



# **EASA/FAA Validation Improvement Roadmap – 2022**

## **Issue 3**

**Updated August 2018**



# Background



- In 2014, the Certification Management Team (i.e. ANAC, EASA, FAA, TCCA) agreed to greater collaboration between authorities...
  - „to more efficiently and effectively develop and implement regulatory and policy solutions to common certification issues”
- Globalization of aviation business and emerging countries trigger growing resource demands on authorities
- Maximum use of the BASA and full recognition of certifying authorities' capabilities are essential to reduce efforts for validation



# Background



- In 2015, the U.S.- EU Bilateral Oversight Board (BOB) directed Certification Oversight Board (COB) to develop Validation Improvement Roadmap (VIR)
  - Objective: By 2022, reduce validation effort (time and costs) to a level of 20% compared to first TIP implementation in 2011
- COB developed VIR in sync with the CMT objectives
- COB VIR approved on 29 February 2016
- COB will annually review VIR implementation and adjust as necessary
- VIR issue 3 signed on 24 August 2018



# COB VIR Visions and Objectives



- Optimize implementation of the BASA by enhancing acceptance of certificating authority (CA) **approvals** and **findings** of compliance
- Objective, under a risk-based approach, is to maximize acceptance by the validating authority (VA), without any technical assessment or issuance of a validation approval
- VIR applies risk-based validation principles to reduce level of technical involvement in validation



# COB VIR Strategic Focus Areas



Three new avenues for approvals between FAA and EASA:

- **Reciprocal Acceptance of Certificates and Approvals**
  - An approval by the CA constitutes a valid approval in the VA's system without any technical involvement or approval by the VA
- **Streamlined Validation of Certificates and Approvals**
  - An approval by the CA leads to an approval being issued by the VA without any technical involvement
- **Validation Work-Plan**
  - Level of involvement by the VA is established based on risk based principles rather than a comprehensive review of compliance findings made by the CA
  - A work-plan is used for each project requiring active management oversight to ensure common principles and procedures are applied to maximize reliance on the CA's findings



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Reciprocal acceptance of Certificates and Approvals

Description	Desired Outcome	TIP Rev	Completion Date
Define criteria for reciprocal acceptance of TSOA/ETSOA articles by EASA and FAA.	An approval in the system of one party constitutes a valid approval in the other party's system without any technical involvement or issuance by the VA (importing authority)	5	Sept 2015
		6	Sept 2017
All repairs approvals are reciprocally accepted		6	Sept 2017
Refine criteria for major level 1 changes (change classification criteria in TIP)	Level 1 and 2 design change categories discarded and brought in line with "Acceptance and Validation"	6	Sept 2017



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Streamlined validation of Certificates and Approvals

Description	Desired Outcome	TIP Rev	Completion Date
Develop merged (design change [STC] and post TVP changes) classification criteria for streamlined validation of low-risk design changes to include in addition to Basic STCs; ATCs, ASTC	An issuance of an approval in the system of one party leads to an issuance by the validating authority without any technical involvement	6	Sept 2017
Define classification criteria for streamlined validation of low-risk TCs (Part 33* and 35) (* reciprocal engine only)		6	Sept 2017



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Streamlined validation of Certificates and Approvals

Description	Desired Outcome	TIP Rev	Completion Date
Define classification criteria for streamlined validation of low-risk TCs (Parts 23, 27, and 33 (turbine engines))	An issuance of an approval in the system of one party leads to an issuance by the validating authority without any technical involvement	8	
Define classification criteria for streamlined validation of all TCs (Parts 25 and 29)		9	
Streamlined validation of STC and TCs for all products		9	





# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Validation Work-Plan for approvals

Description	Desired Outcome	TIP Rev	Completion Date
Identify policy on the development and implementation of a work-plan, applying risk-based criteria to show VA level of technical involvement	The level of technical involvement by the validating authority is established based on a set of risk based principles rather than a comprehensive review of compliance findings made by the certifying authority	6	Sept 2017



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Common Certification Basis

Description	Desired Outcome	TIP Rev	Completion Date
Incorporate as default VA to use CA certification basis for all validation projects with a work plan.	One single certification basis will facilitate reciprocal acceptance of Certificates and Approvals, and streamlined validation of Certificates and Approvals	9	



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Regulatory Cooperation and Harmonization

Description	Desired Outcome	TIP Rev	Completion Date
Modify issue resolution process to include engagement with the applicable EASA-FAA CA Group membership for resolution of regulatory/policy issues	Enhance the harmonization of technical standards and policies to further streamline the reciprocal acceptance of approvals and determinations of compliance. Ultimate goal of CA certification basis being acceptable to the VA with no additional technical conditions.	6	Sept 2017
Streamlined operational validation process by optimizing reliance on the CA system (MRB)		5 Amend- ment 1	March 2017
Develop necessary procedures for acceptance of Certificate of Conformity in lieu of 8130-3 for commercial parts		7	



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Regulatory Cooperation and Harmonization

Description	Desired Outcome	TIP Rev	Completion Date
Streamlined operational validation process by optimizing reliance on the CA system (OSD/MMEL)	Enhance the harmonization of technical standards and policies to further streamline the reciprocal acceptance of approvals and determinations of compliance. Ultimate goal of CA certification basis being acceptable to the VA with no additional technical conditions.	8	
Develop criteria/procedures for reciprocal acceptance of ADs & Alternate Means of Compliance to ADs.		8	
Streamlined environmental validation procedures by optimizing reliance on the CA system	This initiative supports the concept of using one common certification basis for CA and VA. This initiative has various external factors which may not be under AIR control (e.g. FAA rulemaking process).	8	



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Regulatory Cooperation and Harmonization

Description	Desired Outcome	TIP Rev	Completion Date
Harmonize or determine equivalent SMS regulations	This initiative supports the concept of a global recognition of SMS when approved by the state of design or manufacture		Ongoing activity



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ Training

Description	Desired Outcome	TIP Rev	Completion Date
FAA-EASA jointly develop implementation procedures (i.e. TIP) training	Training on the implementation of the bilateral aviation safety agreement implementation procedures is harmonized between FAA and EASA, setting common expectations across the technical community. This will further promote and enhance reciprocal acceptance of findings and approvals.		Ongoing Activity



# COB VIR initiatives 2017 onwards



## Specific Initiatives:

### ➤ UAS/RPAS

Description	Desired Outcome	TIP Rev	Completion Date
Introduce UAS/RPAS to TIP	Develop necessary procedures in TIP to apply validation principles to UAS/RPAS products	7	



# COB VIR Status Overview August 2018



	Reciprocal Acceptance - <b>no validation*</b>	Streamlined validation - <b>no technical involvement*</b>	Validation – <b>Work-Plan+</b>
<b>Type Certificates</b>			
Part 23			
Part 25			
Part 27			
Part 29			
Part 33			
Part 35			
Light Sport Airplanes			
<b>Articles (Parts and Appliances)</b>			
Parts Manufacturers Approval (non-critical)			
Parts Manufacturers Approval (critical)			
Technical Standard Order Authorization			
<b>Design Changes</b>			
Basic STCs (All Products)			
Non-Basic STCs (All Products)			
Non-Basic Design Changes			
Basic Design Changes	No change to TC/TCDS	Change to TC/TCDS	
Minor Change			
Articles			
Parts Manufacturers Approval	Non-Critical PMA		Critical PMA
Technical Standard Order Authorization			
<b>Repairs</b>			
Major repair			
Minor repair			
Alterations (Only applies to FAA)	to Non-Critical parts		to Critical parts





# Supporting COB VIR Elements



- **Post-Approval Audit/Sampling Process**
  - Objective: Maintain confidence and communication channels in domains with no technical involvement
- **Harmonisation of airworthiness requirements**
  - Objective: One single Certification Basis for CA and VA
- **Common Training**
  - Objective: All teams have same understanding