

TECHNICAL ARRANGEMENT
BETWEEN
CIVIL AVIATION BUREAU, MINISTRY OF LAND, INFRASTRUCTURE,
TRANSPORT AND TOURISM, JAPAN
AND
NATIONAL CIVIL AVIATION AGENCY - BRAZIL
FOR
THE ACCEPTANCE OF AIRWORTHINESS AND ENVIRONMENTAL
APPROVAL OF AERONAUTICAL PRODUCTS

The Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan (CAB) and the National Civil Aviation Agency - Brazil (ANAC) referred in this document, for convenience, as the Contracting Authorities, considering that:

- A) The Memorandum of Understanding (MoU) between the Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism - Japan and National Civil Aviation Agency - Brazil, provides for Technical Arrangements to be developed in the airworthiness and environmental approval of aeronautical products;
- B) Each Contracting Authority has determined that the standards used by and the system of the other Contracting Authority for airworthiness and environmental certification, approval or acceptance of the aeronautical products, covered by this Technical Arrangement (hereinafter referred to as "Arrangement"), are sufficiently equivalent to its own to make this Arrangement practicable; and
- C) In the interest of promoting aviation safety and preservation of the environment, each Contracting Authority will cooperate to reduce, to the minimum, the economic burden imposed on the Contracting Authorities and the aviation industry and operators by avoiding redundant technical evaluations, tests and inspections;

have reached the following understanding:

1. GENERAL

1.1 Purpose

This document sets forth the Contracting Authorities procedures for implementing the airworthiness and environmental approvals, with regard to aircraft noise and aircraft engine emission standards and testing procedures of aeronautical products under the provision of the MoU.

The objective of this Arrangement, in accordance with the MoU, is to outline the terms and conditions under which the Contracting Authorities accept each other's airworthiness and environmental approvals of aeronautical products, and environmental testing, thereby reducing redundant technical inspections, evaluations and testing.

1.2 Basis

This Arrangement is based on Article III of the MoU, and in that respect, the Contracting Authorities have assessed each other's standards and systems relating to the airworthiness and environmental approvals of aeronautical products, and the environmental testing and as a result, have established an understanding of such standards and systems, and have agreed such standards and systems of the Contracting Authorities are sufficiently equivalent or compatible to make this Arrangement practicable.

1.3 Definitions

For the purposes of this Arrangement, the following definitions apply:

- a) "Additional Technical Conditions" means the terms notified by the Importing Authority for the acceptance of the type design of an aeronautical product, or for the acceptance of an aeronautical product, to account for differences between the Contracting Authorities in:
 - 1) Adopted or adapted airworthiness and environmental standards;
 - 2) Special conditions relating to novel or unusual features of the product design which are not covered by the adopted/adapted airworthiness and environmental standards;
 - 3) Exemptions or equivalent safety findings from the airworthiness and environmental standards; and
 - 4) Mandatory airworthiness action taken to correct unsafe conditions.
- b) "Airworthiness criteria" means the criteria governing the design, performance, materials, workmanship, and manufacture of aeronautical products as prescribed by the Importing Authority to enable it to find that the design, manufacture, and condition of these products comply with the laws, regulations, standards, and requirements of the Importing State concerning airworthiness.
- c) "Aeronautical product" means any civil aircraft, or aircraft engine, propeller, appliance, part or component to be installed thereon.
- d) "Design-related operational requirements" means the operational requirements affecting either the design features of the product or data on the design relating to the operations of the product that make it eligible for a particular kind of operation in a State.
- e) "Environmental criteria" means the criteria governing the design, performance, materials, workmanship, and manufacture of aeronautical products as prescribed by the Importing Authority, to enable it to find

that the design, manufacture, and condition of these products comply with the laws, regulations, standards, and requirements of the Importing State concerning noise and emissions.

- f) "Exporting Authority" means the authority in the State exporting a type design, a modification thereof, or a product under the provisions of this Arrangement.
- g) "Importing Authority" means the authority in the State importing a type design, a modification thereof, or a product under the provisions of this Arrangement.
- h) "Product airworthiness approval" means the airworthiness certification, approval, or acceptance, as appropriate, by or on behalf of an authority for a particular aeronautical product to permit operation or use of the product under the laws, regulations, standards and requirements of the issuing authority.
- i) "Type design" means the description of all characteristics of a product, including its design, manufacture, limitations, and continued airworthiness instructions which determines its airworthiness and environmental characteristics.
- j) "Type design approval" means the certification, approval, or acceptance of the type design of a product, by or on behalf of an authority.

2. SCOPE OF COVERAGE

This Arrangement applies to:

- a) The acceptance by the Importing Authority of the type design approval, including changes to the type design, and the findings of compliance made by the Exporting Authority with the Importing Authority's design-related operational requirements, for aeronautical products for which the Exporting Authority is the authority responsible for the type design;
- b) The acceptance by the Importing Authority of the airworthiness and environmental certification, approval or acceptance of aeronautical products for which either Contracting Authority is the authority responsible for the type design or the authority of the State of manufacture, including both new and used products which were designed or manufactured partially or wholly in third countries;
- c) Cooperation and assistance on the continuing airworthiness of in-service products;
- d) Technical cooperation and assistance, including the exchange of information, towards maintaining sufficiently equivalent airworthiness and environmental standards and certification systems between the Contracting Authorities;
- e) Cooperation in providing technical evaluation assistance to the other Authority.

3. PROCEDURES

3.1 General

Each Contracting Authority will develop procedures for granting airworthiness and environmental certification to imported aeronautical products whose design or, where applicable, manufacture is under the responsibility of the other Contracting Authority so as to give maximum practicable credit for technical evaluations, tests results, inspections, quality system monitoring, conformity statements, marks of conformity and certificates accepted or issued by the Exporting Authority in granting its own domestic certification for such aeronautical products.

3.2 Type Design Approval

- a) If the Exporting Authority certifies to the Importing Authority that the type design of an aeronautical product, including the design-related operational requirements subject to paragraph 3.2 e) below, or a change to an aeronautical product type design previously approved by the Importing Authority, complies with airworthiness and environmental criteria prescribed by the Importing Authority, the Importing Authority, in finding compliance with its own laws, regulations, standards and requirements for granting type design approval, shall give the same validity to the technical evaluations, determinations, tests and inspections made by the Exporting Authority as if it had made them itself.
- b) The Importing Authority shall prescribe the airworthiness and environmental criteria for the type design approval of a particular aeronautical product, in terms of the laws, regulations, standards, requirements and certification system applied by the Exporting Authority in granting its own type design approval together with the Additional Technical Conditions identified by the Importing Authority.
- c) To this end, the Importing Authority shall have the right:
 - 1) To become familiar with the aeronautical product to be imported and with the laws, regulations, standards, requirements and certification system applied by the Exporting Authority;
 - 2) To identify the Additional Technical Conditions which it finds necessary to ensure that the aeronautical product meets the airworthiness and environmental standards equivalent to that which would have been required for a similar product designed or manufactured in the Importing State at the time the application was received for the approval of the product type design by the Exporting Authority; and,
 - 3) To perform such additional analysis and testing as judged necessary.
- d) The airworthiness and environmental criteria specified by the Importing Authority for its type design approval of an aeronautical product shall

be communicated to the Exporting Authority as soon as practicable after becoming familiar with the design of the product.

- e) The Importing Authority, on request from the Exporting Authority, shall advise the latter of its current design-related operational requirements.

3.3 Approval of aircraft flight manual and aircraft flight manual supplements

The Importing Authority will review the aircraft flight manual and aircraft flight manual supplements and, after acceptance, will request the Exporting Authority to approve the flight manual and flight manual supplements for the individual imported aircraft on its behalf according to the type design approval of the Importing Authority.

3.4 Changes to the Approved Type Design

- a) The Exporting Authority shall notify the Importing Authority of changes in the approved type design that significantly affects the configuration of the aeronautical product that the Importing Authority has certified, approved or accepted under this Arrangement. Examples of changes that the Contracting Authorities shall consider as significantly affecting the approved type design are provided in Appendix of this Arrangement.
- b) Following the review of the changes, the Importing Authority shall notify the Exporting Authority of its acceptance, modification or non-acceptance of these changes.

3.5 Approval of revisions to aircraft flight manual

The CAB and ANAC may delegate review and signature of revisions to the flight manuals, supplements and appendices, on behalf of each other, in order to facilitate their timely approval. Revisions associated to the additional contents that the Importing Authority requires to describe in the flight manuals, supplements and appendices must be submitted to the Importing Authority for review and acceptance before any signature on behalf of the Importing Authority.

3.6 Acceptance of Product Airworthiness Approval

- a) If the Exporting Authority, or a person designated in accordance with the regulations of the Exporting Authority, certifies to the Importing Authority that an aeronautical product, for which a type design approval has been issued or is in the process of being issued by the Importing Authority, conforms in construction to a type design definition notified by the Importing Authority and is in a condition for safe operation, the Importing Authority shall give the same validity to the technical evaluations, determinations, tests and inspections made in accordance with the regulations of the Exporting Authority, as if it had made them itself on the date of the certification by the Exporting Authority.
- b) Additional inspections may be made or specified by the Importing Authority, as it deems necessary, at the time of its airworthiness and

environmental certification, approval or acceptance of an aeronautical product.

- c) The airworthiness release document for appliances and parts, granted by ANAC or an ANAC designated person, according to paragraph 3.6.a) shall be provided in the format of an ANAC Form SEGV00 003.
- d) The airworthiness release document for appliances and parts, granted by the CAB or a CAB approved organization, according to paragraph 3.6 a) shall be provided in the format of CAB Certificate of Airworthiness for Export, Certificate of Conformity for Export, or CAB Form 18, as applicable.

3.7 Production Overview

- a) By mutual agreement, a Contracting Authority will, on behalf of the other Contracting Authority:
 - 1) Monitor the quality system for the production of aeronautical products, accepted by both Authorities, to evaluate the need for improvement, to initiate corrective action and/or to assure conformance to the approved type design; and
 - 2) Certify conformity of parts and assemblies produced.
- b) Each Contracting Authority shall make available to the other Contracting Authority all data, drawings, reports, norms, specifications, instructions, guidelines, policies, and other information necessary to perform the activities referred to in paragraph 3.7 a).
- c) By mutual agreement, a Contracting Authority may participate, with the other Contracting Authority, on production control and engineering activities as necessary, and to participate periodically to audits on the quality system of the other Contracting Authority.

4 MUTUAL COOPERATION AND TECHNICAL ASSISTANCE

4.1 Continuing Airworthiness

- a) Each Contracting Authority shall provide full support in analyzing airworthiness aspects of accidents and incidents occurring on aeronautical products to which this Arrangement applies and which would raise questions concerning the airworthiness of such products.
- b) The Exporting Authority shall, in respect of aeronautical products designed or manufactured in its State, specify any appropriate action it deems necessary to correct any unsafe condition that may be discovered after such product is placed in service, including any actions in respect of components designed and/or manufactured by a supplier under contract to a prime contractor.
- c) The Exporting Authority shall, in respect of aeronautical products designed or manufactured in its State, assist the Importing Authority in

determining any action considered to be necessary by the Importing Authority for maintaining the continuing airworthiness of such product.

- d) Each Contracting Authority shall keep the other Contracting Authority informed of all mandatory airworthiness modifications, special inspections, special operating limitations or other actions which it deems necessary for maintaining the continuing airworthiness of relevant products designed or manufactured in either States and that have been imported or exported under this Arrangement, or prior to the effective date of this Arrangement.

4.2 Technical Assistance and Cooperation

- a) At the request of the Importing Authority, the Exporting Authority shall, in respect of aeronautical products designed or manufactured in its State, assist the Importing Authority in determining whether the design of major changes or repairs made under the control of the Importing Authority comply with the airworthiness and environmental standards under which such product was originally approved by the Exporting Authority.
- b) Each Contracting Authority shall make available to the other Contracting Authority all its relevant airworthiness and environmental laws, regulations, standards and requirements, and its system for airworthiness and environmental certification or approval.
- c) Each Contracting Authority shall, to the maximum extent practicable:
 - 1) Ensure that the other Contracting Authority is notified of proposed significant revisions to its standards and system for airworthiness and environmental certification or approval, that may affect the terms of this Arrangement;
 - 2) Offer the other Contracting Authority an opportunity to comment; and
 - 3) Give due consideration to the comments made by other Contracting Authority on the proposed revisions.
- d) By mutual agreement and upon request, each Contracting Authority shall, as practicable, provide technical evaluation and assistance to the other Contracting Authority.
- e) Both Contracting Authorities may undertake joint type design approval projects in respect of products covered by this Arrangement when it is in the interest of both Contracting Authorities.

5 PREVAILING INTERPRETATION

In the case of conflicting interpretations of the airworthiness or environmental criteria or design-related operational requirements prescribed by the Importing Authority pertaining to the certification, approval, or acceptance of aeronautical product under this Arrangement, the interpretation of the Importing Authority shall prevail.

6 ACCOUNTABILITY

6.1 Implementation

The CAB Director of Airworthiness and the ANAC Manager of Aeronautical Product Certification will be in charge of the administration and implementation of the provisions of this Arrangement.

6.2 Organizational Changes

The Contracting Authorities will advise each other of any significant change to their organization affecting the administration and implementation of the provisions of this Arrangement, including the identity of the persons identified in paragraph 6.1.

6.3 Amendments

Subject to Article V of the MoU, the Contracting Authorities will jointly review this Arrangement from time to time and may amend it as appropriate by written agreement.

7 INTERPRETATION

Any disagreement regarding the interpretation or application of this Arrangement shall be resolved by consultation, pursuant and subject to the provisions of Article IV of the MoU entitled "Dispute Resolution".

8 ENTRY INTO FORCE

- a) This Arrangement shall enter into force upon signature and will remain in force subject to the provisions of Article V of the MoU.
- b) This Arrangement, upon signature, shall replace the previous "Working Procedure on Airworthiness for Embraer Aircraft ERJ-170/190 between Civil Aviation Bureau - Japan and Aerospace Technical Center - Brazil", in effect on October 2001.

9 COMMUNICATION

Communications between both authorities, regarding the subjects covered by this Arrangement, shall be forwarded to the address indicated below:

- a) AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL (ANAC) - BRASIL
Gerência Geral de Certificação de Produtos Aeronáuticos
Avenida Cassiano Ricardo, 521
Bloco B – 2º Andar – Jardim Aquarius
12246-870 – São José dos Campos – SP

Phone: 55 (12) 3797-2525
Fax: 55 (12) 3797-2330
Home page: www.anac.gov.br
E-mail: prodcert.arrang@anac.gov.br

b) **CIVIL AVIATION BUREAU - CAB**

Airworthiness Division
2-1-3 Kasumigaseki, Chiyoda-ku
Tokyo – 100-8918, Japan

Phone: 81 (3) 5253-8735

Fax: 81 (3) 5253-1661

Home page: www.mlit.go.jp/koku/english/index.html

E-mail: g_CAB_GIJ_KKA@mlit.go.jp

10 INTERIM MEASURE

- a) Notwithstanding paragraph 3.6 a), if the Exporting Authority, or a person designated in accordance with the regulations of the Exporting Authority, certifies to the Importing Authority that an appliance, a part or a component to be installed on an aeronautical product, for which a type design approval is not issued by the Importing Authority, but for one of the same type of which an airworthiness and environmental certification was issued by the Importing Authority before the signature date of that Arrangement, conforms in construction to a type design approved by the Exporting Authority and is in a condition for safe operation, the Importing Authority shall give the same validity to the technical evaluations, determinations, tests and inspections made in accordance with the regulations of the Exporting Authority, as if it had made them itself on the date of the certification by the Exporting Authority.
- b) The provisions of paragraphs 3.6 b) through 3.6 d) shall apply accordingly to paragraph 10 a).

Claudio Passos Simao
Airworthiness Superintendent

National Civil Aviation Agency - Brazil

Date: September 15, 2008

Atsushi Shimamura
Director, Airworthiness Division

Civil Aviation Bureau
Ministry of Land, Infrastructure,
Transport and Tourism - Japan

Date: October 6, 2008

APPENDIX

EXAMPLES OF CHANGES THAT SIGNIFICANTLY AFFECT THE APPROVED TYPE DESIGN

The following changes are considered to significantly affect the type design approved by the Importing Authority:

- a) Significant changes to the cabin interior configuration;
- b) Modifications which would result in changes to the Importing Authority's Type Certificate Data Sheet;
- c) Modifications which would result in changes to the Limitations Section of the AFM.
- d) Modifications which result in aircraft configurations not addressed in the Importing Authority's accepted Flight Manual (including supplements);
- e) Modifications which results in changes to the Airworthiness Limitations of the Instructions for Continued Airworthiness;
- f) Modifications which have an impact on any Additional Technical Conditions prescribed by the Importing Authority;
- g) Modifications requiring (or affecting) Exemptions or Findings of Equivalent Safety; and
- h) Other modifications considered necessary by the manufacturer or the Exporting Authority.