Certification Oversight Board

Bilateral Enhancement Roadmap (BER)

Sponsors:

This Roadmap is sponsored by the Certification Oversight Board and signed by the Co-Chairs

For:

European Union Aviation Safety Agency

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1. Preamble

This Bilateral Enhancement Roadmap (BER) has been developed by the Certification Oversight Board(COB) as the successor of the Validation Improvement Roadmap (VIR), See Annex 1 to the Agreement, Paragraph 3.2.11(b). The name change is to introduce consistency across the Certification Management Team (CMT) group partners.

The first issue (of the VIR) was approved on February 29, 2016. The VIR was updated with issue 2 to highlight those goals that had been achieved and revise the target dates for goals that were still active. It added new goals that were not envisioned in the first release. Issue 3 clarified dates of actions already accomplished and the expected TIP revisions for future actions.

The VIR covered activities to the end of the year 2022. This BER has been issued to supersede the VIR and cover activities for the next 5-year period (2023 to end of 2027). The BER has been retitled to capture more aspects of the bilateral relationship (under the oversight of the COB) beyond those covered by the VIR. The COB will continue to review its implementation on a yearly basis and will adjust it if necessary, through subsequent revisions. In case of significant change, the COB will inform the Bilateral Oversight Board (BOB).

2. Vision and Objective

The FAA and EASA had previously developed the Validation Improvement Roadmap (VIR) to respond to the increased globalisation of the aviation business that drives the need for greater collaboration among the authorities to harmonise regulatory systems in order to effectively respond to common industry issues

While the challenges with globalisation and validation programs still remain today, the COB envisions the need to expand on the scope of the engagement to further enhance the bilateral relationship beyond project validation matters.

The COB vision for the BER is to optimise 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 COB 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 commensurate certification resource expenditure during validation activities, while assuring a high degree of safety, this BER aims to expand to the full scope of the bilateral engagement, including for example global data sharing, safety management systems, collaboration in innovation, and cooperation in oversight activities. It also references in other activities under the CMT (and other forums) that also promotes bilateral collaboration on technical subjects: such as human factors and the Changed Product Rule (CPR).

Table A below documents the initiatives, concluded or underway, which will not only provide improvements to the implementation of the risk-based validation principles but also in 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 EASA and FAA to promulgate international standards in a timely and consistent manner.

3. Status of the VIR

The COB considers that the current VIR (at Issue 3) has accomplished the major goals for reduction in validation effort as intended. The FAA-EASA TIP revisions up to Revision 6 have resulted in changes to the TIP architecture that incorporated the major goals set out in the VIR.

At time of drafting this BER the COB acknowledges that not all items of the VIR have been implemented within the EASA/FAA relationship either within each Authorities rules and regulations or within the BASA/ TIP.

In recognition of the current landscape some of the outstanding items will be captured into the BER either in its original form or modified to better reflect best practice and the prevailing strategic direction of the Bilateral Oversight Board (BOB).

The table below summarises those outstanding items from the VIR for reference.

Focus Areas	Initiative Description	Desired Outcome
Streamlined validation of Certificates and Approvals – No technical involvement	Define classification criteria for streamlined validation of low-risk TCs (Part 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. Note: The FAA is required to issue Certificates (Approvals) but can accept ETSO authorisations without issuing an FAA LODA/TSOA.
	Define classification criteria for streamlined validation of all TCs (part 25 and 29)	
	Streamlined validation of STC and TCs for all products	
Common Certification Basis	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
Regulatory Cooperation and Harmonisation	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 with the ultimate goal of CA certification basis being acceptable to the VA with no additional technical conditions.
	Develop criteria/procedures for reciprocal acceptance of ADs & Alternate Means of Compliance to ADs.	
	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).

Focus Areas	Initiative Description	Desired Outcome
	Develop necessary procedures for acceptance of Certificate of Conformity in lieu of 8130-3 for commercial parts	This initiative supports the concept of a global recognition of SMS when approved by the state of design or manufacture.
UAS/RPAS	Develop necessary procedures in TIP to apply validation principles to UAS/RPAS products	UAS/RPAS

Table 1: Open VIR Items

4. Roadmap Focus Areas

The BER sets out a group of high-level aspirational aims that the two Authorities (re-)commit to working towards a common certification (safety) culture, for the enhancement of the relationship and the mutual competitiveness of Industry while achieving their safety goals and priorities. Alignment of those safety goals and priorities are also desired where possible considering the landscape in which the Authorities exercise their responsibilities.

4.1 Reciprocal Acceptance of Approvals

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).

Initiative Description	Timeline	Desired Outcome
Acceptance of Airworthiness Directives (ADs) and Alternative Means of Compliance (AMOCs) issued by the CA.	2027	Enhance the implementation of corrective actions to notified unsafe conditions.

4.2 Streamlined Validation of Certificates and Approvals

An issuance of an approval in the system of one party leads to an issuance by the VA with only a review of the application package. This simplified method of validation was created to further leverage acceptance of findings of the CA and reduce VA validation effort for low-risk products.

Initiative Description	Timeline	Desired Outcome
Define classification criteria for streamlined validation of Part 23 reciprocating engine powered TCs.	2026	An issuance of an approval in the system of one party leads to an issuance by the validating authority without any technical involvement.

Initiative Description	Timeline	Desired Outcome
Define classification criteria for streamlined validation of Part/CS 23 turbine engine powered TC.	2027+	An issuance of an approval in the system of one party leads to an issuance by the validating authority without any technical involvement.
Define classification criteria for streamlined validation of Part 33/ CS-E and Part /CS 27 TCs.	2027+	An issuance of an approval in the system of one party leads to an issuance by the validating authority without any technical involvement.
Streamlined operational validation process by optimising reliance on the CA system (OSD/MMEL)	2024	Enhance the harmonisation of the regulatory framework, technical standards and policies to further streamline the reciprocal acceptance of approvals and determinations of compliance with the ultimate goal of CA certification basis being acceptable to the VA with no additional technical conditions.
Streamlined environmental validation procedures by optimising reliance on the CA system	2024	This initiative supports acceptance of noise and emission test data and compliance determinations made by the CA, avoiding any duplication of noise or emission tests and data review by the VA.

4.3 VA's Retained Involvement

The Level of Involvement (LOI) is established on risk-based principles that recognises the CA as the competent authority. This process applies a work-plan that incorporates transparency of the validation scope between each authority and ensures common principles and procedures that maximise reliance on the CA's findings. The work plan requirement was introduced in TIP rev 6 and allows the visibility into the VA's validation process and more certainty for the Applicant and CA.

Initiative Description	Timeline	Desired Outcome
Develop necessary procedures for acceptance of parts through its Certificate of Conformity in lieu of 8130-3 or Form 1	2024	Agree on parts which could be eligible to be accepted by the other Party with a Certificate of Conformity in lieu of an Authorised Release Certificate
Refine criteria for the scope of Validation involvement for TCs (Simplify/reduce SEI Lists)	2024	LoI in TCs is reduced incrementally through the reduction in scope of the SEI Lists.
Validation Work Plan	2023	Develop and implement guidance and improvements to Validation Work Plans use and process, drawing on experience

4.4 Maintenance of Confidence

The E.U. /U.S. Bilateral Aviation Safety Agreement (BASA) contains an obligation between the parties to ensure that confidence is maintained with each other's regulatory system. The Technical Implementation Procedures (TIP) contains the description of the process to maintain that confidence.

Initiative Description	Timeline	Desired Outcome
Reinforce the cooperation framework on COS / CAW matters	2025	Further improve the management of continued airworthiness through full cooperation and sharing of COS/ CAW data
Global Data Sharing	2027	Further improve the global level of safety by jointly gathering, managing and analysing safety data; and utilising advanced data analytics to evaluate risks, identify precursors, and develop effective mitigations.
Maintenance of Confidence, Level of Involvement	2024	Promote continued understanding and compatibility of each other's standards, rules, practices, procedures, and systems to ensure the maintenance of confidence in each other's technical competence and ability to perform regulatory functions.
Regulatory Staff Development through joint initiatives	Continuous	The development of better relationships through all levels of the organisations fosters deeper understanding and reliance on the systems with high levels of common understanding and application and caters for staff turnover

4.5 Regulation and Cooperation Strategy

One of the core aims of the U.S. – EU aviation safety agreement is to:
"ensure the continuation of the high level of regulatory cooperation and harmonisation between the United States and the European Community…."
The previous VIR incorporated several items to this effect. However as regulatory evolution is a continuing process the BER must continue to strive towards those aims at all levels.

The drive towards regulatory cooperation and harmonisation is best achieved early within the innovation lifecycle and therefore cooperation between EASA and the FAA during the early stages of technological development brings benefits to industry through streamlined approached.

To achieve this EASA and the FAA aim to foster collaboration on regulation and innovation topics.

Initiative Description	Timeline	Desired Outcome
Pilot Training, Human Factors, Operational Evaluations	2027	For large aeroplane certification develop compatible assessments in the areas of: • System safety assessment requirements and methodologies, including integration of HF evaluation • Operational evaluation and associated derived type specific training requirements
Safety Management Systems	2026	Globally accepted methods to identify risks and mitigate hazards through the establishment of safety management systems.
Changed Product Rule	2025	A globally harmonised application of CPR that ensures the safe continuity of both existing and maturing bilateral validation and acceptance procedures.
Systematic regulatory cooperation	2024	Achieve a systematic cooperation and coordination of Rulemaking activities, in order to achieve compatability as early as possible in each Authority's Rulemaking process
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 harmonisation of requirements.
Light Sport Aircraft: Reach compatible systems after MOSAIC and Part 21 Light;	2026	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated to compatible requirements by the validating authority.
E-VTOL: Develop compatible certification mechanisms;	2026	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated using compatible requirements by the validating authority.
UAS: Develop compatible certification mechanisms;	2027	An issuance of an airworthiness approval (excluding environmental) in the system of one party can be validated to compatible requirements by the validating authority.
Modernisation of TSO requirements framework	2024	A globally compatible framework of TSO requirements that ensures the safe continuity of existing reciprocal acceptance procedures.
EHPS: Develop compatible certification mechanisms;	2027	An issuance of an approval in the system of one party can be validated to compatible requirements by the validating authority.