FAA-TCCA Bilateral Enhancement Roadmap

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Federal Aviation Administration

Transport Canada / Transports Canada

FEDERAL AVIATION ADMINISTRATION

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BAMT Bilateral Enhancement Roadmap

Preamble

This Bilateral Enhancement Roadmap (BER / Roadmap) was developed under the auspices of the FAA/TCCA Bilateral Airworthiness Management Team (BAMT). The BAMT provides governance to the effective functioning, implementation, and continued validity of the bilateral airworthiness procedures between the FAA and TCCA. The first issue of this document was approved on November 19, 2018 as the Validation Improvement Roadmap. The second issue of this document here within has been retitled to Bilateral Enhancement Roadmap to capture more aspects of bilateral airworthiness beyond those covered by the VIR. The BAMT will review this document on a yearly basis and evaluate the progress of its implementation.

Introduction

The FAA and TCCA have previously developed Validation Improvement Roadmaps (VIR) to respond to the increased globalization of the aviation business that drives the need for greater collaboration among the authorities to harmonize regulatory systems in order to effectively respond to common industry issues. Increasing levels of domestic product certification and new validation projects from other countries that were placing growing resource demands on the authorities. Maximum use of the Bilateral Aviation Safety Agreement (BASA) and full recognition of the capability of each partner was essential to reduce the efforts expended in validation programs.

While the challenges with globalization and validation programs still remain today, the BAMT envisions the need to expand on the scope of the engagement to further enhance the bilateral relationship.

BAMT Bilateral Enhancement Roadmap (BER) Vision and Objective

The BAMT BER vision is to optimize the overall implementation of the Bilateral Aviation Safety Agreement by enhancing not only the acceptance of certificating authority (CA) approvals and findings of compliance by the Validating Authority (VA), but also in other areas that the BAMT sees the need to address to effectively meet the challenges ahead.

In addition to continuing the application of the risk-based validation principles to ensure a rational and effective reduction in certification resource expenditure while maintaining a high degree of safety, this BER aims to exercise the full scope of the bilateral engagement to areas including but not limited to global data sharing, safety management systems, operational evaluations, collaboration in innovation, and modernization of TSO requirements framework. It also promotes bilateral collaboration on technical subjects such as human factors and the Changed Product Rule.

Table A below identifies initiatives, where the application of the risk-based validation principles may be applied in other strategic areas determined to be beneficial in enhancing the relation and engagement between the authorities. An estimated target date in which these initiatives could be

accomplished is also provided; however, it is contingent on both FAA and TCCA to promulgate international standards in a timely and consistent manner.

Table A: Roadmap Focus Areas

Initiative Description	Target Date	Desired Outcome
UAS Low-Medium Risk: Alignment and harmonization of requirements, regulatory expectations, and confidence building in lower-risk processes	2025	An issuance/acceptance of an airworthiness approval (excluding environmental) under the system of one Authority constitutes a valid/accepted airworthiness approval under the other Authority's system with minimal technical involvement nor issuance by the VA.
Modernization of TSO requirements framework	2025	A globally compatible framework of TSO requirements that ensures the safe continuity of existing reciprocal acceptance procedures.
Maintenance of Confidence, Level of Involvement	2025	Promote continued understanding so that both authorities remain competent of each other's standards, rules, practices, procedures, and systems are compatible to ensure the maintenance of confidence between each other's technical competence and ability to perform regulatory functions.
Acceptance of Maintenance Review/Type Board Report	2025	An approval under the system of one Authority constitutes a valid approval under the other Authority's system with minimal technical involvement nor issuance by the VA.
UAS High Risk: Develop harmonized/compatible certification mechanisms	2025	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated to similar/compatible requirements by the validating authority.
Harmonization of software development	2025	Enhance the harmonization of technical standards, policies, and interpretations relating to software guidance to ensure the safe continuity of both existing and

		maturing bilateral validation and acceptance procedures.
Bilateral Collaboration – Innovation, Technology and Research	2025	Established criteria and processes for early engagement with authorities on new and novel technologies that may require international harmonization of requirements.
Light Sport Aircraft: Reach harmonized/compatible systems after MOSAIC	2026	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated to similar/compatible requirements by the validating authority.
E-VTOL: Develop harmonized/compatible certification mechanisms	2026	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated to similar/compatible requirements by the validating authority.
Acceptance of Airworthiness Directives (ADs) and Alternative Means of Compliance (AMOCs) issued by the CA	2026	Enhance the harmonization of technical standards and policies to maximize the efficiency in addressing safety issues in the worldwide fleet. NOTE: For TCCA, foreign SoD airworthiness directives are automatically applicable per CAR 605.84. Procedures to accept AMOCs issued by the CA are also already in place in the IPA.
Safety Management Systems	2026; NOTE: This goal requires broad level support and harmonization with other international Authorities.	Globally accepted methods to identify risks and mitigate hazards through the establishment of safety management systems.
Define classification criteria for streamlined validation of Part 23, 27, and 33 (turbine engines) TCs	2027	An issuance of an approval in the system of one party leads to an issuance by the validating authority with minimal technical involvement. NOTE: For TCCA, classification criteria for streamlined validation of Part 33 (reciprocating engines),

		and 35 (propellers) has already been defined in the IPA.
Define classification criteria for streamlined validation of Part 25 and 29 TCs	2027	An issuance of an approval in the system of one party leads to an issuance by the validating authority with minimal technical involvement.
International Pilot Training, Human Factors, Operational Evaluation; initial implementation of cooperation procedures	2027	Collaborate on the operational aspects of aircraft designs and enhance operational evaluation processes to support the reciprocal acceptance of operational evaluation findings regarding pilot qualification and operational suitability requirements.
Changed Product Rule	2027; NOTE: This goal requires broad level support and harmonization with other international Authorities.	Collaboratively develop and implement the internationally harmonized interpretation and application of CPR that ensures the safe continuity of both existing and maturing bilateral validation and acceptance procedures.
Global Data Sharing – COS, etc.	2027; NOTE: FAA and TCCA are already working towards this goal. The intent is promulgate our advancements to gain broad level support and harmonization with other international Authorities.	Further improve the global level of safety by jointly gathering, managing and analyzing and sharing safety data; and utilizing advanced data analytics to evaluate risks, identify precursors, and develop effective mitigations.
Regulatory Staff Development through joint initiatives	Continuous	The development of better relationships through all levels of the organizations fosters deeper understanding and reliance on the systems with high levels of common understanding and application.