



**Working Arrangement**  
**between**  
**The General Administration of Civil Aviation of China (CAAC)**  
**and**  
**The European Aviation Safety Agency (EASA)**

**On the validation by CAAC of Rolls-Royce engines approved by**  
**EASA**

## 1. PURPOSE

This Working Arrangement defines the working relationship between the European Aviation Safety Agency (EASA) and the General Administration of Civil Aviation of China (CAAC) hereafter called the "Authorities", to facilitate and accomplish the type validation by CAAC, post-type validation activities, as well as to define continued airworthiness activities of Rolls-Royce engines and parts and appliances related to these engines, for which EASA carries out on behalf of the Member States of the European Community and of the European third countries that participate in the activities of EASA under Article 55 of Regulation (EC) No 1592/2002<sup>1</sup>, the functions and tasks of the State of Design.

## 2. OBJECTIVES

This Working Arrangement is intended to accomplish the following objectives:

2.1 To define the working procedures under the respective responsibilities of each Authority:

- a) For the type validation process; and
- b) For subsequent post type validation activities.
- c) For the acceptance of new and used engines produced by the manufacturer as mentioned in the CAAC Validation Data Sheet and for which the CAAC has issued the Validation of Type Certificate (VTC);
- d) For the validation of Supplemental Type Certificates approved by EASA for these engines and for which CAAC will issue the Validation of Supplemental Type Certificate (VSTC);

Note: The process of STC Validation is operated with reference to the process of Type Certificate Validation (VTC) described in this Working Arrangement.

- e) For parts and appliances related to these engines.

2.2 To minimise redundant inspections, tests, demonstrations, evaluations and approvals.

2.3 To co-operate and assist on continued airworthiness of Rolls-Royce engines.

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<sup>1</sup> As of 1 January 2007. Iceland, Liechtenstein, Norway and Switzerland

### 3. SCOPE

The scope of this Working Arrangement applies to Rolls-Royce plc and Rolls-Royce Deutschland engines covered according to Appendix I under the provisions set forth in the following paragraphs.

### 4. REQUIREMENTS AND BASIS

The requirements for this Working Arrangement result from paragraph 2.2 of CAAC AP 21-01 R2 dated 13 October 2006 (English version) "Validation Procedures for Import Civil Aviation Products and Parts".

### 5. COMMUNICATIONS

- a) The Aircraft Airworthiness Certification Department (CAAC-AAD) of CAAC and the EASA Certification Directorate as aircraft certification Authority will be responsible for the implementation of this Working Arrangement (see Appendix I)
- b) A project manager will be assigned by each Authority to facilitate the implementation of this Working Arrangement. All routine communication related to the activities of this Working Arrangement will formally take place between the project managers.
- c) It is recognised that the applicant will be the primary source for providing technical support to CAAC-AAD. When requested, EASA will provide the necessary assistance and support within its regulatory functions, which will be initiated through and coordinated by the designated project managers of the respective Authority.
- d) All communications between CAAC and EASA related to the activities of this Working Arrangement will be made in English language.
- e) Unless otherwise specified, EASA shall be copied into all correspondence between the applicant and CAAC related to the activities of this Working Arrangement in order to support the applicant and CAAC in the future.

## 6. TYPE VALIDATION ACTIVITES

### 6.1 General

- a) It is recognised that the applicant is responsible for showing and verifying compliance with the CAAC validation basis and for demonstrating this compliance to both Authorities. Subject to paragraph 6.2(c) (ii), any compliance documents provided to CAAC shall be approved by EASA.
- b) The CAAC type validation of affected engines must be accomplished in respect of all laws and regulation governing both Authorities.
- c) EASA will forward the application for type validation (ie.VTC/VSTC) and related information to CAAC.

### 6.2 Certification basis

- a) The certification basis is the following:
  - i) For EASA:  
As defined in the EASA Type Certificate Data Sheet (TCDS) at the latest applicable issue.
  - ii) For CAAC:  
According to CAAC procedure, CAAC accepts the EASA certification basis for civil aviation products as validation basis plus “Additional Technical Conditions (ATC)” as validation basis in Validation Type Certificate Data Sheet of VTC.
- b) CAAC will notify in writing both EASA and the applicant of any ATC necessary for the CAAC type validation.
- c) EASA will review the ATC to ensure its understanding thereof. As necessary, CAAC will provide EASA in writing with any interpretative material or any data regarding the means of compliance pertaining to those ATC.
  - i) EASA, upon request from CAAC, will initiate the process of finding compliance referred to in paragraph 6.4 once the necessary understanding of the particular CAAC ATC has been acquired.

- ii) CAAC will perform its own findings of compliance on ATC for which EASA has not acquired sufficient understanding.

### **6.3 Process of finding compliance**

For the CAAC VTC validation activities, CAAC will, in close co-ordination with EASA, define its involvement taking into account paragraph 2.2 of this Working Arrangement.

### **6.4 Process of finding compliance to the ATC**

Provided that CAAC has not already made findings of compliance with its own ATC according to paragraph 6.2(c)(ii), EASA, upon request, will make the findings of compliance with the ATC on behalf of CAAC. EASA will make the findings of compliance in accordance with the interpretative material and the means of compliance provided by CAAC. In the absence of such interpretative material, EASA will use its own interpretation for the specific ATC.

### **6.5 Formalisation of the findings of compliance**

- a) For the purpose of finding compliance with the CAAC VTC validation basis, CAAC may raise Issue Papers (IP) and Action Items (AI).
- b) An IP is normally opened to document the ATC:
  - i) to document any controversial technical issue; and
  - ii) to document differences in interpretative material or the means of compliance.
- c) AI are normally opened to record any non-controversial action to be performed by the applicant.
- d) CAAC will notify EASA and the applicant of the status of each IP and AI. CAAC will request the formal EASA position on the IP. All IP and AI must be closed before the issuance of the CAAC VTC.

## 6.6 Final statement

At the end of the process EASA will provide, upon request, a formal statement attesting that EASA has found compliance with CAAC validation basis. The CAAC validation basis and approved type design will be identified in a CAAC VTCDS.

## 7. POST TYPE VALIDATION ACTIVITIES

### 7.1 Design change approval

- a) EASA, upon request, will verify that design changes affecting the EASA type design which have been introduced after CAAC type validation, and embodied on products to be delivered to China, comply with the CAAC certification basis using the information gained during the type validation activities (see paragraph 6 above). If the change is approved via a Supplemental Type Certificate (STC), it will be validated by CAAC who will notify its approval.
- b) Prior to each products delivery or at a frequency to be determined between EASA and CAAC, a formal statement of compliance with CAAC validation basis will be provided by EASA to CAAC for major design changes not previously approved by CAAC. CAAC will make a technical validation on those major design changes that affect the EASA/TCDS or CAAC/VTCDS and will inform VTC holder and EASA of their approval. For other major design changes that not affect the EASA/TCDS and CAAC/VTCDS, they will normally be approved by CAAC on the basis of the EASA statement of compliance without technical validation. However, CAAC reserves the right to make a technical validation on major design changes and will inform the VTC holder and EASA accordingly.
- c) The declaration of compliance for export is considered sufficient to cover minor changes.

### 7.2 Other changes approval

At the request of the CAAC, the EASA will assist the CAAC in determining whether the design of alterations, modifications or repairs made under the control of the CAAC, complies with the CAAC certification basis prescribed in the subparagraph 6.2 before the change is approved and implemented.

## 8. AIRWORTHINESS SUPPORT ACTIVITIES

### 8.1 Individual product deliveries

- a) For each new product to be delivered to China, EASA will issue, when required, an EASA declaration of compliance for Export, (so called Export Certificate of Airworthiness), based on the individual EASA Form 52 issued in accordance with the POA granted under Commission Regulation (EC) No 1702/2003<sup>2</sup>, stating that the product complies with the CAAC approved type design.
- b) An Installation Drawing and Manual, an Operating Instruction Manual as well as a Maintenance and Overhaul Manual in the English language will be provided for each engine to be delivered to China. The documents will be in accordance to the CAAC approved type design, and the airworthiness limitations sections of these documents and will be approved by EASA on behalf of the CAAC.
- c) Each part and appliance related to products, will be delivered to China with an individual EASA Form One, issued in accordance with the POA granted under Commission Regulation (EC) No 1702/2003, stating that the part and appliance complies with the CAAC approved type design and is in a condition for safe operation, with a note in Block 13 of EASA Form One that the part and appliance is eligible for export to China.

### 8.2 Continued Airworthiness

- a) In accordance with ICAO Annex 8 “Airworthiness of Aircraft”, EASA will promptly inform CAAC of all mandatory airworthiness modifications, special inspections, special operating limitations or other actions necessary for maintaining the continuing airworthiness of the engines.
- b) CAAC will promptly notify EASA of any unsafe condition associated with the design and manufacturing of the products that are in service in China.
- c) EASA will notify CAAC, where appropriate, of any action it deems necessary to correct any unsafe condition in the type design that may be discovered after the type validation,

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<sup>2</sup> Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

including any actions in respect of components designed or manufactured by a supplier under contract with the type certificate holder.

**9. ENTRY INTO FORCE, INTERPRETATION, AMENDMENT, DURATION AND TERMINATION**

**9.1 Entry into force**

This Working Arrangement shall enter into force at the date of signature by the Authorities' duly authorised representatives.

**9.2 Interpretation and amendment**

Any disagreement regarding the interpretation or application of this Working Arrangement shall be resolved by common accord via consultation between the Authorities.

This Working Arrangement may be amended by mutual consent between the Authorities. Such amendments shall be in writing and made effective by the signatures of the duly authorised representatives or their designees.

**9.3 Duration and termination**

This Working Arrangement will remain in force until terminated by either Authority.

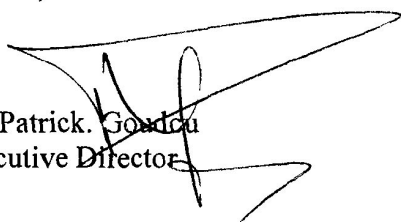
Either Authority may at any time give written notice to the other Authority of its decision to terminate this Working Arrangement. This Working Arrangement shall terminate three months following the date of receipt of the notice by the other Authority, unless the said notice of termination has been withdrawn by mutual agreement before the expiry of this period.

The Authorities agree to the provisions of this Working Arrangement as indicated by the signature of their duly authorised representatives.

Signed in.....on.....2007 in duplicate in English language:

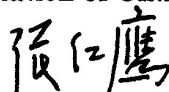
**For the European Aviation Safety Agency  
(EASA)**

Mr. Patrick Gaudou  
Executive Director



**For the General Administration of Civil  
Aviation of China (CAAC)**

Mr. Zhang Hongying  
Director General



## APPENDIX I

This Template will be used to cover the Rolls-Royce engines and parts and appliances related to these engines during the validation and signed by focal points designated by the Authorities.

APPENDIX I (No)

Date:

Models	EASA TC No	EASA TCDS Issue No
EASA Certification Basis		
CAAC Validation Basis		
ATCs		
CAAC Special Requirements		
EASA  (signature)		CAAC  (signature)

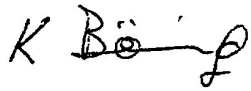
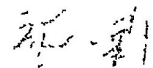
### General Contact (see paragraph 5.a)

FOR EASA	FOR CAAC
Certification Directorate	Aircraft Airworthiness Certification Dpt
Postfach 10 12 53	155 Dongsi Street West
D-50452 Köln	Beijing 100710
Germany	Peoples Republic of China
Certification Manager Propulsion	
Mr Klaus RÖWING	Mr ZHANG Sen
Product Department	Airworthiness Certification Div CAAC-AAD
Phone: +49 221 39990 4003	Phone: +86 10 64091331
Fax: +49 221 89990 4503	Fax: +86 10 64092331
Email : <a href="mailto:klaus.roewing@easa.europa.eu">klaus.roewing@easa.europa.eu</a>	Email: <a href="mailto:Zhangsen@caac.gov.cn">Zhangsen@caac.gov.cn</a>

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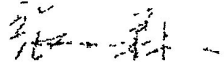
APPENDIX I (No) 01      Date: 2007-9-30

Models	EASA TC No	EASA TCDS Issue No
RB211 Trent 970-84	E 012	04
RB211 Trent 970B-84		
RB211 Trent 972-84		
RB211 Trent 972B-84		
RB211 Trent 977-84		
RB211 Trent 977B-84		
RB211 Trent 980-84		
RB211 Trent 980B-84		
<b>EASA Certification Basis</b>		
See section II of EASA TCDS No E 012, issue 04		
<b>CAAC Validation Basis</b>		
Validate the EASA Certification Basis		
<b>AICs</b>		
NONE		
<b>CAAC Special Requirements</b>		
Define the operation condition for the PRC J1 fuel No 3 (SPEC. GB 6537-94)		
<b>EASA</b>	<b>CAAC</b>	
(signature)	(signature)	
		

## APPENDIX I

This template will be used to cover the Rolls-Royce engines and parts and appliances related to these engines during the validation and signed by focal points designated by the Authorities

APPENDIX I (No) 02      Date 2007-9-30

Models BR700-710A1-10 BR700-710A2-20 BR700-710C4-11	EASA TC No E 018	EASA TCDS Issue No 01
EASA Certification Basis See Section II of EASA TCDS No. L 018, issue 01		
CAAC Validation Basis Validate the EASA Certification Basis		
AICs NONE		
CAAC Special Requirements Define the operation condition for the P.R.C. JET fuel No 37 SPEC (GB 6537-94)		
EASA  (signature)  	CAAC  (signature)  	

APPENDIX I

This Template will be used to cover the Rolls-Royce engines and parts and appliances related to these engines during the validation and signed by focal points designated by the Authorities

APPENDIX I (No) 03 Date: 2007-9-30

Models TAY611-8C	EASA TC No LBA TC No 6327	EASA TC DS Issue No LBA TC No.6327 Issue 03
FASA Certification Basis See Section II of LBA TCDS No 6327, Issue 03		
CAAC Validation Basis Validate the FASA Certification Basis AICs NONE		
CAAC Special Requirements Define the operation condition for the P.R.C. JET fuel No 3 (SPEC GB 6537-94)		
EASA  (signature)  K. Böing	CAAC  (signature)  [Signature]	