification; FAA Order 8110.37, Designated Engineering Representative Guidance Handbook; FAA Order 8100.15, Organization Designation Authorization Procedures; and FAA Order 8300.16, Major Repair and Alteration Data Approval". Minor repairs are made in accordance with "acceptable" data, in accordance with 14 CFR part 43.
- (c) EASA shall approve design data in support of repairs in accordance with EASA Part 21 Subpart M Repairs and EASA's procedure Airworthiness of Type Design. A design approval shall be issued for all repair design data.

#### 3.3.5.2 FAA Acceptance of EASA Repair Design Data

- (a) The FAA shall accept EASA approved design data produced under EASA Part 21 Subpart M used in support of major or minor repairs regardless of the SoD of the product, part, or article, if:
  - (1) The FAA has certificated/ validated the product or article;
  - (2) EASA is acting on behalf of the SoD for the repair design data;
  - (3) EASA repair design data approval is substantiated via a repair design approval letter or a repair design approval issued under a DOA. For repair data approved prior to September 28, 2003, in France, Germany, Italy, the Netherlands and Sweden, FAA shall accept either the AA approval document, or equivalent, or a repair design approval issued under a former national DOA as evidence of the approval, and
  - (4) The repair is not in an area that is subject to an FAA AD, unless the AD allows for acceptance of an EASA repair design approval.
- (b) In these circumstances, repair design data approved by EASA are accepted without further review as approved by the FAA. This process does not require application to the FAA or compliance findings to the FAA Certification Basis.

#### 3.3.5.3 EASA Acceptance of FAA Repair Design Data

- (a) EASA shall accept data used in support of major repairs regardless of the SoD of the product, part or article, if:
  - (1) EASA has certificated/ validated the product or article;
  - (2) The FAA is the Authority of the SoD for the repair design data; and

- (3) The FAA repair design data approval is substantiated via an FAA letter, FAA Form 8110-3, FAA Form 8100-9, FAA Form 337 or a signed cover page of a repair specification.
- (b) EASA shall also accept data used in support of minor repairs when:
  - (1) EASA has certificated/ validated the product or article; [and]
  - (2) The FAA is the Authority of the SoD for the repair design data; [and]
  - (3) The repair design data has been provided by the U.S. TC, STC, PMA, or TSOA holder; [or]
  - (4) For minor repairs from other than the U.S. TC, STC, PMA, or TSOA holder, the determination that data are acceptable (under 14 CFR part 43) has been made by a U.S. maintenance organization under the FAA's authorized system.

**Note:** An EASA approved maintenance organization must use EASA Part 21 for the approval of repair data for use on an EU-registered aircraft, unless the data for a minor repair has been previously used to repair an N-registered aircraft.

- (c) In these circumstances, repair design data are considered to be EASA approved following its approval or acceptance under the FAA's system. This process does not require application to EASA or compliance findings to the EASA Certification Basis.

### 3.3.6 Design Data for Alterations

FAA approved or accepted alterations per 14 CFR part 43 installed on a used aircraft exported from the U.S., regardless of the SoD of the aircraft, are considered approved by EASA at the time of import to the EU except for alterations on critical components. EASA shall accept such FAA alteration data when substantiated via an appropriately executed FAA Form 8110-3, FAA Form 8100-9, FAA Form 337 or logbook entry.

**Note:** An FAA STC whose installation is documented on a Form 337 must be approved in accordance with paragraph 3.5.

### 3.3.7 Part 26 Compliance

FAA-approved Damage Tolerance (DT) data and fatigue critical structure (FCS) lists developed for a repair, design change, STC or alteration in compliance with 14 CFR Part 26, when specified in Appendix G, is considered approved by EASA (for the sake of compliance with Commission Regulation (EU) 2015/640 Annex I (Part-26) (including subsequent amendments).

EASA-approved DT data and FCS lists developed for a repair, design change or STC in compliance with Commission Regulation (EU) 2015/640 Annex I (Part-26), when specified in Appendix G, is considered approved by FAA (for the sake of compliance with 14 CFR Part 26).

## 3.4 Validation

For CA design approvals that do not meet the Acceptance criteria established in paragraph 3.2, there are two validation processes depending on the basic/ non-basic classification: Streamlined

Validation process (for Basic Changes that only need reissuance of certificates or datasheets), or Technical Validation Process (for Non-Basic).

## 3.5 Procedures for Streamlined Validation and Technical Validation

### 3.5.1 CA Application Responsibilities

Upon receipt of an application for validation from an applicant, the CA will:

3.5.1.1 Assure that the application is eligible for validation according to paragraph 3.5.2;

3.5.1.2 Verify the applicant classification as Basic or Non-Basic according to paragraph 3.5.3;

3.5.1.3 Determine if the application meets the Acceptance criteria of paragraph 3.2, and

3.5.1.4 For projects that are not eligible for Acceptance, prepare the application package for transmittal to the VA according to paragraphs 3.5.4.2 or 3.5.5.1, as applicable.

### 3.5.2 Validation Application Eligibility

The CA will consent to receive an application for validation when the product or design change is within the scope of this TIP as provided in paragraphs 2.2 and 2.3.

### 3.5.3 Classification of Applications for Validation

The CA will classify an application for validation as Basic or Non-Basic according to the criteria in this section. The classification determines the process to be followed, and also, for Non-Basic projects, defines the scope of possible VA level of involvement.

#### 3.5.3.1 Basic Classification Criteria

All design approvals that do not meet one or more of the Non-Basic classification criteria at paragraph 3.5.3.2 are classified as Basic, and processed by either the Acceptance process (paragraph 3.2) or the Streamlined Validation process (paragraph 3.5.4).

#### 3.5.3.2 Non-Basic Classification Criteria:

##### (a) Type Certificates

Application for validation of a TC shall be classified as Non-Basic, except for:

Applications for validation of new TCs for reciprocating engine or propeller and all changes to those TCs, including STCs, will be classified as Basic, unless the CA or VA certification basis includes or is anticipated to include a new or amended (i.e. not previously applied):

- (i) FAA Exemption or EASA Deviation;
- (ii) Special Condition; or
- (iii) Equivalent level of Safety (ELOS/ESF);

##### (b) Major Design Changes, including STCs

Application for validation will be classified as Non-Basic when any of the following criteria are impacted:

- (1) Any item in the VA Safety Emphasis Item (SEI) list as defined in paragraph 3.5.10.4;
- (2) The CA or VA Certification Basis includes a new or amended:

- (i) FAA Exemption or EASA Deviation;
- (ii) Special Condition; or
- (iii) Equivalent level of Safety/Equivalent Safety Finding (ELOS/ESF);

Note: New or amended is considered in the context of the project, relative to the baseline Certification Basis of the product or STC being changed.

- (3) A classification of “significant” has been made by the CA in accordance with FAA 14 CFR section 21.101(b) or EASA 21A101(b);
- (4) An AD is affected that was issued unilaterally by the VA; or an AD is affected that was issued by the VA, and where the VA is the Authority for the SoD for the TC;
- (5) Changes involving the use of a new or different applicable Method of Compliance from that previously agreed by the CA and the VA;

Note: A method of compliance (MoC) would not be considered “new” or “different” if it had been applied previously in a similar context by both the CA and the VA.

- (6) New technology exists;

Note: New technology is technology that is new to the VA as a whole, not just new to the VA team members. For example, if technology used by the applicant were new to the VA team but not the VA itself, it would not be considered new. It is the VA Management’s responsibility to make sure the VA team members are properly informed of the earlier use of the technology, VA standards and MoC.

- (7) Novel applications of existing technology exist;

Note: Novel application of technology is where a particular technology is being used in a manner that causes the precepts of the technology to be questioned. However, it does not mean that existing technology being applied for the first time to a particular product line is automatically novel. Additionally, novel applies to the VA as a whole, not just to a project being assessed by the specific VA team members.

- (8) Changes that impact environmental protection per paragraph 3.5.3.2(e)
- (9) Changes that have an appreciable effect on any one of the Operational Suitability Data (OSD) constituents (refer to EASA Guidance Material GM 21.A.91 to determine an appreciable effect); and
- (10) Any other design change designated as Non-Basic by the CA.

Note: The addition of models to TC and STCs are considered basic if none of the 10 criteria is triggered.

(c) PMA Parts

Application for PMA parts on critical components that have not been produced under a licensing agreement from the TC or STC holder according to 14 CFR section 21.303 shall be classified as Non-Basic.

(d) Alterations

Application for alteration on critical components shall be classified as Non-Basic.

(e) Environmental Protection

(1) Noise Level substantiations have been affected by (see list of noise basic/non-basic examples in Appendix H):

- testing (except for Part 23/ CS-23 propeller-driven aircraft); or
- a change in the Noise Certification Basis; or
- equivalencies (for FAA) or alternative means of compliance (for EASA); or
- procedures, methodologies, or noise processing software that differ from those accepted by both CA and VA in previous projects of the same applicant; or
- different test organization or staff that performs the procedures or operates the equipment and software.

(2) Emission Level substantiations have been affected by (see list of emissions basic/non-basic examples in Appendix H):

- engine emissions testing (except for unchanged design, or small design changes); or
- a change in the Emissions Certification Basis; or
- procedures, equivalencies, methodologies, deviations that differ from those accepted by both CA and VA in previous projects of the same applicant.

Note: Projects involving an airplane CO<sub>2</sub> emissions change are considered non-basic by default.

### 3.5.4 Streamlined Validation Process for applications classified as Basic

Applications classified as Basic are managed through the Streamlined Validation process described in this section.

When design changes would be classified as Basic (per the criteria of paragraph 3.5.3) and do not require a change to the certificate, they are Accepted per Paragraph 3.2, and no validation involvement or validation application occurs.

#### 3.5.4.1 Streamlined Validation Principles

The VA has no technical involvement in Streamlined Validation projects. In order to accomplish this, the VA will:

- (a) Reserved
- (b) Accept the CA's statement that the design complies with the VA Certification Basis and issue a certificate;
- (c) Accept the data provided by the CA, including CA approved and accepted manuals; and
- (d) Accept the classification of Basic determined by the CA.

Note: The VA may only review the CA classification of the application after the issuance of the VA's approval. This may be conducted under the maintenance of confidence provisions defined in paragraph 1.6.

#### 3.5.4.2 Streamlined Validation Application

Streamlined Validation application package contents:

- (a) A description of the product in accordance with the following:



- (1) For a TC, descriptive data defined in 14 CFR section 21.15 for applications to the FAA, or Part 21A.15 for applications to EASA, plus:
  - (i) A listing of any applicable CA and VA ADs and a statement that changes to correct the unsafe condition identified in the AD have been incorporated into the type design presented for validation; and
  - (ii) A copy of approved manuals and instructions for continued airworthiness (ICA).
- (2) For a design change, including an STC, a high-level description of the change, together with the make and model of the product being changed, including, if affected, a copy of:
  - (i) Changes to the Airworthiness Limitations Section of the Instructions for Continued Airworthiness;
  - (ii) Changes to other Operating Limitations (e.g. Flight Manual); and
  - (iii) Changes to OSD for EASA validations, and for FAA validations a copy of changed MMEL.

The VA must be aware of any such changes to ensure they are able to release updated information, or to perform any necessary mandatory airworthiness activity as required by their system, or to address crew training requirements to support operational introduction. Any additional information the VA needs to fulfil such responsibilities will be requested by the VA within the time frame specified in paragraph 3.5.4.4.

- (b) The date of application to the CA, where applicable.
- (c) A statement that the CA has classified the application as Basic per the Basic criteria as defined in paragraph 3.5.3.1;
- (d) A copy of the CA's TC and TCDS, TCDSN or STC that identifies the Certification Basis upon which the CA's design approval was issued. In the absence of a TCDS, the CA should submit the document that defines the CA Certification Basis.

If not directly identified in the documentation described in this paragraph, the CA should also provide the reference date used to establish the CA certification basis.

- (e) A statement that the CA certifies that the product has been examined tested and has been found to meet either:
  - (1) The applicable airworthiness, noise, fuel venting, engine exhaust emissions and/or airplane fuel efficiency (CO<sub>2</sub> emissions) requirements of the VA; or
  - (2) The CA airworthiness requirements and the VA Significant Standard Differences, Special Conditions, Equivalent Level of Safety Findings/Equivalent Safety Findings and Exemptions/Deviations and where the VA has prescribed to provide an equivalent level of safety as the VA airworthiness requirements, and the CA noise, fuel venting, engine exhaust emissions and/ or airplane fuel efficiency (CO<sub>2</sub> emissions) requirements, plus any other requirements prescribed by the VA to

provide noise, fuel venting, engine exhaust emissions and/ or airplane fuel efficiency (CO<sub>2</sub> emissions) requirements equivalent to those provided in the applicable VA standards.

Note 1: In providing the statement required by this paragraph, the CA may choose to either list the pertinent VA standards, or may reference existing VA documentation that lists those applicable standards.

Note 2: The statement of compliance will not address OSD constituents.

- (f) In cases where the applicant chooses to voluntarily adopt into the VA certification basis later amendments to airworthiness or environmental protection standards than those required as described in paragraph 3.5.11, those later amendments for those standards will be identified in the application.
- (g) For Basic projects requiring an update of the EASA certification noise levels database and the reporting of noise levels for FAA Order 8110.35, the below data shall be transmitted by the CA to the VA, when applicable by aircraft type:
  - (1) Aircraft manufacturer and type designation
  - (2) Maximum take-off mass and maximum landing mass
  - (3) Engine manufacturer and type designation
  - (4) Propeller manufacturer and type designation (hub and blade, when applicable)
  - (5) Noise certification standard (Annex 16 Vol. I Part II Chapter and paragraph)
  - (6) Other modifications already incorporated affecting the noise levels.
  - (7) Lateral/full-power noise level: (\*)
  - (8) Approach noise level (\*)
  - (9) Flyover noise level (\*)
  - (10) Overflight noise level (\*)
  - (11) Take-off noise level (\*)
    - (\*) These items are applicable depending on the required noise certification standard
- (h) For Basic projects requiring an update of the ICAO Engine Emissions Databank (EEDb), the approved engine emissions datasheet shall be transmitted to the CA to the VA.

#### 3.5.4.3 VA Review of Application

- (a) The VA reviews the application package and requests any missing information in accordance with paragraph 3.5.4.2.
- (b) The VA assures the CA statement of compliance is complete, including verification of the correct VA Certification Basis reference.

#### 3.5.4.4 VA Issuance of Design Approval

The VA shall issue the corresponding certificate or design approval within fifteen (15) working days (for design change) and twenty (20) working days for (TC) of receipt of a complete application, with concurrent notification to the CA.

### 3.5.5 Technical Validation Process for Applications Classified as Non-Basic

Applications classified as Non-Basic are managed through the Technical Validation process described in this section.

#### 3.5.5.1 Non-Basic Validation Application Packages

For concurrent validation projects some elements of the application package will not be known at the time of application; those applications must include all known data.

- (a) A description of the product in accordance with the following:
  - (1) For a TC, descriptive data defined in 14 CFR section 21.15 for applications to the FAA, or Part 21A.15 for applications to EASA; and
  - (2) For design changes including STCs, a detailed description of the design change together with the make and model of the product being changed.
- (b) Identification that the application is Non-Basic per the Non-Basic criteria as defined in paragraph 3.5.3.2;
- (c) List of specific criteria(ion) from paragraph 3.5.3.2 that led to the Non-Basic classification;  

This list is necessary for the VA to develop the items for VA review in the validation work plan.
- (d) Copy of the CA's TC and TCDS, or STC that identifies the Certification Basis upon which the CA's design approval was issued. In the absence of a TCDS, the CA should submit the document that defines the CA's Certification Basis;
- (e) Proposed VA validation program consisting of the following elements. The VA will use this information to assist in the development of the VA Work Plan:
  - (1) The proposed VA airworthiness (and OSD, if applicable) standards, Special Conditions, Equivalent Safety Findings and environmental protection requirements; and
  - (2) The description on how compliance has been or will be demonstrated, with proposed means of compliance, and any selected guidance material. The description of the means of compliance should be sufficient to determine that all necessary data will be collected and compliance can be demonstrated.
- (f) For TCs, the CA will list any applicable VA ADs and provide an assessment that changes to correct the unsafe condition identified in the AD have been incorporated into the type design;
- (g) Compliance checklist;
- (h) List of all CA Exemptions, Deviations, Special Conditions, and Equivalent Level of Safety Findings;
- (i) List of all Issue Papers for FAA, Certification Review Items for EASA, and Certification Memoranda raised during the CA's certification activities;

- (j) Brief description of all novel or unusual design features;
- (k) Information on VA customers and delivery schedules;
- (l) Master documentation list or master drawing list which lists all type design drawing, specifications and reports for the TC or for the change;
- (m) Top level drawing of the aircraft or design change. If a top level drawing is not available include a drawing or diagram that shows the overall change;
- (n) Approved manuals or changes to approved manuals as applicable;
- (o) Changed OSD constituents for EASA as VA, or MMEL for FAA as VA;
- (p) Weight and balance data if not contained in an approved manual;
- (q) Environmental Protection:  
For a TC, a definition of the noise, fuel venting, and exhaust emissions standards upon which the design approval was based, and the amendment level of VA noise, fuel venting, and exhaust emissions standards that the applicant proposes and the CA believes to be applicable to the VA validation;
- (r) Instructions for continued airworthiness;
- (s) For FAA PMA parts on critical components, which will be validated as an EASA STC, the application should contain the following information:
  - (1) The FAA PMA approval, with all supplements, and in particular the description of the means by which the FAA PMA approval was granted;
  - (2) Overview of the technical data transmitted to the FAA for the purpose of approving the critical PMA part;
  - (3) Description of the means by which the PMA part user would be made aware of any changes on the PMA part by the PMA holder with a potential impact on safety; and
  - (4) Description of the means by which the PMA part user would be made aware of any changes by the TC holder with a potential safety impact on the PMA part.

### 3.5.6 VA Initial Review and Acknowledgement of Application

The VA will accept the CA's classification as provided and initiate processing of the file as described below:

3.5.6.1 The VA will notify the CA within ten (10) working days of receipt of application.

3.5.6.2 The VA will review the application and request any missing information within thirty (30) working days.

3.5.6.3 If the VA has concerns over the classification (basic/ non basic or significant/ non-significant) of the application, the VA may mark it for review under the Continued Maintenance of Confidence provisions defined in paragraph 1.6, but the VA shall proceed with the process as determined by the CA's classification.

3.5.6.4 Non-Basic applications will go through the Technical Validation process unless the VA concludes that they require no further level of involvement based solely on review of the application. In this case the VA will proceed directly to request the CA compliance statement, as noted in paragraph 3.5.9.1(f).

### 3.5.7 Technical Validation

For projects classified as Non-Basic, a Technical Validation may be performed by the VA to support issuance of the VA design approval.

3.5.7.1 The objective of the Technical Validation process is to provide the VA with sufficient information for it to identify the applicable Non-Basic criteria, and within the scope defined by those applicable criteria, establish its certification basis and acceptable means of compliance.

3.5.7.2 The VA may choose to limit the Technical Validation process to a review of the application, proceeding from there directly to request the CA Statement of Compliance, as noted in paragraph 3.5.9.1(f). Intermediate steps such as a work plan are not required in such cases.

3.5.7.3 Technical Validation can be performed as a sequential or as a concurrent validation.

- (a) In a sequential validation, the CA has completed its certification, or is well advanced in the certification process, before the applicant requests validation by the VA. In this case, the CA certification basis and acceptable methods of compliance (MoCs) have been established and may or may not have received final approval by the CA.

Type design changes, revised operating limitations, or new or revised certification testing or analysis may be required in a sequential program to meet the requirements of the VA, since these requirements may not have been considered during the original CA certification.

- (b) In a concurrent validation, the applicant requests validation of the product by the VA at the same time as certification by the CA, with the objective to get the CA and the VA approval at the same, or nearly the same time.

- (1) This approach allows unique VA requirements to be addressed during the design development and initial compliance demonstration.

- (2) A concurrent validation provides an opportunity for collaborative development of both CA and VA use of exceptions to the latest airworthiness standards, Special Conditions, Exemptions, Deviations, Equivalent Level of Safety Findings and acceptable MoCs. Additionally, it provides for early identification of areas where jointly agreed solutions are not readily available.

- (3) A concurrent validation may use any or all of the following optional provisions:

- (i) Work Sharing

A work sharing program may be used in areas where the VA may make compliance determinations on behalf of both the VA and CA. Work sharing may be advantageous when certification activity is occurring within the geographical area of the VA, or when limited CA resources make it advantageous to advance the project by using VA resources. Work sharing can be limited to a single issue or may be utilized extensively throughout the project, and, if agreed, may persist through the life of a program into post-type certification

activities. Such work sharing arrangements are a form of technical support, as described in the TIP Section 8.

(ii) Common Issue Papers (IP) and Certification Review Items (CRI)

The CA and the VA may jointly develop and approve IPs or CRIs that are common or identical, as applicable, depending on which authority is the CA, to establish the enveloped FAA and EASA program certification requirements. Common IPs/ CRIs can be limited to a single issue, or may be used extensively throughout the project.

(iii) Single Certification Basis

The CA and VA may elect to jointly develop a single agreed Certification Basis that satisfies both U.S. and EU regulatory requirements.

### 3.5.8 Technical Validation Procedure

3.5.8.1 The VA reviews the application and requests any missing information required in paragraph 3.5.5.1.

3.5.8.2 The VA develops a work plan in accordance with paragraph 3.5.9.

3.5.8.3 The CA reviews the VA proposed Work Plan and works with the VA and applicant to refine the work plan and complete the work plan elements.

3.5.8.4 Once the work plan activities are concluded, the VA will notify the CA, in writing, that it has completed its review per the work plan, and that it is ready to receive the CA Statement of Compliance against the VA's Certification Basis.

3.5.8.5 Upon completion of the CA certification and receipt of the VA statement described in paragraph 3.5.8.4, the CA will issue a statement of compliance, confirming adherence to the VA's Certification Basis. The following is an example:

*"The CA certifies that the {specific product type, model, or STC} complies with the {VAs} Certification Basis as identified in {work plan, issue paper, STC, TCDS, etc., as applicable to the project} dated {date}"*.

3.5.8.6 Communication during a validation should be primarily between the CA and VA.

(a) If the CA is not present in a technical discussion, the CA should be immediately informed of the outcome.

(b) The VA will request data through the CA to the applicant.

### 3.5.9 Work Plan

#### 3.5.9.1 General

(a) The work plan establishes the scope and depth of VA involvement, and is used to document the VA certification basis.

(b) An initial work plan is created by the VA at the beginning of the validation program, based on VA review of the Non-Basic application package.

(c) When applicable the work plan may include reference to documents such as draft or final CRIs, CAIs or IPs rather than duplicating them in the work plan.

- (d) In a concurrent project, the initial work plan may evolve over the course of the validation program as the VA gains knowledge during technical familiarization, or as the design presented for validation, including methods of compliance, evolves over the course of the certification program.
- (e) In a sequential program, the VA work plan should be finalized upon completion of technical familiarization (paragraph 3.5.10.1).
- (f) The VA may choose to have no further level of involvement beyond review of the application package, in which case no work plan is required and the VA will request a statement of compliance, as described in paragraph 3.5.8.4 from the CA to support issuance of the VA design approval.
- (g) As soon as possible, the VA will share the approved work plan with the CA and the applicant so that the CA can prepare its resources for the validation activities. The initial work plan is approved by VA management. The work plan is subsequently approved by VA management only when expanding the VA's involvement.
  - (1) Active management oversight assures that the VA's involvement remains within the criteria for establishing the work plan according to paragraph 3.5.9.2.
  - (2) The immediate supervisor of the validation Project Manager or equivalent may provide the signature on the work plan.
- (h) If the VA includes areas of involvement in the work plan that are not included in the Non-Basic criteria, the CA will question those work plan elements using the issue resolution of conflicts process in paragraph 1.9.3.

Limiting the VA scope of involvement to those elements included in the Non-Basic criteria is critical to ensuring an efficient validation process.

#### 3.5.9.2 Work Plan Contents

- (a) The work plan content described below, and the evolution of those contents over the course of a validation project, is described here for a certification project that requires VA involvement beyond simple review of the application. The work plan is intended to ensure the VA receives the information it needs to:
  - (1) Identify the applicable Safety Emphasis Items (SEI); and
  - (2) Identify its Certification Basis, including the applicable Significant Standards Differences, Special Conditions, Equivalent Level of Safety Findings, Exemptions/ Deviations, and additional noise, fuel venting, engine exhaust emissions and/or airplane fuel efficiency (CO<sub>2</sub> emissions) requirements relative to the CA certification basis.
- (b) The work plan documents the scope and depth of VA level of involvement. All other areas shall not be subject to any VA technical review beyond technical familiarization. This means that EASA will verify compliance on behalf of FAA against FAA Certification basis for all non-listed areas, and FAA will find compliance on behalf of EASA against EASA Certification Basis for all non-listed areas.
- (c) The initial VA work plan will include the following elements:

- (1) A brief description of the product or change, as provided in the application package;
- (2) A proposed initial VA certification basis, including the following elements, to the extent that they can be defined based on review of the application:
  - (i) Applicable VA airworthiness standards;
  - (ii) Applicable Significant Standards Differences (SSD); and
  - (iii) Proposed Exemptions/ Deviations, Special Conditions, or Equivalent Level of Safety Findings;
- (3) A list of proposed areas of VA level of involvement, bounded by the applicable Non-Basic criteria;
- (4) A proposal for technical familiarization activities (see section 3.5.10.1) necessary to achieve a final work plan;
- (5) Identification of the responsible VA Project Certification Manager and any VA Team Members identified based on review of the application.

### 3.5.10 Technical Validation Guidelines

#### 3.5.10.1 Technical Familiarization

- (a) The VA will use the Technical Familiarization process to refine and finalize the work plan. The objectives of technical familiarization are to:
  - (1) Establish the VA Certification Basis, including identification of any additional VA airworthiness, noise, fuel venting, engine exhaust emissions and/or airplane fuel efficiency (CO<sub>2</sub> emissions) requirements relative to the CA Certification Basis;
  - (2) Establish the VA scope of level of involvement, limited to the applicable Non-Basic criteria; and
  - (3) Establish the areas, if any, within the identified VA scope of level of involvement, where the VA will review compliance data.
- (b) The objectives of technical familiarization can only be fully satisfied when the applicant or CA has presented to the VA the following information:
  - (1) An overview of the proposed design, intended operational use, and, if applicable, relation to previously approved products;
  - (2) The proposed CA and VA Certification Basis, including analysis of potential differences; and
  - (3) Any design features or compliance methods that trigger the Non-Basic classification criteria of 3.5.3.2.
- (c) The VA will focus its attention during technical familiarization on understanding the general compliance methodologies used or to be used by the applicant, including assumptions, boundary conditions and critical parameters of that methodology to verify the Non-Basic criteria that are impacted, to determine if IPs/ CRIs are necessary, and to update the work plan, if needed.



Further details, including review of test plans or other compliance documents, test witnessing, or other details of the compliance demonstration are deferred until that depth of review is added to the work plan and approved by VA management.

- (d) When technical familiarization meetings are identified and approved in the VA work plan, those meetings will be arranged by the CA. The CA must be represented at any technical familiarization meetings with the VA and the applicant, unless otherwise agreed between the CA and the VA.
- (e) Familiarization flights are a unique aspect of technical familiarization since, in a concurrent program, they cannot be conducted until late in the project when a flying article is available. Familiarization flights are not to be used to repeat determinations or verifications of compliance performed by the CA. Rather, they have the following purposes:
  - (1) Identify any late compliance issues not previously identified by the validation team when the test article was not available to be flown during familiarization test flights;
  - (2) Provide the VA flight test representatives with sufficient familiarity with the aircraft whenever needed and justified by a risk-based VA Level of Involvement (LOI), to get the necessary familiarization with the product that is necessary to validate the MMEL and other operational aspects, and to develop any special flight characteristics training requirements; and
  - (3) Familiarize the VA with the type design as necessary to support continued operational safety of the VA registered fleet.
- (f) VA requests for familiarization flights must be identified in the work plan and approved by VA management.
  - (1) Familiarization flights should be supported by the CA flight test team to facilitate completion of the objectives described in paragraph (e) above.
  - (2) Familiarization flights are typically conducted for all new TC programs that meet the Non-Basic criteria. Familiarization flights may also be conducted for other design change programs having a significant impact on the operational capabilities or limitations, or pilot/ aircraft interface.

#### 3.5.10.2 Managing VA Level of Involvement and Review of Compliance Data

- (a) The depth of VA level of involvement within each impacted Non-Basic classification element is guided by the procedures and principles provided in this section.
- (b) VA level of involvement in Non-Basic projects (including TC projects), beyond technical familiarization, is limited to the applicable Non-Basic criteria.
- (c) A VA decision to directly review a compliance document is typically reached through an exchange of information following identification of an applicable Non-Basic criterion. This exchange may take place through additional meetings following technical familiarization, correspondence (in the context of an established IP or CRI), or other interactions.

A compliance document in this context is any test report or other document that directly supports a determination of compliance.

- (d) The VA will rely, to the maximum extent possible, on the CA to make determinations and verifications of compliance on its behalf. VA justification is required for any VA review of a compliance document.

This justification normally falls into the following general areas:

- (1) Applicable Non-Basic criteria, when those criteria represent a new issue for the VA, and judgment is required in its application to the project; and
  - (2) Sensitive issues usually associated with an accident or incident on a product with similar design features.
- (e) In the case of a Non-Basic change classified by the CA as significant per 14 CFR section 21.101 or EASA 21.A.101(b), the area of VA involvement shall only be to the extent necessary for the VA to establish its certification basis, and to determine if that certification basis triggers any other Non-Basic criteria.
  - (f) In the case of new or amended Exemption/ Deviation, SC, ELOS or ESF, if the Exemption/ Deviation, Special Condition, ELOS or ESF has been applied previously in a similar context and no changes are anticipated for the current projects, VA involvement is limited to the administrative action necessary to extend the applicability or to reissue the Exemption/ Deviation, SC or ELOS/ ESF to the new project.

Note: A MoC proposed by the applicant that is new to the CA or VA or different from the one used at original certification of the product is a criterion for Non-Basic classification to ensure awareness of the VA of a new or different MoC to ensure any applicant can use same MoC. It shall not be used as a systematic reason for review of compliance documents or data.

- (g) VA review of compliance determinations, including review of any compliance documents, must be identified in the work plan along with the associated justification, and approved by VA management.

When the VA requests review of a compliance document according to the procedures in this Section, the VA will provide a written statement to the CA verifying that the document is acceptable for demonstration of compliance to the VA certification basis. This may be part of the general statement of approval.

#### 3.5.10.3 Use of CRI's and IP's

- (a) The VA may use CRIs or IPs, as applicable, to fully develop and document resolution of each of these applicable criteria.
- (b) The VA will not generate an IP or CRI on a subject which has already been addressed by the CA, if applicable to the validation, and with which the VA concurs. The VA will use the work plan to document decisions to rely on the CA IP or CRI in these cases.
- (c) The VA will coordinate IPs or CRIs through the CA to the applicant in order to expedite a mutually acceptable resolution with the awareness of both Authorities.
- (d) VA intention to raise IPs or CRIs, as applicable, must be documented in the work plan and approved by VA management.

#### 3.5.10.4 Safety Emphasis Items (SEI)

- (a) SEIs define areas of VA interest for all products of a certain class. SEI lists must be developed and approved by the appropriate offices within the FAA and EASA. SEI lists are an integral part of the Non-Basic classification criteria, and a list of SEIs for each product class must be available to the public.
- (b) The CA will use the VA SEI list to identify in the application potentially applicable SEIs. The VA team will refine and finalize the list of applicable SEIs during technical familiarization. SEIs include:
  - (i) New VA standards or certain SSDs where the VA or CA has limited past experience with the application to a product, they have an important impact on the whole product or a critical feature, and engineering judgment is required to establish compliance;  

Only those SSDs that meet the noted criteria should be identified as SEI. The expectation is that the majority of SSDs are well understood by both authorities, with full confidence given to the CA for determining compliance to those VA SSDs.
  - (ii) Airworthiness standards where the VA's and CA's interpretive, advisory, MoC, or guidance materials differ or are insufficient, to an extent that those differences impact the level of safety required by the VA system and could result in VA required changes to the type design or approved manuals. As experience is gained, the VA may choose to reduce the application of this criterion to minimize non-basic applications. When interpretive, advisory, MoC, or guidance materials are well understood by both authorities; full confidence should be given to the CA for determining compliance to those VA SEIs. When the VA is confident that the CA fully understands the VA unique safety related MoC and will correctly apply the documented SEI, allowing the CA to confirm compliance to that safety related MoC without involvement of the VA, the SEI can be further classified as "SEI Part 2" and not trigger the Non-Basic classification. Those safety critical unique VA MoC will usually remain on the SEI Part 2 list until the MoC is harmonized and implemented by the CA
  - (iii) Items identified for special emphasis by the VA in a data-driven risk assessment analysis for the product class; and
  - (iv) Subjects linked to known safety conditions that the VA has identified, and for which the VA either has taken, or is in the process of taking, airworthiness action.
- (c) The list of SEI shall be frequently revised with the goal of reducing the size of the list through targeted harmonization effort. SEI list revisions are approved by the management responsible for maintenance of the list. The update process shall be subject to COB monitoring.
- (d) It is agreed that, subject to a valid written authority-to-authority agreement, an applicant may benefit from its past experience in applying the VA SEIs to certain products and seek an agreed applicant-specific subset of existing VA SEIs.

#### 3.5.11 Establishment of the VA Certification Basis

The VA will establish the VA Certification Basis for projects classified as Non-Basic according to paragraph 3.5.3.2, following the Technical Validation procedures described in paragraph 3.5.8.

3.5.11.1 The VA shall develop its proposed type certification basis using a reference date corresponding to the date of application to the CA, or as applicable under the prior TIP with an AA;

3.5.11.2 The VA Special Conditions, ELOS/ ESF and Exemptions/ Deviations will be either adopted from the CA proposal or created as part of the Technical Validation and added to the VA Certification Basis as applicable;

3.5.11.3 Reserved

3.5.11.4 CA classification of changes as either significant or non-significant according to 14 CFR section 21.101 or EASA part 21.A.101, will be accepted by the VA. For changes classified by the CA as significant, the VA will determine the final VA certification basis for the change, including any exceptions to the standards in effect on the date of application to the CA;

3.5.11.5 Applicants for U.S. TC, or for a design change classified as an acoustical change according to 14 CFR section 21.93(b), need to comply with the noise standards of 14 CFR part 36 in effect on the reference date established under paragraph 3.5.11.1, or as otherwise provided in 14 CFR 36.2 3.5.11.1;

3.5.11.6 Applicants for U.S. TC, or for a design change classified as an emissions change according to 14 CFR section 21.93(c), need to comply with the fuel venting and emissions standards of 14 CFR part 34 in effect on the date of FAA design approval; and

3.5.11.7 Applicants to EASA must comply with the applicable noise, fuel venting and exhaust emission standards/ requirements in EASA Part 21 that are in effect on the date of application for validation to EASA.

### 3.5.12 Approval of and Changes to Approved Manuals

3.5.12.1 The CA approves all manuals unless the VA specifies its involvement to approve certain manuals as documented in the work plan.

3.5.12.2 If the VA requires changes to the manuals during the validation, the VA will request changes through the CA, and the approval of the manual will be made by the CA.

3.5.12.3 Change requests to manuals must be directly related to work plan areas of VA involvement.

3.5.12.4 Stand-alone changes to approved manuals shall be dealt with as any other design change according to the Acceptance, Streamlined Validation, or Technical Validation procedures, as applicable.

### 3.5.13 Significant Standards Difference (SSD)

3.5.13.1 A comparison of the airworthiness standards developed by the FAA and EASA indicates that they sometimes differ. In some cases, the 14 CFR are more stringent than the CS; in other instances, the CS are more stringent.

3.5.13.2 An SSD must be identified when in order to meet the minimum standard of the VA relative to that of the CA, the difference requires type design changes, approved

manual changes, additional or different demonstrations of compliance, or the imposition of operational limitations.

- (a) This impact determination is accomplished by the VA for each VA standard, by comparison to the corresponding CA standards.
- (b) Multiple CA standards, taken together may satisfy the objective of a single VA standard; in such cases an SSD need not be identified.

3.5.13.3 SSDs are identified independent of any project considerations and are unique to a particular amendment pair of standards. An amendment pair is defined as a particular CS/ JAR amendment number and a comparable 14 CFR amendment number.

3.5.13.4 Each Authority's list of SSDs must be developed and approved within the Authority.

3.5.13.5 SSDs for the current standards will be added each time the 14 CFR and CS amendments change. There will be a current set of SSDs, as well as other SSDs that have been generated for other amendment pairs in the past.

3.5.13.6 Once a particular set of SSDs are generated for a particular amendment pair, that set of SSDs will be published and should be used for all validation projects where the regulatory basis consists of that amendment pair.

3.5.13.7 In a particular validation project, especially for derivative products, the amendment pair that form the CA and VA certification basis may not have an SSD list published. In that case, for projects classified as Non-Basic, the VA will follow the procedures at paragraph 3.5.11 to establish the VA certification basis, and from that, the VA will identify in the Work Plan the SSD applicable to the project.

3.5.13.8 All interpretive and guidance material associated with the SSD must be identified and provided with the SSD list.

3.5.13.9 Differences in interpretive advisory, or guidance material, may exist even when the standards are identical or equivalent. When appropriate (see paragraph 3.5.10.4), these differences will be identified as SEIs.

## 3.6 Evaluation of Operational and/ or Maintenance Aspects

### 3.6.1 Evaluation of EU Operational and/or Maintenance Aspects

The EASA system includes, under the type certification process, an approval of data that are considered necessary for the safe operation of an aircraft, called the Operational Suitability Data (OSD). These data, once approved, are attached to the TC through a reference in the TCDS and owned by the TC holder. To support the process, specific panels of experts are part of the certification team. Means of compliance to the OSD requirements are described in the relevant Certification Specifications, and listed below, and in the provisions in this TIP. The OSD consist of:

3.6.1.1 OSD Flight Crew (EASA CS-FCD Flight Crew Data), consisting of the minimum syllabus of pilot type rating training, including determination of type rating;

3.6.1.2 OSD Cabin Crew (EASA CS-CCD Cabin Crew Data), consisting of determination of type or variant for cabin crew and type specific data for cabin crew;

- 3.6.1.3 OSD Maintenance Certifying Staff, consisting of the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;
  - 3.6.1.4 OSD Simulator Data (EASA CS-SIMD Simulator Data), consisting of the definition of scope of the aircraft validation source data to support the objective qualification of simulator(s) associated to the pilot type rating training, or provisional data to support their interim qualification; and
  - 3.6.1.5 OSD Master Minimum Equipment List (MMEL) (EASA CS-MMEL Master Minimum Equipment List), consisting of the MMEL.
- 3.6.2 Evaluation of U.S. Operational and/or Maintenance Aspects
- 3.6.2.1 The FAA has established Aircraft Evaluation Division (AED) that are responsible for the operational and maintenance evaluations necessary to support introduction of products into the FAA system.
  - 3.6.2.2 The AED will assemble a Flight Standardization Board and/or Maintenance Review Boards, as appropriate, to review the following items: Operational Configuration, Pilot Training and Licensing Requirements, and the formulation and approval of an MMEL.
- 3.6.3 FAA/EASA Validation of MMEL

This procedure allows validation of an initial or revised MMEL by the FAA or EASA as the VA. Validation should occur concurrently with the CA MMEL development as far as practical, to optimize efforts and resources of both Authorities. However, a request for sequential validation is possible, but the level of involvement will be determined to the satisfaction of the VA. This validation procedure is also applicable for MMEL content related to STCs.

Note: This validation procedure is optional, and contingent on the specific and voluntary request by the applicant and with concurrence of the CA and the VA. Alternatively, the applicant may elect to apply the procedure in 3.6.4 also for MMEL. It is however highly recommended that both FAA and EASA use the validation procedure for initial MMEL approvals in order to reduce duplication of effort and optimize the time and resources expended by the applicant, the CA, and the VA. The TIP does not prevent an applicant from applying for EASA and FAA separate MMELs. However, these applications should be coordinated by the CA to ensure appropriate level of cooperation and information exchange between all the parties.

- 3.6.3.1 The MMEL validation procedure is based on the following agreed and underlying conditions:
- (a) Validation is applicable when the FAA or EASA is the CA and does not cover cases when the product is from a third country SoD;
  - (b) The MMEL will be developed during the validation process. The VA validation of the MMEL will not be issued/ approved until the TC or STC for the product has also been issued by the VA;
  - (c) The validation of an initial MMEL results in a single MMEL document in a form and manner that will be acceptable in both CA and VA regulatory systems; for revisions of existing MMELs approved separately by EASA and the FAA, only

the proposed change will be validated under this procedure, and incorporated within the two separate MMELs;

- (d) The CA shall ensure the VA is informed of any request for validation of initial MMEL or revision to an existing MMEL;
- (e) The VA establishes its level of involvement in the MMEL validation process using risk-based principles in the evaluation of each item listed in the MMEL;
- (f) The MMEL shall be approved in accordance with the procedures of the CA and after this validation procedure is satisfactorily completed, the CA approval shall also indicate that the MMEL is validated/ approved by the VA;
- (g) FAA Flight Operations Evaluation Board and comparable arrangements when EASA is the CA, may allow for participation by operators and stakeholders; and
- (h) The MMEL validation procedure when EASA is the CA shall allow for FAA public comment period and FAA internal coordination.

#### 3.6.3.2 Reserved

3.6.3.3 Any potential conflict derived from this process shall be resolved in a similar manner as the provisions outlined in paragraph 1.9 but through the appropriate FAA Flight Standards Service and EASA Certification office.

#### 3.6.4 EASA Evaluation of Other OSD Elements

While the FAA and EASA have agreed to a validation process for MMELs, they are still working together to develop validation processes for the remaining operational suitability aspects. Until these processes are completed, EASA will verify compliance with the EASA OSD requirements based on the following:

- 3.6.4.1 U.S. original equipment manufacturer will send its application and compliance package to the FAA (either as a standalone application or as part of a design change or TC approval);
- 3.6.4.2 The FAA will forward the application and compliance package to EASA;
- 3.6.4.3 EASA experts will perform the necessary reviews and evaluations, and verify compliance to the appropriate CS OSD requirements; and
- 3.6.4.4 EASA will coordinate all activities with the FAA.

#### 3.6.5 Evaluation of Maintenance Review/ Type Board Aspects

- 3.6.5.1 The FAA and EASA agree that when acting as the CA for an initial issue or a revision of a Maintenance Review Board (MRB) or Maintenance Type Board (MTB) process based report, its approval/ acceptance shall be automatically accepted by the VA as being equivalent to having granted and issued its own approval/ acceptance.
- 3.6.5.2 The process referred to as “Acceptance” requires that the VA shall accept the CA’s report approval/ acceptance and shall not issue its own approval/ acceptance, as there is full confidence in each other’s approval/ acceptance system. In this case, an application for approval/ acceptance of a report to the VA shall not be required.

**Note:** In the transition period, for ongoing initial MRB/ MTB reports exercises, the planned CA and VA concurrent participation should be maintained until the initial revision is approved/ accepted. An exercise is considered to be ongoing, when an application/ notification had been received from an

applicant before the date when TIP Revision 5 Amendment 1 entered into force. For amendments to living MRB/ MTB reports, CA and VA concurrent participation shall be maintained until the approval/ acceptance of the next planned complete MRB/ MTB report revision.

3.6.5.3 The Acceptance of Maintenance Steering Group – 3rd Task Force (MSG-3) derived MRB/ MTB process based reports under the Agreement is based on the following agreed and underlying conditions:

- (a) That the CA and VA are members of the International MRB Policy Board (IMRBPB);
- (b) That the CA and VA commit to implement the latest revision of the International MRB/ MTB Process Standards (IMPS) developed and approved by the IMRBPB;
- (c) That Acceptance is applicable to all current and future reports issued by the FAA or EASA;
- (d) That either the FAA or EASA is the CA for the SoD for the product;
- (e) That the product has been issued a TC or validated TC by both parties, or the TC application is being processed;
- (f) That the CA shall inform the VA of any application for a new or revised issue of the report;
- (g) That the report shall be approved/ accepted in accordance with the approval/ acceptance procedures of the CA; the CA approval/ acceptance shall state that the report is also approved/ accepted on behalf of the VA under the provisions of the Agreement;
- (h) That for existing legacy products where specific VA requirements are addressed in appendices/ annexes to the report, the CA approval/ acceptance of these specific requirements shall be coordinated with the VA;
- (i) That for existing legacy products where specific VA action items are still open, the closure of these action items by the CA shall be coordinated with the VA;
- (j) That significant changes to MRB/ MTB approval/ acceptance processes or procedures shall be communicated by each Authority to the other in accordance with the provisions outlined in paragraph 1.4;
- (k) That the VA reserves the right to review or sample the CA approval/ acceptance process and the resultant MRB/ MTB reports at any point, in the lifecycle of the product from the MRB/ MTB report application, to ensure continued confidence that the agreement is being implemented in accordance with the TIP and that the MRB/ MTB report achieves its intended goals. The CA shall make data supporting the report available to the VA on request, bearing in mind that this shall not prevent or delay the CA approval/ acceptance process; and
- (l) That any potential conflict derived from this process shall be resolved in a similar manner as the provisions outlined in paragraph 1.9 but through the appropriate FAA Flight Standards Service and EASA Flight Standard offices.



3.6.5.4 If processes other than MRB/ MTB are used to develop scheduled maintenance interval and/ or tasking requirements, those processes shall be managed by the VA office responsible for the product.

#### 3.6.6 Instructions for Continued Airworthiness

Acceptance or approval, as appropriate, of Instructions for Continued Airworthiness (ICA), including the Airworthiness Limitations Section (ALS) of the ICA, will be managed by the VA office responsible for the product. The Level of involvement of the VA will be established using the Design Approval Procedures of this Chapter: the CA reviews the ICA unless the VA specifies its involvement in the Work Plan; stand-alone changes to ICA shall be dealt with as any other design change according to the Acceptance, Streamlined Validation, or Technical Validation procedures, as applicable.

### 3.7 Environmental Protection Compliance Demonstration and Approval Procedures

#### 3.7.1 General

3.7.1.1 The FAA is authorized to make findings of compliance to 14 CFR parts 34 and 36.

3.7.1.2 Information and data must be supplied to the FAA in order to make a finding in accordance with Title 49 of the United States Code, Section 44715 (49 U.S.C. 44715) (previously known as the Noise Control Act of 1972). The FAA, before issuing an original TC for an aircraft of any category, must assess the extent of noise abatement technology incorporated into the type design and determine whether additional noise reduction is achievable. This examination must be initiated as soon as possible after the application for type certification in each original type certification project and reflect noise reduction potentials that become evident during the design and certification process.

3.7.1.3 The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.) requires the FAA to publicly assess and analyze potential environmental consequences of its actions. In order to grant an aircraft type certificate (new, amended, or supplemental) in the absence of noise regulations that are applicable and appropriate to a particular aircraft type, the FAA must prepare an Environmental Assessment, including a decision on whether to prepare a finding of no significant impact or an environmental impact statement. Information and data must be supplied to the FAA in order to prepare the Environmental Assessment.

3.7.1.4 EASA is required to verify compliance to the environmental protection essential requirements defined in Article 9 of Regulation (EU) 2018/1139, the requirements of Part 21.B.85, and in accordance with the procedures as defined in CS-34, CS-36 and CS-CO<sub>2</sub>.

3.7.1.5 Upon request to EASA, and after mutual agreement, the FAA may authorize environmental protection findings of compliance to be performed by EASA on behalf of the FAA. For tests conducted prior to a TC or STC application being made to the FAA, FAA may accept EASA approved noise, fuel venting, engine exhaust emissions and/or airplane fuel efficiency (CO<sub>2</sub> emissions) certification compliance data, provided the data meets the applicable FAA regulations, guidance, and policy material.

Note: None of the bilateral agreements listed in Attachment 1 of the Agreement have the approval of compliance with environmental protection standards within their scope.

3.7.1.6 Upon request to the FAA, and after mutual agreement, EASA may authorize environmental protection findings of compliance to be performed by the FAA on behalf of EASA. For tests conducted prior to a TC or STC application being made to EASA, EASA may accept FAA approved noise, fuel venting, engine exhaust emissions and/ or airplane fuel efficiency (CO<sub>2</sub> emissions) certification compliance data, provided the data meets the applicable EASA regulations, guidance, and policy material.

3.7.2 Environmental Protection Approval Process for new TC and Non-basic changes to a Type Design (TC/STC) affecting Noise and Emissions.

3.7.2.1 In accordance with the Work Plan, the process for environmental protection compliance determination and approvals by the CA includes the following when the criteria of paragraph 3.5.3.2(b)(8) is applied:

- (a) Environmental Protection (noise, fuel venting, engine exhaust emissions and/or airplane CO<sub>2</sub> emissions) certification compliance demonstration plans must be submitted to the VA for review, comment, and subsequent approval not less than ninety (90) days prior to commencing testing;
- (b) Information and data must be supplied to the VA in order to conduct an evaluation of the measurement and analysis methods and practices, and data correction procedures of the applicant for aircraft noise certification under 14 CFR part 36, Subpart B and/ or Subpart H or EASA CS-34, CS-36 and CS-CO<sub>2</sub>;
- (c) Compliance demonstration tests must be witnessed by the VA personnel or authorized VA designees. Prior to the start of testing it is necessary to assure the conformity of the test article (aircraft or engine configuration) to that identified in the CA approved compliance demonstration test plans;
- (d) Proposed equivalent procedures to be used by the applicant during testing, data processing, data reduction, and data analysis must be specifically identified to the VA and approved in advance by the VA; and
- (e) Compliance demonstration reports must be submitted to the VA for review and/ or comment and subsequent approval prior to TC/ STC approval.

## 3.8 Acceptance of Equipment Standards and Aeronautical Databases

3.8.1 Appendix D defines recognized RTCA and EUROCAE standards that may be used for issuing organization approvals under the TIP.

3.8.2 FAA and EASA have adopted comparable procedures to apply when accepting an organization providing aeronautical databases for use on aircraft and/ or on certified aircraft application/ equipment.

3.8.3 FAA guidance is found in Advisory Circular (AC) 20-153, Acceptance of Aeronautical Data Processes and Associated Databases.

3.8.4 EASA applies Regulation (EU) 2017/373 of 1 March 2017. According to these Regulations, Data Services (DAT) providers are allowed, on a voluntary basis, to apply for, and be granted, the relevant certificates immediately upon the Entry into Force of that Regulation,

i.e., in advance of the applicability date of this requirement (1<sup>st</sup> January 2019). Therefore, DAT providers having voluntarily implemented Agency's Opinion 01/2005 on acceptance of Navigation Database Suppliers and been issued EASA Letter of Acceptance are also accepted until 1 January 2019.

- 3.8.5 The FAA shall accept an EASA DAT provider certificate (or an EASA Letter of Acceptance by 1 January 2019 at the latest) as an equivalent to an FAA Letter of Acceptance.
- 3.8.6 EASA shall accept an FAA Letter of Acceptance as an equivalent to a data services (DAT) provider certificate (or an EASA Letter of Acceptance by 1 January 2019 at the latest) when a data supplier provides a release statement (reference paragraph 10.2.6 of AC 20-153B) with each database distribution.
- 3.8.7 Procedures for Split Design/ Production Projects

The FAA and EASA recognize that some joint venture projects of their aviation industries may involve products designed under one's Authority jurisdiction and manufactured under the other Authority's jurisdiction. In such cases, the FAA and EASA may work together during validation to develop an arrangement defining their regulatory responsibilities to ensure accountability under Annex 8 to the Convention on International Civil Aviation, done at Chicago on 7 December 1944, (1994); (the "Chicago Convention"). Such special arrangements will address the continued airworthiness responsibilities of SoD and the SoM and will be documented in accordance with Section 9 of this TIP.

### 3.9 Submission of Electronic Data

When a U.S. or EASA applicant complies with FAA Order 8000.79 or EASA's electronic data policy, as applicable, the applicant is considered to have an arrangement acceptable to both the FAA and EASA for the submission and storage of electronic data as long as the data is in a format that is compatible with the VA's information system.

## Section 4 Continuing Airworthiness

### 4.1 General

- 4.1.1 In accordance with Annex 8 to the Chicago Convention, the Authority for the SoD is responsible for resolving in-service safety issues related to design or production. The CA, as the Authority for the SoD, will provide applicable information that it has found to be necessary for mandatory modifications, required limitations and/ or inspections to the other Authority to ensure continued operational safety of the product or article. Each Authority will review and normally accept the corrective actions taken by the CA, as Authority for the SoD, in the issuance of its own mandatory corrective actions.
- 4.1.2 At the request of either Authority, the Authority for the SoD will assist in determining what action is considered necessary for the continued operational safety of the product or article. The Authority for the SoR retains sole authority for decisions on final actions to be taken for products or articles under their jurisdiction. The FAA and EASA will strive to resolve differences.
- 4.1.3 The FAA and EASA recognize the importance of the routine sharing of Continued Operational Safety (COS) information as a means to assist in the identification and resolution of emerging airworthiness issues. The FAA and EASA will share their COS data with each other to assist in their respective COS oversight.
- 4.1.4 The VA has the right to seek information from the Authority for the SoD, which includes, but is not limited to, design data and findings of compliance. Additionally, once the design is validated, the Authority for the SoD will provide any mandatory continuing airworthiness information necessary to ensure continuing airworthiness of the product registered in the jurisdiction of the importing State.
- 4.1.5 The FAA and EASA will ensure active communication between specific focal points, for regular feedback and communicating continuing airworthiness issues on products certified by either the FAA or EASA and validated by the other. The extent of this engagement will be commensurate with the continuing airworthiness activities associated with the product.

### 4.2 Malfunctions, Failures, and Defects (MF&D) and Service Difficulty Reports (SDR)

- 4.2.1 The FAA and EASA agree to perform the following functions for the products and articles for which it is the SoD:
- 4.2.1.1 Tracking of MF&D reports/ SDR and accident/ incidents;
  - 4.2.1.2 Evaluating MF&D reports/ SDR and accident/ incidents;
  - 4.2.1.3 Investigating and resolving all suspected unsafe conditions;
  - 4.2.1.4 Advising the other Authority of all known unsafe conditions and the necessary corrective actions (see paragraph 4.3);
  - 4.2.1.5 Upon request, providing the other Authority with the following:
    - (a) Reports of MF&D/ SDR and accidents/ incidents, if available;
    - (b) Status of investigations into MF&D/ SDR and accidents/ incidents; and

- (c) Copies of final reports reached in its investigation into MF&D/ SDR, if available.
- 4.2.1.6 Making a reasonable effort to resolve issues raised by the other Authority concerning matters of safety for products registered in their State.
- 4.2.2 The FAA and the applicable EU member state (AA), as Authorities for the SoR, agree to perform the following functions:
  - 4.2.2.1 Advise the Authority for the SoD of MF&D/ SDR and accidents/ incidents occurring on imported products which are believed to be potentially unsafe conditions; and
  - 4.2.2.2 Support the Authority for the SoD in investigations of unsafe conditions and their occurrences.
- 4.2.3 For COS issues related to investigations of Safety Recommendations, Service Difficulty Reports (SDRs), accidents or incidents on the imported products, parts, or articles, the Authority for the SoR can directly request information from the DAH after informing the CA of the investigation.
- 4.2.4 Copies of MF&D/ SDR reports from U.S. can be found at <https://sdrs.faa.gov> and for the EU can be found at the addresses listed in Appendix A.

### 4.3 Unsafe Condition and Mandatory Continuing Airworthiness Actions

- 4.3.1 The FAA (under 14 CFR part 39) and EASA (under EASA Part 21) agree to perform the following functions for the products, articles, and design changes for which they are the Authority for SoD:
  - 4.3.1.1 Issue a mandatory continuing airworthiness action (Airworthiness Directive (AD)) whenever the Authority determines that an unsafe condition exists in a type certificated product or article, and is likely to exist or develop on a type certificated product or article of the same type design. This may include a product that has an engine, propeller, or article installed on it and the installation causes the unsafe condition;
  - 4.3.1.2 Ensure that the following information is provided to the other Authority in support of the mandatory continuing airworthiness action or directly from the approval holder;
    - (a) The number of aircraft world-wide;
    - (b) A statement on the availability of parts;
    - (c) An estimate of the number of labor hours and the cost of parts required for the corrective actions; and
    - (d) Copies of all relevant service bulletins referenced in the mandatory action, as well as other supporting documentation.
  - 4.3.1.3 Issue a revised or superseding AD when determined that any previously issued AD was incomplete or inadequate to fully correct the unsafe condition;
  - 4.3.1.4 Provide timely notification to the VA of the unsafe condition and the necessary corrective actions by providing a copy of the AD at the time of publication to the address listed in Appendix A. All documentation will be forwarded to the appropriate focal point in the product-responsible FAA or EASA product-responsible department, as appropriate;

- 4.3.1.5 In the case of emergency airworthiness information ensure special handling so that the other Authority is notified prior to publication, and provide the FAA or EASA product-responsible office advance electronic notice of anticipated emergency ADs (including security-sensitive ADs) or other significant safety events;
- 4.3.1.6 Advise and assist the VA in defining the appropriate actions for the VA to take in the issuance of its own AD;
- 4.3.1.7 Provide sufficient information to the VA for its use in making determinations as to the acceptability of alternative means of compliance to ADs; and
- 4.3.1.8 Maintain a web-based database of ADs that can be accessed by the SoR.
- 4.3.2 The FAA and EASA recognize that they may disagree as to the finding of an unsafe condition and propose to issue a unilateral AD. In such case that Authority should consult with the Authority of the SoD prior to issuing its own AD.
  - 4.3.2.1 The responsible office of the VA shall consult with its counterpart organization.
  - 4.3.2.2 If the CA agrees that the proposed mandatory action is needed, then it shall issue an AD.
  - 4.3.2.3 If the CA disagrees with the proposed mandatory action, it shall notify the VA with its written justification via email. The VA shall review the justification and determine whether or not to continue its AD action.
  - 4.3.2.4 If the decision is to continue with a unilateral AD, the VA shall hold a teleconference with appropriate management of both Technical Agents to advise that unilateral AD action shall commence.
- 4.3.3 The FAA and EASA will promptly respond to the issuance of an AD by the Authority for the SoD in making its own determination of the need for issuing its own similar AD that addresses all unsafe conditions on affected products or articles certified, approved or otherwise accepted by the importing Authority.
- 4.3.4 When the VA has determined that an AD is needed, the VA should consider the compliance time given by the CA when establishing its own compliance time.
- 4.3.5 The FAA and EASA as an Authority for the SoD will share information on any changes that affect operating limitations, life limits, or any other airworthiness limitation, to include manual changes and changes to certification maintenance requirements. These changes should be promptly sent to the VA in order to ensure the continued operational safety of the aircraft. The FAA and EASA will evaluate any of these changes to determine if an unsafe condition is created.
- 4.3.6 Reserved.

#### 4.4 Alternative Methods of Compliance (AMOC) to an AD

- 4.4.1 If an AMOC of general applicability to an existing AD is issued by the CA for its own SoD products, articles, or parts, the CA shall electronically notify the VA of the decision.
- 4.4.2 FAA approved AMOCs for U.S. SoD products are automatically considered to be EASA-approved provided the following conditions apply:
  - 4.4.2.1 The related FAA AD has been adopted by EASA, or EASA issued an AD with no deviations from the FAA AD; and

- 4.4.2.2 The AMOC approval holder is the design approval holder of the product, or of the design change, or of the article or part, as applicable, to which that AD applies, or
- 4.4.2.3 The AMOC was issued to a US design change approval holder where:
  - 4.4.2.3.1 Compliance to the AD is affected by the design change, and
  - 4.4.2.3.2 The intent of the AMOC is to provide the necessary adaptation of the AD compliance method to account for the installed design change.
- 4.4.3 The FAA must approve all AMOCs in accordance with 14 CFR section 39.19. When issuing its approval, the FAA will give full consideration to the EASA approved AMOC provided the following conditions apply:
  - 4.4.3.1 The FAA issued an AD with no deviations from the EASA AD; and
  - 4.4.3.2 The AMOC approval holder is the design approval holder of the product, or of the design change, or of the article or part, as applicable, to which that AD applies.
- 4.4.4 EASA shall provide support to the FAA when approving a similar AMOC. In consideration of its AMOC approval, the FAA should only account for differences that may affect the mitigation used by EASA when applied to the FAA standards.

## Section 5 Administration of Design Approvals

### 5.1 General

This section addresses procedures for the transfer, surrender, revocation, suspension, termination, or withdrawal of a design approval.

- 5.1.1 The FAA and EASA shall administer the transfer of TCs/ STCs only where an applicant agrees to assume responsibility for both an FAA and EASA TC/ STC and the affected operating fleet. Early coordination with both Authorities is necessary for the timely transfer of TCs and STCs (refer to Appendix A).
- 5.1.2 In all cases, the type design data are the property of the design approval holder.
- 5.1.3 The transfer of the SoD responsibilities in accordance with Annex 8 of the Chicago Convention must be agreed to by both Authorities. If agreement cannot be reached between the two Authorities, then the CA may revoke the certificate and notify the concerned ICAO States that there is no longer a design approval holder. The following paragraphs outline the procedures to be followed for effective TC transfers.

### 5.2 Transfer of TCs and STCs

The FAA and EASA will administer the transfer of TCs/ STCs only if an applicant agrees to assume responsibility for both an FAA and EASA TC/ STC (when applicable) and the affected operating fleet.

- 5.2.1 Transfer of a U.S. or EASA TC/ STC to a Person in the Other Authority's Territory
  - 5.2.1.1 Early coordination between the current TC/ STC holder and its Authority, together with the proposed TC/ STC holder and its Authority is essential. The current Authority will notify the receiving Authority of the proposed transfer and include information about current production status. All information related to the transfer of a TC/ STC including technical documentation, will be in the English language.
  - 5.2.1.2 Upon notification of a change in ownership of a TC/ STC holder to a new holder in the other territory, the current Authority's responsible office will notify the receiving Authority's responsible office as listed in Appendix A. A special arrangement may be developed to identify each Authority's responsibilities.
  - 5.2.1.3 The current Authority will transfer to the receiving Authority the ICAO SoD responsibilities for TCs and STCs within the scope of the TIP. The receiving Authority will not assume ICAO SoD functions for models or design changes that have not been found to meet their certification requirements.
  - 5.2.1.4 If the receiving Authority does not already have a corresponding TC/ STC, the receiving holder will have to apply to their Authority for a new TC/ STC. The transferring Authority will provide support to establish acceptance of the receiving Authority's TC/ STC as showing compliance to the applicable certification requirements of the receiving Authority. This would include the current Authority's statement of compliance that the product meets new SoD (receiving Authority) certification requirements. Upon acceptance, the new Authority will issue their TC/ STC.



- (a) For any FAA or EASA-certificated model not listed on the new TC, the transferring Authority will, if requested, provide support to establish acceptance of the additional model as showing compliance to the applicable certification requirements. This support would include the current Authority's statement of compliance that the model meets the receiving Authority's certification requirements. Upon acceptance, the new Authority will place the additional model on their TC.
- (b) For STCs, if the original STC does not include a specific certificated model of the product listed on the new STC, the applicability of the new STC will only include those TCs that have been validated by the receiving Authority. All pre-requisite STCs will be listed on the STC.

5.2.1.5 The transfer of the ICAO SoD responsibilities for the TC/ STC to the receiving Authority will be considered complete when the new Authority confirms all necessary data have been transferred to the new holder, and the new holder is able to perform the responsibilities required of a design approval holder.

5.2.1.6 The transferring Authority will reissue a TC/ STC in the name of the new holder after the new Authority issues their TC/ STC.

5.2.1.7 If the new holder does not have and does not apply for a new SoD TC, or if the Authority for the new SoD's TC covers only some models covered by the transferring Authority's TC and the new holder does not apply for an additional approval, the transferring Authority will continue to fulfil its responsibilities for those models.

5.2.1.8 Upon transfer, or a mutually agreed-upon date, the new Authority in carrying out SoD functions will comply with the requirements of Annex 8 to the Chicago Convention, *Airworthiness of Aircraft*, for affected products. For TCs/ STCs, the new Authority will notify the previous Authority and all affected ICAO Contracting States (i.e. States of Registry) as notified by the previous Authority, of the change in SoD responsibility and identify the new TC/ STC holder, upon completion of all applicable procedures described above.

#### 5.2.2 Transfer of TCs and STCs within the U.S. or the EU

5.2.2.1 When there is no change in the SoD, the CA will notify the VA when a TC/ STC has been transferred to a new design approval holder within the country of the CA.

5.2.2.2 The VA will transfer its TC/ STC only when satisfied that the applicant is able to undertake the responsibilities in 14 CFR Part 21/ EASA Part 21, as appropriate, and that the TC/ STC has been transferred to the same applicant. The VA may request that the CA provide technical support in making the determination that the new TC/ STC holder will be able to execute their design approval holder responsibilities.

5.2.2.3 The VA will issue a TC/ STC in the name of the new design approval holder after the CA's TC/ STC has been issued.

### 5.3 Surrender of TC or STC

- 5.3.1 If a certificate holder surrenders a TC or STC issued by either the FAA or EASA, the Authority of the SoD will immediately notify the other in writing of the action. For EASA, notification

will be to the appropriate FAA office at the address listed in Appendix A. For the FAA, notification will be to the EASA TC or STC website at the address listed in Appendix A.

5.3.2 The FAA or EASA, as Authority for the SoD, will accomplish all actions necessary to ensure continuing airworthiness of the product until such time as:

5.3.2.1 The TC or STC is reissued to a new holder when that new holder demonstrates competence to fulfil the necessary obligations; or

5.3.2.2 The FAA or EASA revokes the TC or STC. Prior to revocation, the FAA or EASA will notify the other of the pending action.

## 5.4 Revocation or Suspension of TC or STC

5.4.1 In the event EASA revokes or suspends a TC or STC of a product for which EASA is the Authority for the SoD, EASA should immediately inform the appropriate FAA office, at the address listed in Appendix A, in writing. The FAA, upon notification, will conduct an investigation to determine if action is required in the U.S. If the revocation or suspension was “for cause” and the FAA concurs with EASA’s certificate action, the FAA will initiate revocation or suspension of the U.S. TC or STC. EASA will retain responsibility for assisting the FAA with design related issues concerning the continued operational safety of any aircraft for which the TC or STC was revoked or suspended. Final certificate action is at the sole discretion of the FAA. The FAA may revoke the U.S. TC or STC if the continuing airworthiness responsibilities would cause an undue burden for the FAA.

5.4.2 In the event the FAA revokes or suspends a TC or STC of a product for which the FAA is the Authority for the SoD, the FAA responsible office should immediately inform EASA in writing. EASA, upon notification, will revoke the type acceptance certificate. As U.S. STCs are considered acceptable technical data and not issued an EU STC, EASA will notify all potentially affected EU operators. The FAA will retain responsibility for assisting EASA with design related issues concerning the continued operational safety of any aircraft for which the TC or STC was revoked or suspended. Final certificate action relating to the revocation of the U.S. STC is at the sole discretion of EASA. For an STC, EASA will advise potentially affected operators of the change in acceptability.

## 5.5 Surrender or Withdrawal of a TSOA/ ETSOA

### 5.5.1 Surrenders

If an FAA TSOA holder, FAA Letter of Design Approval holder (LODA), or an ETSOA holder elects to surrender the TSOA, LODA, or ETSOA issued by the FAA or EASA, the FAA or EASA office that issued the approval being surrendered shall immediately notify the other in writing of the action. The exporting Authority shall inform the importing Authority when an unsafe condition has been identified, until such time as the TSOA or ETSOA is formally withdrawn by the exporting Authority.

### 5.5.2 Withdrawals

If a TSOA or ETSOA is withdrawn, the FAA or EASA office that issued the approval being withdrawn shall immediately notify the other in writing of the action. The exporting Authority shall inform the importing Authority when an unsafe condition has been identified. In the event of a withdrawal of a TSOA or ETSOA for non-compliance, the exporting Authority shall investigate all non-compliances for corrective action and shall

notify the importing Authority of the corrective action. The exporting Authority still has responsibility for the continuing airworthiness of those TSOA or ETSOA articles manufactured under its Authority.

## 5.6 Change of Holder of TSOA or ETSOA

For TSOA and ETSOA validated before the entry into force of TIP Rev 5, upon notification of a change to a holder of TSOA or ETSOA, the FAA or EASA office that issued the approval shall immediately notify the other in writing of the action.

## 5.7 Surrender, Withdrawal or Termination of an FAA PMA for a Critical Component

### 5.7.1 Surrenders

5.7.1.1 If an FAA PMA holder for a critical component for which EASA has issued a corresponding STC elects to surrender the PMA and STC approval issued by the FAA and EASA, the FAA office that issued the approval shall immediately notify EASA in writing. The FAA shall inform EASA when an unsafe condition has been identified, until such time as FAA formally terminates the PMA approval.

5.7.1.2 Upon notification by the FAA, EASA shall revoke its STC according to paragraph 5.4.

### 5.7.2 Withdrawal or Termination

5.7.2.1 If an FAA PMA for a critical component for which EASA has issued a corresponding STC is withdrawn or terminated, the FAA office that issued the approval shall immediately notify EASA in writing of the action. In the event of withdrawal or termination for non-compliance, the FAA shall investigate all non-compliances for corrective action and shall notify EASA of the corrective action. The FAA shall inform EASA when an unsafe condition has been identified. The FAA still has responsibility for the continued airworthiness of those critical PMA parts manufactured under its authority.

5.7.2.2 Upon notification by the FAA, EASA shall revoke its STC according to paragraph 5.4.

## Section 6 Production and Surveillance Activities

### 6.1 Production System

- 6.1.1 Implementation of production is addressed starting at paragraph 3.4 of Annex 1 of the Agreement.
- 6.1.2 The EASA and FAA shall recognize production approvals issued by either Technical Agent (FAA or EASA) to organizations located outside their territories under the following circumstances. For self-standing production approvals, this recognition shall apply to cases where the organization is located in a third country whereby either side has concluded an international agreement for aviation safety that covers cooperation and assistance in the area of airworthiness with the aviation authority of that third country\*. As part of that agreement, the FAA or EASA shall have completed a system assessment verifying that the level of safety is sufficiently equivalent based on the scope of the agreement.

\*Note: This includes bilateral or multilateral agreements, such as the European Economic Area (EEA) Agreement, Agreement between the European Community and the Swiss Confederation on Air Transport, the Multilateral Agreement on the Establishment of a European Common Aviation Area (ECAA) and the Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community and the United Kingdom of Great Britain and Northern Ireland.

- 6.1.3 In addition, such recognition may be extended, subject to specific conditions to be later agreed between the Technical Agents by mutual consent, to self-standing production approvals located in other third countries where the FAA or EASA have concluded a cooperation and assistance agreement (with similar conditions as noted above) between the respective aviation authorities. The list of countries where this recognition applies is published on the FAA and EASA websites.

## Section 7 Export Procedures

### 7.1 General

This section addresses procedures and certifying statements for export for the implementation of paragraph 3.5 in Annex 1 of the Agreement.

### 7.2 Export Certificates of Airworthiness

- 7.2.1 For the FAA, an Export Certificate of Airworthiness, FAA Form 8130-4, is issued for complete aircraft. An Authorized Release Certificate, FAA Form 8130-3, is issued for aircraft engines, propellers and articles.
- 7.2.2 For the EU, an Export Certificate of Airworthiness, EASA Form 27, is issued by the AAs or by EASA for completed aircraft. AAs may use their own Export Certificate of Airworthiness forms for aircraft exported to the U.S. if issued before September 28, 2008. An Authorized Release Certificate, EASA Form 1, is issued for aircraft engines, propellers, parts, and articles. A JAA Form One is still valid for aircraft engines, propellers, parts, and articles when issued before September 28, 2005.
- 7.2.3 If the exporting Authority is not in a position to assess whether or not an aircraft satisfies the conditions defined in this section, it will inform the importing Authority accordingly.

### 7.3 New Aircraft Exported to the U.S. or the EU for which a Design Approval Has Been Granted

- 7.3.1 Except as provided in paragraph 7.13, the importing Authority will accept an Export Certificate of Airworthiness on new aircraft identified in paragraphs 2.2.3 and 2.3.3, when the exporting Authority certifies that each aircraft:
  - 7.3.1.1 Conforms to a type design approved (or grandfathered by EASA) by the importing Authority, as specified in the importing Authority's TCDS;
  - 7.3.1.2 Conforms to a type design approved as modified by each STC and design change by the importing Authority;
  - 7.3.1.3 Has undergone a final operational check;
  - 7.3.1.4 Is in a condition for safe operation, including compliance with applicable importing Authority ADs;
  - 7.3.1.5 Is marked in accordance with paragraph 7.15; and
  - 7.3.1.6 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15 as notified.
- 7.3.2 Each new aircraft imported to the U.S. or the EU will have an Export Certificate of Airworthiness. The Export Certificate of Airworthiness should contain the following statement: *"The [insert aircraft MODEL] covered by this certificate conforms to the type design approved under [insert U.S. or EASA] Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER and REVISION LEVEL], and is found to be in a condition for safe operation,"* and/ or any other "import requirements" text as specified in the [insert U.S. or EASA] TCDS.

- 7.3.3 For aircraft grandfathered on the basis of an FAA type certification basis but for which EASA has not yet issued an EASA TC, the FAA shall certify that the aircraft model conforms to the FAA TC and is in a condition for safe operation. The pre-printed certifying statement on the FAA Form 8130-4 is sufficient, and no other additional information in the Exceptions block is necessary.

**Note:** Grandfathered aircraft means aircraft with a TC grandfathered under Article 2.3 of Commission Regulation EC 748/2012.

## 7.4 Used Aircraft Exported to the U.S. or the EU for which a Design Approval Has Been Granted

- 7.4.1 The importing Authority will accept an Export Certificate of Airworthiness on used aircraft identified in paragraphs 2.2.3 and 2.3.3, for import only if a TC holder exists to support continuing airworthiness of such aircraft and when exporting Authority certifies that each aircraft:
- 7.4.1.1 Conforms to the type design approved (or grandfathered by EASA) by the exporting Authority and importing Authority as specified in their respective TCDSs;
  - 7.4.1.2 Conforms to a type design approved as modified by each STC and design change by the exporting Authority and validated or accepted by the importing Authority;
  - 7.4.1.3 Is in a condition for safe operation, including compliance with all applicable importing Authority ADs;
  - 7.4.1.4 Is marked in accordance with paragraph 7.15 of this TIP;
  - 7.4.1.5 Is properly maintained using approved procedures and methods throughout its service life to the requirements of an approved maintenance program;
  - 7.4.1.6 Can provide records which verify that all overhauls, major changes and repairs were accomplished in accordance with approved data; and
  - 7.4.1.7 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15, as notified.
- 7.4.2 When a used aircraft produced in the EU or the U.S. is to be imported into the other country from a third country, the Authority of the original SoM will, upon request, assist the importing Authority in obtaining information regarding the configuration of the aircraft at the time it left the manufacturer. The original SoD Authority will also provide, upon request, information regarding subsequent installations on the aircraft that the SoD has approved.
- 7.4.3 If a used civil aircraft produced in the EU or the U.S. has been used in military service in either country at any time, the exporting Authority will consult with the importing Authority to determine if they will accept such an aircraft.

## 7.5 Acceptance of Used Aircraft Being Exported (Returned) to the original SoD

Either Authority will accept an Export Certificate of Airworthiness on a used aircraft being exported (returned) to the original SoD for the aircraft, when the conditions of 7.4.1 have been met.

## 7.6 Acceptance of Used Aircraft for which a Third Country is the SoD

The importing Authority will accept Export Certificates of Airworthiness from the exporting Authority for used aircraft for which a third country is the SoD, when that third country has a bilateral agreement/ arrangement with both the U.S. and the EU covering the same class of product, and the conditions of paragraph 7.4.1 have been met.

## 7.7 New Aircraft Engines and Propellers Exported to the U.S. and New and Rebuilt Aircraft Engines and New Propellers Exported to the EU

- 7.7.1 The importing Authority shall accept the exporting Authority's Authorized Release Certificates certifying that each new propeller or new and rebuilt aircraft engine identified in paragraphs 2.2.4.1 and 2.3.4.1, respectively, exported to the U.S. or the EU:
- 7.7.1.1 Conforms to a type design approved by the importing Authority, as specified in the importing Authority's TCDS, and any additional STCs accepted by the importing Authority;
  - 7.7.1.2 Has undergone a final operational check by the manufacturer;
  - 7.7.1.3 Is in a condition for safe operation, including compliance with applicable importing Authority ADs;
  - 7.7.1.4 For a rebuilt engine, that the engine has been rebuilt by the PAH and the Total Time Since New (TTSN) is specified in the Technical Record of that engine; and
  - 7.7.1.5 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15.
- 7.7.2 Each new or rebuilt aircraft engine and new propeller exported to the importing Authority will have an Authorized Release Certificate that identifies the EA's approved design data (TC number).
- 7.7.3 For new and rebuilt aircraft engines and new propellers, the Authorized Release Certificate should contain information equivalent to the following statement: "The [INSERT ENGINE OR PROPELLER MODEL] covered by this certificate conforms to the type design approved under the importing Authority's TC Number [INSERT TYPE CERTIFICATE NUMBER, REVISION LEVEL, AND DATE], and is found to be in a condition for safe operation and has undergone a final operational check," and any other clarifying language as specified in the importing Authority's TCDS.
- 7.7.4 For aircraft engines and propellers grandfathered on the basis of an FAA type certification basis but for which EASA has not yet issued an EASA TC, the FAA shall certify that the engine or propeller model conforms to the FAA TC and is in a condition for safe operation. The pre-printed certifying statement on the FAA Form 8130-3 is sufficient, and no other statement as additional information is necessary.

Note: Grandfathered aircraft engines or propellers means an aircraft engine or propeller with a TC grandfathered under Article 2.3 of Commission Regulation EC 748/2012.

## 7.8 New TSO Articles that Are Subject to Acceptance

Under the Acceptance provisions for TSO articles as detailed in paragraph 3.3.3, the importing Authority shall accept the EA's Authorized Release Certificate on those new articles only when the exporting Authority certifies, that the new article:

- 7.8.1 Conforms to the EA's TSOA or ETSOA as applicable, including any accepted non-TSO functions (see paragraph 3.3.3) as applicable;
- 7.8.2 Complies with all applicable exporting Authority ADs;
- 7.8.3 Is marked in accordance with paragraph 7.15; and
- 7.8.4 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15, as notified.

## 7.9 New TSO Articles that were Approved prior to Acceptance

For TSO articles that were approved prior to Acceptance provisions implemented in TIP Revision 5 (September 14, 2015), the importing Authority shall accept the EA's Authorized Release Certificate on those new articles only when the exporting Authority certifies, that the new article:

- 7.9.1 Conforms to the EA's TSOA or ETSOA as applicable, including any accepted Non-TSO functions (see paragraph 3.3.3.3) as applicable;
- 7.9.2 Complies with all applicable exporting Authority ADs;
- 7.9.3 Is marked in accordance with paragraph 7.15; and
- 7.9.4 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15, as notified.

## 7.10 New Modification and Replacement Parts excluding Standard Parts

7.10.1 The importing Authority will accept the EA's Authorized Release Certificates on new modification and/ or replacement parts as identified in paragraphs 2.2.4.2, 2.2.4.3, 2.3.4.2, and 2.3.4.3 only when the exporting Authority certifies by issuance of an Authorized Release Certificate that each part:

- 7.10.1.1 Conforms to EA-approved design data and is in a condition for safe operation;
- 7.10.1.2 Is marked in accordance with paragraph 7.15 of the TIP; and
- 7.10.1.3 Meets all additional requirements prescribed by the importing Authority in paragraph 7.15, as notified.

7.10.2 Each part exported to the importing State with the EA's airworthiness approval will have an EA's Authorized Release Certificate.

## 7.11 Additional Documentation Requirements for FAA PMA Parts

For a PMA part that shall be installed on a product which has been certified or validated by EASA, one of the following statements should be written in the remarks block of the FAA Form 8130-3, as applicable:



- 7.11.1 For a PMA part which is not a “critical component” (see definition paragraph 1.13.16), the following statement should be written in the remarks block of the FAA Form 8130 3: *“This PMA part is not a critical component.”*
- 7.11.2 For a PMA part conforming to design data obtained under a licensing agreement from the TC or STC holder according to 14 CFR part 21 (see paragraph 3.3.4), the following statement should be written in the remarks block of the FAA Form 8130 3: *“Produced under licensing agreement from the holder of [INSERT TC or STC NUMBER].”*
- 7.11.3 If the PMA holder is also the holder of the EASA STC design approval which incorporates the PMA part into an EASA certified or validated product (see paragraph 3.4), the following statement should be written in the remarks block of the FAA Form 8130 3: *“Produced by the holder of the EASA STC number [INSERT THE FULL REFERENCE OF THE EASA STC INCORPORATING THE PMA].”*

## 7.12 Standard Parts

- 7.12.1 The FAA shall accept standard parts exported from the EU when accompanied by a manufacturer’s Certificate of Conformity verifying the part’s compliance to an officially recognized standard, e.g. a U.S. or EU industry, U.S. or European government or international specification.
- 7.12.2 The AA shall accept standard parts exported from the U.S. when accompanied by a manufacturer’s Certificate of Conformity verifying the part’s compliance to an officially recognized standard, e.g. a U.S. or EU industry, U.S. or European government or international specification.

## 7.13 Coordination of Exceptions on an Export Certificate of Airworthiness

- 7.13.1 The exporting Authority will notify the importing Authority prior to issuing an Export Certificate of Airworthiness when non-compliance to an importing Authority’s import requirements is to be noted on the exporting approval document. This notification should help to resolve all issues concerning the aircraft’s eligibility for an airworthiness certificate.
- 7.13.2 For new aircraft exported to the U.S, this notification should be sent to the responsible FAA Manufacturing Inspection Office (MIO) at the address listed in Appendix A.
- 7.13.3 For used aircraft exported to the U.S., this notification should be sent to the responsible FAA Flight Standards District Office (FSDO). A listing of FSDOs can be found at: [http://www.faa.gov/about/office\\_org/field\\_offices/fsdo/](http://www.faa.gov/about/office_org/field_offices/fsdo/).
- 7.13.4 For new and used aircraft exported to the EU, the importing AA should be contacted.
- 7.13.5 In all cases, a written acceptance of the exceptions from the importing Authority is required before the issuance of the EA’s Export Certificate of Airworthiness. A copy of this written acceptance will be included with the export documentation. This acceptance does not negate the importing Authority requiring the rectification of these exceptions prior to the issuance of the Certificate of Airworthiness.

## 7.14 Exceptions on an Authorized Release Certificates

When an Engine, propeller or articles contains a non-compliance to an EA approved design, the non-compliance will be noted in the remarks block of the authorized Release Certificate. It is up to the importers design organization to assess the acceptability of the non-compliance.

## 7.15 Additional Requirements for Imported Products

### 7.15.1 Additional requirements for the U.S.

The following identifies those additional requirements which must be complied with as a condition of acceptance for products and articles imported into the U.S. or for use on a U.S. registered aircraft.

#### 7.15.1.1 Identification and Marking

- (a) Aircraft, engines, and propeller must be identified as required in 14 CFR part 45.
- (b) Each critical component of a product must be identified with a part number (or equivalent) and serial number (or equivalent) in accordance with 14 CFR part 45.
- (c) Each article approved by an FAA Letter of TSO Design Approval must be marked in accordance with the requirements in 14 CFR section 45.15(b).
- (d) Each replacement or modification part must be marked with the part number, serial number, if applicable, and a manufacturer's name, trademark, or symbol. If the article is too small, or it is otherwise impractical to mark an article with this information, a tag attached to the article, or a readily available manual or catalogue, may contain this information.
- (e) For parts produced to U.S. STC design data, the part must be accompanied with information that identifies the applicable U.S. STC. This information may be included on the appropriate airworthiness approval document.

#### 7.15.1.2 Instructions for Continued Airworthiness

Instructions for continued airworthiness and maintenance manuals having airworthiness limitation sections must be provided by the certificate holder as prescribed in applicable regulations (i.e. 14 CFR sections 21.50, 23.1529, 25.1529, 27.1529, 29.1529, 31.82, 33.4, 35.4).

#### 7.15.1.3 Aircraft Flight Manual, Operating Placards and Markings, Weight and Balance Report, and Equipment List

Each aircraft must be accompanied by an approved Aircraft Flight Manual, including all applicable supplements. The aircraft must also have the appropriate operating placards and markings, a current weight and balance report, and a list of installed equipment.

#### 7.15.1.4 Logbooks and Maintenance Records

Each aircraft (including the aircraft engine, propeller, rotor, or article) must be accompanied by logbooks and maintenance records equivalent to those specified in 14 CFR section 91.417. The maintenance records must also show that, for a used

aircraft, that aircraft has had a 100-hour inspection, or equivalent, as specified in 14 CFR section 21.183(d).

7.15.1.5 Noise certification information must be provided upon export of a new or used aircraft to the U.S. as specified in 14 CFR sections 36.1581, 36.1583, and 36.105 (as applicable).

#### 7.15.2 Additional requirements for the EU

The following identifies those additional requirements that must be complied with as a condition of acceptance for products and articles imported into the EU, or for use on an EU registered aircraft.

##### 7.15.2.1 Product/ Article Identification

Aeronautical products and articles must be identified in accordance with requirements contained in EASA Part 21 Subpart Q.

Each article which was approved by an EASA ETSOA before the entry into force of the reciprocal acceptance of TSO/ ETSO must be marked in accordance with the requirements in EASA Part 21 Subpart Q (21.A.807).

##### 7.15.2.2 Instructions for Continuing Airworthiness

Instructions for continuing airworthiness and maintenance manuals having airworthiness limitation sections must be provided by the certificate holder as prescribed in EASA Part 21.

##### 7.15.2.3 Aircraft Flight Manual, Operating Placards and Markings, Weight and Balance Report, and Equipment List

Each aircraft must be accompanied by an approved Aircraft Flight Manual, including all applicable supplements. The aircraft must also have the appropriate operating placards and markings, a current weight and balance report, and a list of installed equipment.

7.15.2.4 The information necessary to complete an EASA Form 45 (noise certificate – see paragraph 3.5.4.2.g) shall be provided upon export of a new or used aircraft to the EU and any additional information needed to uniquely identify the aircraft acoustic configuration for the purpose of compliance with EASA noise certification requirements.

7.15.2.5 Information needed to uniquely identify the engine configuration for which emission characteristics were obtained for the purpose of compliance with EASA emissions certification requirements.

##### 7.15.2.6 Logbooks and Maintenance Records.

Each aircraft (including the aircraft engine, propeller, rotor, or article) must be accompanied by logbooks and maintenance records equivalent to those specified in EASA Part 145 and Part M and applicable operations regulations (Part ORO.MLR.110).

## Section 8 Technical Support between Authorities

### 8.1 General

- 8.1.1 Upon request and after mutual agreement, and as resources permit, the FAA and EASA or an EU member state (AA) may provide technical support to each other when significant activities are conducted in either the U.S. or the EU.
- 8.1.2 Every effort should be made to have these certification tasks performed locally on each other's behalf. These technical support activities will help with regulatory surveillance and oversight functions at locations outside of the requesting Authority's country. These supporting technical support activities do not relieve the Authority of the responsibilities for regulatory control, environmental protection certificate, and airworthiness approval of products and articles manufactured at facilities located outside of the requesting Authority's country.
- 8.1.3 The FAA and EASA or an AA will use their own policies and procedures when providing such technical support to the other, unless other special arrangements are agreed upon. Types of support may include, but are not limited to, the following:

#### 8.1.3.1 Certification Support

- (a) Approving test plans;
- (b) Witnessing tests;
- (c) Performing compliance inspections;
- (d) Reviewing reports;
- (e) Obtaining data;
- (f) Verifying/ determining compliance;
- (g) Monitoring the activities and functions of designees or approved organizations; and
- (h) Conducting investigations of service difficulties.

#### 8.1.3.2 Conformity and Surveillance Support

- (a) Conformity inspections;
- (b) Witnessing the first article inspection of parts;
- (c) Monitoring the controls on special processes;
- (d) Conducting sample inspections on production parts;
- (e) Monitoring production certificate extensions;
- (f) Monitoring the activities and functions of designees or approved organizations;
- (g) Conducting investigations of service difficulties; and
- (h) Evaluating or conducting surveillance of production systems including support in determining that a supplier complies with purchase order and production requirements at locations in the U.S. or the EU. (see paragraph 8.5).

#### 8.1.3.3 Airworthiness Certification Support

- (a) Support in the delivery of airworthiness certificates for aircraft; and
- (b) Determining the original export configuration of a used aircraft.

#### 8.1.3.4 Technical Training

Any additional support needed to support the technical implementation of this TIP.

- 8.1.4 For requests from the FAA for EASA engineering design support (including conformity of test set-ups), EASA has delegated EASA DOAs to provide technical support to the FAA. Routine requests for technical support shall be sent directly to an EASA DOA with a copy notification to EASA. When the EU company holds an EASA DOA, the company may use its DOA procedures to conduct the requested technical support on behalf of EASA. No coordination or individual requests to EASA are required once the FAA confirms with EASA that the DOA is authorized for similar activities. EASA retains responsibility for the DOA's performance. Non-routine requests shall use the procedures outlined in paragraphs 8.2 through 8.11.

## 8.2 Witnessing of Tests during Design Approval

- 8.2.1 The FAA and EASA may request support in the witnessing of tests from each other.
- 8.2.2 Only Authority-to-Authority requests are permissible and neither the FAA nor EASA will respond to a test witnessing request made directly from the manufacturer or supplier. Witnessing of tests will be conducted only after consultations and agreement between FAA/ EASA on the specific work to be performed. A written request for witnessing of tests will be provided.
- 8.2.3 Unless otherwise delegated, approval of the design approval applicant's test plans, test procedures, test specimens and hardware configuration remains the responsibility of the Authority of the country in which the design approval applicant is located. Establishing the conformity of each test article prior to the conduct of the test is the responsibility of the design approval applicant.
- 8.2.4 Test witnessing activities may require the development of a Management Plan based on the complexity and frequency of the requested certifications. At the discretion of the Authority receiving such requests, these activities may be delegated to authorized designees or approved organizations.
- 8.2.5 Generally, conformity inspections associated with prototype parts in the EU are the responsibility of the AA. However, EASA shall assure that such inspections have been conducted prior to witnessing any tests on behalf of the FAA. In addition, EASA is generally responsible for the conformity of the test set-up.
- 8.2.6 Where there is no Management Plan, requests for witnessing of individual tests must be specific enough to provide for identification of the location, timing, and nature of the test to be witnessed. An approved test plan must be provided by the FAA or EASA, as appropriate, at least two weeks prior to each scheduled test.
- 8.2.7 The FAA or EASA requests for conformity of the test set-up and/ or witnessing of tests shall be sent to the appropriate FAA Certification Branch or EASA office which has responsibility for the location of the test. FAA requests for test witnessing may be sent on FAA Form 8120-10, Request for Conformity, and described in the Special Instructions section of the form. FAA and EASA offices are listed in Appendix A.

- 8.2.8 Upon completion of test witnessing on behalf of the requesting Authority, the FAA or EASA will send a report stating that the test was conducted in accordance with approved test plans and confirming the test results, as well as any other documentation as notified by the requesting Authority.

### 8.3 Compliance Determinations

- 8.3.1 The FAA or EASA may also request that specific compliance determinations be made associated with the witnessing of tests or other activities. Such statements of compliance will be made to the airworthiness or environmental protection standards of the requesting Authority.
- 8.3.2 The FAA's or EASA's statements of compliance will be sent in a formal letter, transmitted electronically, to the requesting FAA Certification Branch or EASA.

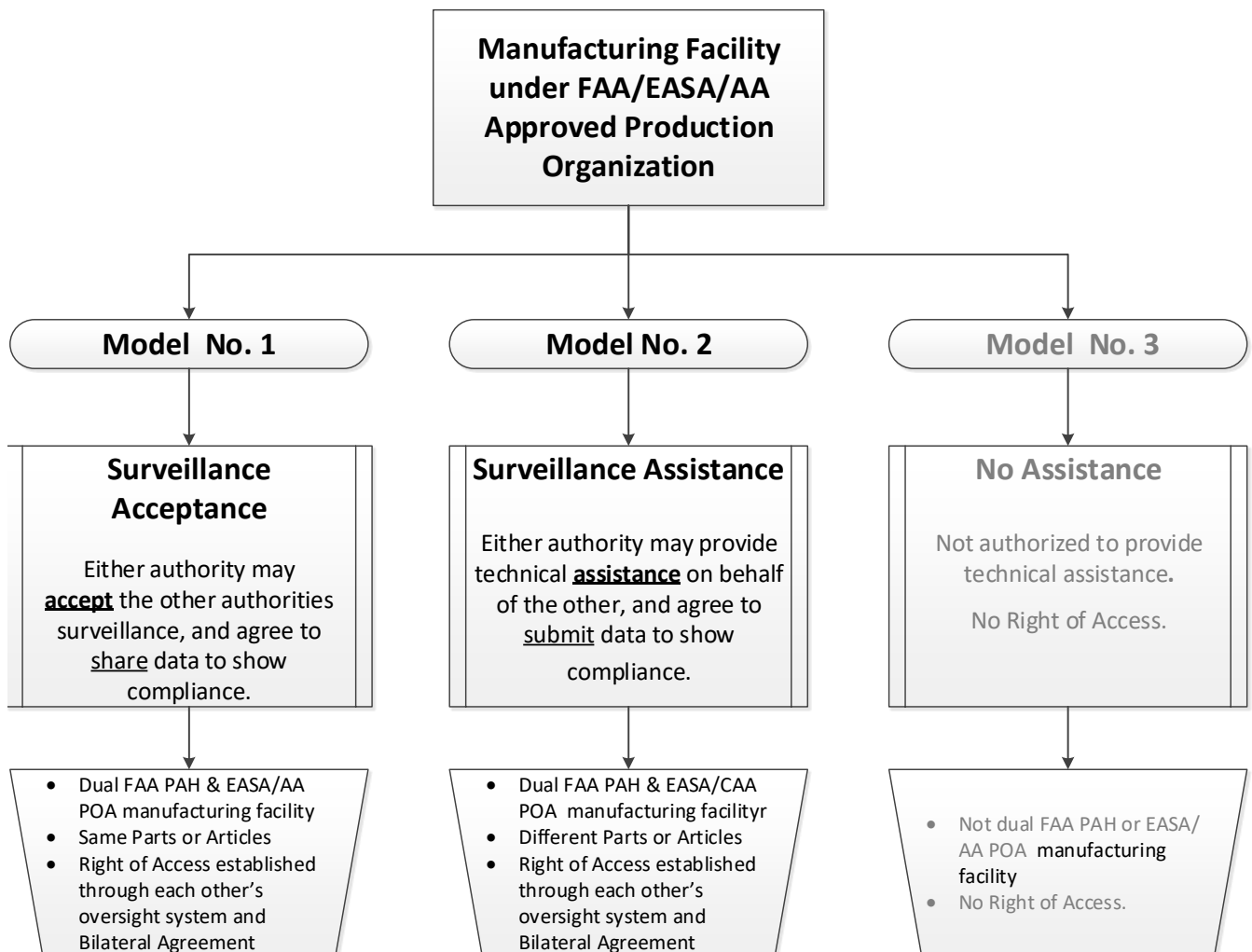
### 8.4 Conformity Certifications during Design Approvals

- 8.4.1 The CA may request conformity certifications from the Civil Aviation Authority in the State in which the design approval applicant's part supplier is located.
- 8.4.2 Only Authority-to-Authority requests are permissible and Authorities will not respond to a conformity certification request from the manufacturer, supplier or designee. Certifications will be conducted only after consultations between the two Civil Aviation Authorities on the specific work to be performed, and agreement has been obtained from the Civil Aviation Authority in the State in which the supplier is located. Requests for conformity certifications should be limited to prototype/ pre-production parts that are of such complexity that they cannot be inspected by the manufacturer or its Civil Aviation Authority after assembly or prior to installation in the final product. Conformity certifications may require the development of a working procedure based on the complexity of the requested certifications. At the discretion of the Authority in receipt of such requests, conformity certifications may be delegated to authorized designees or delegated organizations.
- 8.4.3 EASA requests for conformity certifications will be sent by standard letter to the responsible FAA Manufacturing Inspection Office (MIO) which has responsibility for the U.S. region in which the conformity certification will take place. FAA Offices are listed in Appendix A. FAA requests for conformity certifications will be sent on a completed FAA Form 8120-10, Request for Conformity, to the appropriate AA.
- 8.4.4 Upon completion of all conformity inspections conducted on behalf of the requesting Authority, the FAA or EASA will complete and return all documentation to the requesting Authority, as notified. The Civil Aviation Authority of the State in which the supplier is located will note all deviations from the requirements notified by the design approval applicant's Civil Aviation Authority on the conformity certification for the particular part. Any non-conformity described as a deviation should be brought to the attention of the FAA or EASA for evaluation and disposition. The FAA or EASA should receive a report stating the disposition required on each deviation before an FAA Form 8130-3 or EASA Form 1 is issued.
- 8.4.5 Neither conformity certification on prototype/ pre-production parts, nor inspections on prototype/ pre-production parts, should be construed as being an export airworthiness approval, since a conformity certification does not constitute an airworthiness

determination. Airworthiness determinations remain the responsibility of the design or PAH and the Civil Aviation Authority of the State in which the holder is located.

## 8.5 Process for Shared Production Surveillance and Oversight

- 8.5.1 When requested by the CA, the FAA, EASA and AAs may share in surveillance responsibilities on behalf of the CA, including acceptance and any other authorized technical support, with suppliers under the quality system of both an FAA-issued PAH and an EASA or AA issued Production Organization Authorization (POA) when that supplier is located in the other’s territory. Notwithstanding that the TIP specifies that each Authority will use its own policies and procedures when providing technical support to the CA, this procedure provides for shared surveillance performed to the other Authority’s policies and procedures.
- 8.5.2 The following models provide the allowances and restrictions under which shared surveillance can be requested and agreed to in a special arrangement (per Section 9 below) with the CA for manufacturing facilities (e.g., suppliers) under the quality system of both a PAH and a POA.



- 8.5.3 Surveillance Model No. 1 is when a manufacturing facility (e.g., supplier) is under the quality system of a PAH and a POA for the same parts or articles being supplied to the approved production organizations. The Authorities entering into the special arrangement (per Section 9 below) should consider the following:
- 8.5.3.1 Acceptance of the CA's system; and
  - 8.5.3.2 Sharing of safety data, such as quality escapes, service difficulties, and in-service feedback.
- 8.5.4 Surveillance Model No. 2 is when a supplier is under the quality system of a PAH and a POA for different parts or articles being supplied to the approved production organizations. The Authorities entering into the special arrangement should consider the following:
- 8.5.4.1 Technical support can be requested to support the CA's surveillance activities; and
  - 8.5.4.2 Sharing of safety data, such as quality escapes, service difficulties, and in-service feedback.
- 8.5.5 Surveillance Model No. 3 represents when a supplier is under only one Authority's approved production organization's quality system (e.g., either a supplier to a PAH or a POA, but not both). In this case, there may be no legal authority for right of access to conduct surveillance on the CA's behalf.
- 8.5.6 The required technical acceptance or support responsibilities between authorities will be specified in a signed and mutually agreed special arrangement.
- 8.5.7 Any special arrangements developed to address supplier surveillance as described above should consider including the following elements:
- 8.5.7.1 If the supplier is also a PAH or a POA, the supplier oversight may be conducted in conjunction with the CA's scheduled authorization/ approval oversight activity. In this case, all requirements of the requested technical support and terms of this procedure apply during the surveillance.
  - 8.5.7.2 The Authorities will keep each other informed of any changes in policy, personnel, and resources, as well as the capabilities of those resources, relevant to the activity performed under this procedure.
  - 8.5.7.3 All documents and correspondence relating to technical support conducted shall be in English.
  - 8.5.7.4 Any non-conformity or violation of regulations governing supplier control will be directed to the CA.
  - 8.5.7.5 The Authorities may elect to do a joint assessment of the supplier when either Authority requests, e.g. for the investigation of significant non-compliances, violations; incidents; accidents; or suspected unapproved parts involving a product or article.

## 8.6 Other Requests for Assistance or Support

The FAA or EASA may request other types of technical support outlined in paragraph 8.1.3. Each request will be handled on a case-by-case basis, as resources permit. Each written request will include sufficient information for the task to be performed and reported back to the requestor. Where the technical support is repetitive or long-term, a special arrangement may be needed.



## 8.7 Airworthiness Certificates

There may be certain programs and conditions that warrant technical support for the issuance of standard airworthiness certificates so that aircraft may be placed directly into operation from the site of manufacture. The importing Authority may seek support from the exporting Authority in the final processing and delivery of an airworthiness certificate when the aircraft has been manufactured, granted an Export Certificate of Airworthiness by the exporting Authority, and entered on the importing State's registry. This will require the development of a special arrangement between the exporting and importing Authorities.

## 8.8 Protection of Proprietary Data

The FAA and EASA agree that they shall not copy, release, or show data identified as proprietary or otherwise restricted obtained from each other to anyone other than an FAA or EASA employee, without written consent of the design approval holder or other data submitter, unless required by law. The FAA or EASA should obtain this written consent from the design approval holder through its CA. To the extent that EASA shares such data with an AA or accident investigation entity, EASA shall ensure that these persons treat such restricted information in accordance with Article 11.B of the Agreement.

## 8.9 FOIA Requests

8.9.1 The FAA often receives requests from the public under the U.S. Freedom of Information Act (FOIA) (5 U.S.C. section 552) to release information that the FAA may have in its possession. Each record the FAA has in its possession must be disclosed under the FOIA unless a FOIA exemption applies to that record. Trade secrets and financial or commercial information that is confidential or privileged are examples of criteria that may exempt records from FOIA. Design approval holders' data may include trade secrets or other information that is confidential because release of the information would damage the competitive position of the holder or other person.

8.9.2 When the FAA receives a FOIA request related to a product or article of an FAA approval holder or applicant who is located in the EU, the FAA will request EASA support in contacting the FAA approval holder or applicant to obtain justification for a determination of what may qualify for exemption under the criteria found in 5 U.S.C. section 552.

## 8.10 Access to Information Act Requests

8.10.1 The EU Access to Information and Privacy (ATIP) office often receives requests from the public under the Access to Information Act to release information which EASA may have in its possession.

8.10.2 Each record EASA has in its possession must be disclosed under the Access to Information Act unless an exemption applies to that record. Subject to Subsection 20(1) of the act, which pertains to third party information, the ATIP office shall refuse to disclose any records requested under this Act that contains:

- (a) trade secrets of a third party;
- (b) financial, commercial, scientific, or technical information that is confidential information supplied to EASA by a third party and is treated consistently in a confidential manner by the third party;

- (c) information the disclosure of which could be reasonably expected to prejudice the competitive position of a third party; and
  - (d) information the disclosure of which could reasonably be expected to interfere with contractual or other negotiations of a third party.
- 8.10.3 If the ATIP Office intends to disclose any record requested under this Act, or any part thereof, that contains or that EASA has reason to believe might contain information related to (a), (b), or (c), a notice must be given to the third party under Subsection 27(1) with a statement that they have twenty days after the notice is given to make representations to the ATIP Office that has control of the record as to why the record or part thereof should not be disclosed.
- 8.10.4 When the ATIP Office receives a request related to a product of an EASA approval holder or applicant who is located in the U.S., the ATIP Office will contact the EASA approval holder or applicant to solicit their position on what portions of that information should be excluded under the criteria above.

## 8.11 Accident/ Incident and Suspected Unapproved Parts Investigation Information Requests

- 8.11.1 When either the FAA or EASA needs information for the investigation of service incidents, accidents, or suspected unapproved parts involving a product or article imported under the TIP, the request for the information should be directed to the appropriate authority. In turn, upon receipt of the request for information, the exporting Authority will ensure that the requested information is provided in a timely manner.
- 8.11.2 In case of an incident/ accident, the FAA and EASA will cooperate to address urgent information needs. Following an incident/ accident, upon receipt of a request for urgent information, the FAA or EASA will provide the requested information. EASA and the FAA will establish individual focal points to respond to each other's questions and ensure that timely communication occurs. The FAA or EASA may request information directly from a manufacturer if immediate contact with the appropriate focal points cannot be made. In such cases, notification of this action will be made as soon as possible. Either the FAA or EASA, as applicable, will assist in ensuring that their manufacturer provides requested information expeditiously.

## Section 9 Special Arrangements

### 9.1 General

- 9.1.1 It is anticipated that urgent or unique situations will develop that have not been specifically addressed in the TIP, but which are within the scope of the Agreement. When such a situation arises, it will be reviewed by the respective FAA Aircraft Certification Service Director and the EASA Certification Director, and a Management Plan will be developed to address the situation. If it is apparent that the situation is unique, with little possibility of repetition, then the Management Plan will be of limited duration. If, however, the situation has anticipated new technology, or management developments, which could lead to further repetitions, then the TIP will be revised accordingly by the FAA and EASA.
- 9.1.2 Once a Management Plan has been developed and reviewed by the respective stakeholders, it will be agreed to by the FAA Executive Director of Aircraft Certification and the EASA Certification Director. The special arrangement may be posted on the FAA bilateral website and EASA website for public viewing as appropriate.

## Section 10 Authority

### 10.1 General

The TIP Revision 7 will enter into force one month (30 calendar days) after the date of signature and will be used for new validation projects initiated after that date. Concurrent validation projects initiated prior to that date may continue under the procedures associated with the TIP revision related to their initiation, or if the FAA and EASA mutually agree the TIP Revision 7 procedures can be applied. With the exceptions noted above, TIP Revision 7 will supersede previous Technical Implementation Procedures, and will remain in force until terminated by either Authority.

Either the FAA or EASA may terminate the TIP upon receipt of ninety (90) days written notice by the other Authority. Termination will take effect at the expiry of the ninety (90) days and will not affect the validity of activities conducted under the TIP prior to termination.

The FAA and EASA agree to the provisions of this TIP as indicated by the signature of their duly authorized representatives.



Lirio Lid  
Executive Director  
Aircraft Certification Service, AIR-1  
Federal Aviation Administration  
Department of Transportation  
United States of America

Dated:

October 19, 2023



Rachel Daeschler  
Certification Director

European Union Aviation Safety Agency

European Union

Dated:

19 October 2023

## Appendix A Addresses

The designated focal point offices for the TIP are:

**For the FAA:**

International Office (AIR-040)  
Aircraft Certification Service  
Federal Aviation Administration  
c/o Wilbur Wright Building, Room 600W  
800 Independence Avenue, SW  
Washington, DC 20591  
U.S.A.

Telephone: 1-202-385-8950  
Fax: 1-202-493-5144  
Email: 9-AWA-AVS-AIR400-Coord@faa.gov

**For EASA:**

Certification Director's Office (CT0.1)  
  
Certification Directorate  
European Aviation Safety Agency  
Postfach 10 12 53  
D-50452 Köln  
Germany

Telephone: 49-221-89990-00

For additional contact information please see the respective EASA and FAA websites:

[www.easa.europa.eu](http://www.easa.europa.eu)

[www.faa.gov/aircraft/air\\_cert/international/bilateral\\_agreements/baa\\_basa\\_listing](http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing)

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## Applications

For EASA:

Applications to EASA are made through the EASA Portal, found at:

<https://portal.easa.europa.eu>

For the FAA:

All applications for validation to the FAA are made through email to the International Validation Branch (AIR-730) at 9-AVS-AIR-730-FAA-Validation@faa.gov.

## EASA Noise Change Information

### EASA Contact for Noise

European Aviation Safety Agency  
Konrad-Adenauer-Ufer 3;  
D-50668 Cologne, Germany  
Postal: Postfach 10 12 53, 50452 Cologne, Germany  
Tel.: +49 221 89990-4080

For Accepted changes that effect the EASA certification noise levels database send information to  
Email: [noise@easa.europa.eu](mailto:noise@easa.europa.eu)

**EASA Certification Noise Levels Database**

<https://www.easa.europa.eu/easa-and-you/environment/easa-certification-noise-levels>

## Appendix B List of Referenced Documents

### FAA Referenced Documents

1. Code of Federal Regulations, Title 14, parts 21-36, 39, 43, 45, 91, and 183
2. FAA Advisory Circular 21-2
3. FAA Advisory Circular 21-23
4. FAA Advisory Circular 43-210
5. FAA Order 8110.4
6. FAA Order 8110.37
7. FAA Order 8110.53
8. FAA Order 8110.120
9. FAA Order 8120.23
10. FAA Order 8130.2
11. FAA Order 8130.21
12. FAA Order 8300.16
13. FAA Order 8900.1
14. Annex 8 to the Convention on International Civil Aviation done at Chicago on 7 December 1944 (Chicago Convention)
15. Agreement between the Government of the United States of America (U.S.) and the European Union (EU) on Cooperation in the Regulation of Civil Aviation Safety (The Agreement)
16. Annex 1 of The Agreement: Airworthiness and Environmental Certification

### EASA Referenced Documents

1. Basic Regulation
2. EASA Part 21
3. EASA Part M
4. EASA Part 145
5. Certification Specifications (CS 22, 23, 25, 26, 27, 29, 31GB, 31HB, 31TGB, 34, 36, APU, E, ETSO, LSA, P, SIMD, STAN, VLA, VLR, MMEL, GEN-MMEL, CCD and FCD)
6. AMC 20
7. AMC 20-20A
8. AMC and GM to Part 21
9. Certification Memoranda as listed on EASA website  
(<http://www.easa.europa.eu/document-library/public-consultations/certification-memoranda> )

## Appendix C List of Special Arrangements

Special Arrangements can be found on the respective websites and are available at the following addresses:

For EASA

<https://www.easa.europa.eu/document-library/bilateral-agreements/eu-usa> .

For FAA

For signed Working Arrangements select European Union under Bilateral Agreements Listing and look under the Agreements column.

[https://www.faa.gov/aircraft/air\\_cert/international/bilateral\\_agreements/baa\\_basa\\_listing/](https://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/)

Note: For Special Arrangements and Management Plans contact AIR-40 International Office.



## Appendix D FAA and EASA Recognized Standards

This appendix includes FAA and EASA recognized airborne systems standards considered to be equivalent for the purpose of issuing approvals under this TIP.

FAA	EASA
RTCA/DO-160 ( ), Environmental Conditions and Test Procedures for Airborne Equipment	EUROCAE/ ED-14 ( ), Environmental Conditions and Test Procedures for Airborne Equipment
RTCA/DO-178 ( ), Software Considerations in Airborne Systems and Equipment Certification	EUROCAE/ ED-12 ( ), Software Considerations in Airborne Systems and Equipment Certification
RTCA/DO-254, Design Assurance Guidance for Airborne Electronic Hardware	EUROCAE/ ED-80, Design Assurance Guidance for Airborne Electronic Hardware
SAE ARP 4754, Guidelines for Development of Civil Aircraft and Systems	EUROCAE/ ED-79, Guidelines for Development of Civil Aircraft and Systems
RTCA/DO-200B, Standards for Processing Aeronautical Data	EUROCAE/ ED-76A, Standards for Processing Aeronautical Data
RTCA/DO-201A, User Recommendations for Aeronautical Information Services	EUROCAE/ ED-77, Aeronautical Information
RTCA/DO-236C, Minimum Aviation System Performance Standards: Required Navigation Performance for Area Navigation	EUROCAE/ ED-75D, Minimum Aviation System Performance Standards: Required Navigation Performance for Area Navigation
RTCA/DO-260, 1090 MHz MOPS for ADS-B (a Joint document with EUROCAE)	EUROCAE/ ED-102, MOPS for 1090 MHz Automatic Dependent Surveillance – Broadcast
RTCA/DO-218B, MOPS for the Mode S Airborne Data Link Processor	EUROCAE/ ED-82A, Minimum Operational Performance Specification for Mode S Aircraft Data Link Processors
RTCA/DO-264, Guidelines for the Approval of the Provision and Use of Air Traffic Services Supported by Data Communications	EUROCAE/ED-78A, Guidelines for Approval of the Provision and Use of ATS Supported by Data Communications
RTCA/DO-272C, User Requirements for Aerodrome Mapping Information	EUROCAE/ED-99C, User Requirements for Aerodrome Mapping Information
RTCA/DO-276B, User Requirements for Terrain and Obstacle Data	EUROCAE/ED-98B, User Requirements for Terrain and Obstacle Data
RTCA/DO-208, Minimum Operational Performance Standards for Airborne Supplemental Navigation Equipment Using Global Positioning System (GPS)	EUROCAE/ ED-72A, MOPS for Airborne GPS Receiving Equipment used for Supplemental Means of Navigation

## Appendix E Scope of Acceptance for EU STCs dated before 28<sup>th</sup> September 2003

Previous BASA/ IPA scope of U.S. acceptance for STCs from the following member states (AA):

Member State	Scope of Acceptance
France	STCs for products for which France is the SoD
Germany	STCs for both German and U.S. products, and for Airbus model aircraft for which Germany is the SoD for the design change.
Italy	STCs for products which Italy is the SoD
Netherlands	STCs for Netherlands SoD Aircraft
Sweden	STCs for products for which Sweden is the SoD

## Appendix F SSD and SEI Lists

FAA Lists:

FAA All Products SSD and SEI Lists Main Reference Page:

[http://www.faa.gov/aircraft/air\\_cert/international/bilateral\\_agreements/baa\\_basa\\_listing/approvals/EASA/](http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/approvals/EASA/)

EASA Lists:

EASA All Products SSD and SEI Lists Main Reference Page:

<http://www.easa.europa.eu/document-library/bilateral-agreements/eu-usa>

## Appendix G Part 26

CA approved DT data and FCS lists automatically accepted as compliant with the corresponding specified VA requirement.

Table 1

Data for repairs, design changes, alterations and STCs for which the original VA design approval or acceptance was issued prior to 26 Feb 2021.

After that date the requirements of the VA for DT data and FCS lists are addressed to the extent necessary for VA acceptance or approval during the initial design approval by following the acceptance and approval procedures of the applicable sections of this TIP on repairs, changes, STCs and alterations.

Note 1: All current VA approved ICA remain applicable to the VA approved design in addition to those contained in the CA approved data for the requirements listed in the table, unless otherwise specified.

Regulation (EU) 2015/640 Part-26 approved data	CFR 14 § Part 26 approved data	Description of data	Acceptance by VA of CA approved data without the need to specify the VA requirement?
26.306(a)	26.43(b)	TCH developed Fatigue Critical Baseline Structure (FCBS) list	Yes
26.307(a)(ii)	26.45(b)	TCH developed Fatigue Critical Modified Structure (FCMS)/ Fatigue Critical Alteration Structure (FCAS) list	Yes
26.307(a)(iii)	26.45(c)	TCH developed DT data for changes/alterations	Yes
26.308(a)	26.43(c) and 26.45(d)	TCH developed DT data for published repairs affecting FCBS and FCMS/FCAS	Yes
26.332	26.47(b)	FCMS and FCAS lists	Yes, except for STCs approved by the FAA after 11 Jan 2008

			for which no FCAS list was required. An FCMS list is required for the STCH to comply with point 26.332.
26.333	26.47(c)	DT data for STCs EASA approved Sept 2003 onward	Yes
26.333	26.47(d)	DT data for published repairs to STCs approved Sept 2003 onward	Yes
26.334	26.47(c)	DT data for STCs approved before Sept 2003	Yes
26.334	26.47(d)	DT data for published repairs to STCs approved before Sept 2003	Yes

## Appendix H Noise and Emission Examples

To support the design change classification determination when noise or emissions are affected EASA and the FAA have produced (a non-exhaustive) list of examples to help with the classification exercise.

These lists are found on the EASA and FAA websites.

### For EASA

<https://www.easa.europa.eu/document-library/bilateral-agreements/eu-usa> .

### For FAA

For signed Working Arrangements select European Union under Bilateral Agreements Listing and look under the Agreements column.

[https://www.faa.gov/aircraft/air\\_cert/international/bilateral\\_agreements/baa\\_basa\\_listing/](https://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/)