



UK CAA / EASA TIP Industry Outreach Webinar

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Welcome and Introductions

Dave Malins

Introduction

David Malins, Head of Airworthiness, CAA

- Purpose
- Intro's
 - CAA colleagues
 - Bi-Lateral partners

Email: aweuexitquestions@caa.co.uk



CAA – EASA TIP: SECTION 1 GENERAL

Neil Williams, Christopher Street

CAA – EASA TIP

Neil Williams
Safety Policy Manager
CAA

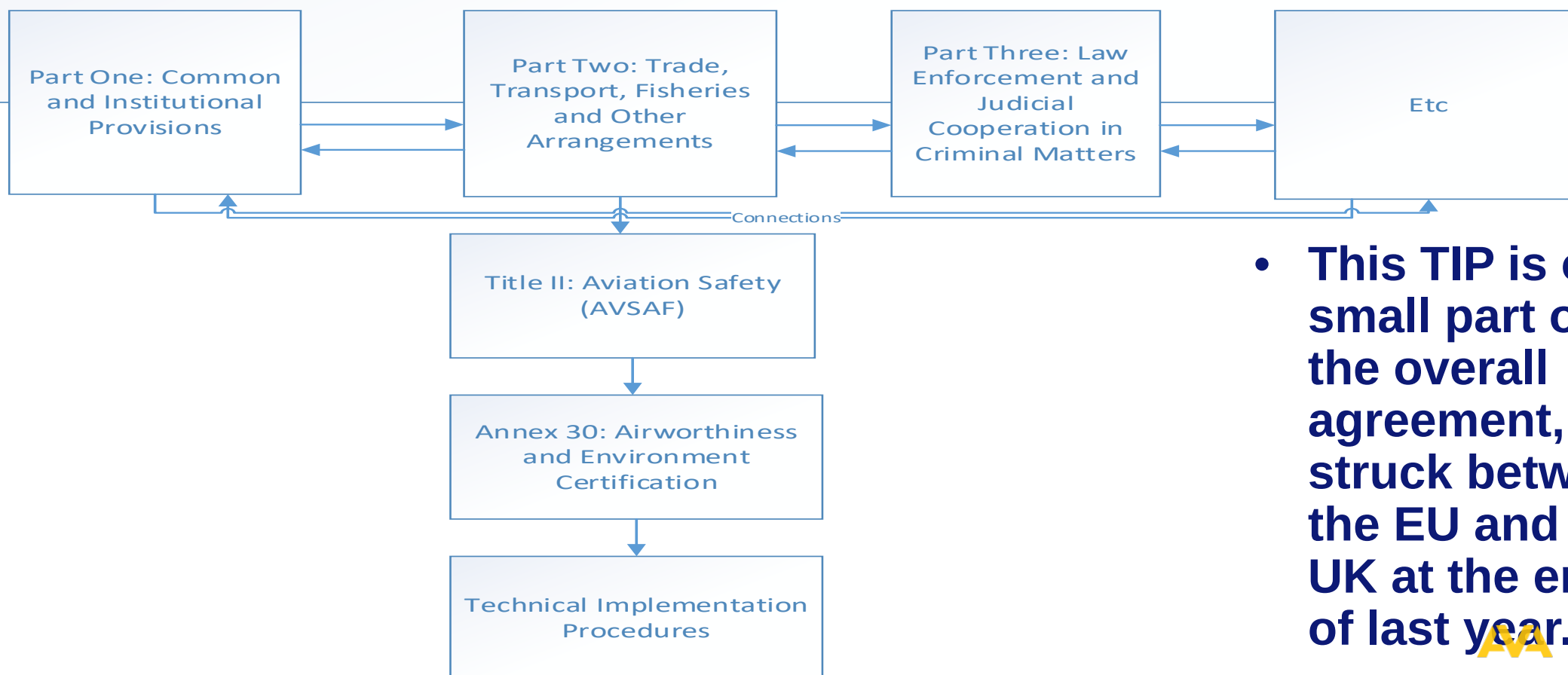
Christopher Street
Legal Adviser
CAA

TIP Section 1:

General

The Trade and Cooperation Agreement

TRADE AND COOPERATION AGREEMENT BETWEEN THE EUROPEAN UNION AND THE EUROPEAN ATOMIC ENERGY COMMUNITY, OF THE ONE PART, AND THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, OF THE OTHER PART



- This TIP is one small part of the overall agreement, struck between the EU and the UK at the end of last year.

What is a Bilateral Aviation Safety Agreement (BASA)?

- An international agreement enabling reciprocal acceptance of certificates and findings of compliance issued by the respective Competent Authorities
- It allows derogation from domestic laws and creates rights and obligations for the signatories (including the regulators and the industry)
- Important distinction between Agreement and Arrangement/MoU

Scope

The BASA supersedes any agreement in existence between EU member states and the UK in place for the areas which are covered.

Currently these are only:

- **Airworthiness Certificates of civil aeronautical products**
- **Environmental Testing and Certificates**
- **Design and Production Organisations**

But it is hoped we can add to these in the future.

Basic Structure

- **Section 1 – Scope and Admin**
- **Section 2 – Validation – A full validation process is outlined at page 28 (in the table).**
- **Section 3 – Communication and unsafe conditions**
- **Section 4 – Administration of design certificates**
- **Section 5 – Production – This reflects the Annex and is interlinked with section 7**
- **Section 6 – Requirements for exports and imports (of products)**
- **Section 7 – Technical support details (how the technical agents will work together).**

The Certification Oversight Board (COB)

- **Certification Oversight Board will be established in accordance with Article 3 of the AVSAF Annex**
 - The Board is the technical coordination body responsible for the effective implementation of the Annex
 - Comprises of representatives from both technical Agents (CAA and EASA)
 - Its mandate includes:
 - Developing, adopting, and revising the Technical Implementation Procedures
 - Sharing information on major safety concerns
 - Resolving technical issues falling within the responsibilities of the competent authorities and affecting the implementation
 - Developing effective means of cooperation
 - Conducting periodic reviews on the modalities of validation or acceptance of design certificates set out in Articles 10 [Modalities of the validation of design certificates] and 13 [Acceptance]
 - **Proposing amendments to this Annex to the Specialised Committee on Aviation Safety;**
 - Defining procedures to ensure the **continued confidence of each Party** in the reliability of the other Party's processes for findings of compliance
 - Analysing and taking action regarding the implementation of the procedures
 - **Reporting unresolved issues** to the **Specialised Committee on Aviation Safety** and ensuring the implementation of decisions taken by the Specialised Committee on Aviation Safety



CAA – EASA TIP: SECTION 2

APPROVAL PROCEDURES FOR DESIGN CERTIFICATES

Mark Bonnick, Dominic Cortizo



CAA – EASA TIP



Mark Bonnick
Dominic Cortizo

Principal Design and Certification Specialists
CAA

TIP Section 2:

Approval Procedures for Design Certificates

Scope

- Principles (2.1)
- Acceptance (2.2)
- Validation
 - Streamlined Validation (2.3)
 - Validation in Line with Level of Involvement Principles (2.4)
- Summary of Acceptance and Validation
- Application Process
 - Applications to EASA
 - Applications to CAA

2.1 Principles of Involvement for Validation

The validation process will be based to the maximum extent practicable on the technical evaluations, tests, inspections and compliance certifications by the Certifying Authority (CA).

The level of involvement of the Validating Authority (VA) considers:

- Experience of the CA;
- the overall experience gained by the VA during previous validation exercises of similar product categories with the CA;
- the nature and complexity of the design to be validated;
- the performance and experience of the applicant with the VA; and
- continued mutual confidence between the CAA and EASA.



2.2 Acceptance (1)

- ☐ **No application to the VA** *(except see note)*
- ☐ **No assessment by the VA**
- ☐ **No validation certificate issued by the VA** *(except see note)*

Note: if an accepted change requires the update of a certificate, such as in the case of a Major Change affecting the VTCDS or a minor change adding a part number to a ETSOA, then an application for an administrative update is required.

When the civil aeronautical product has been previously certificated or validated:



EASA will accept:

2.2.2 **Minor Changes** (to products and TSOA'd articles) approved in the CAA's system.

2.2.3 Design data for **Minor Repairs** approved in the CAA's system.

2.2 Acceptance (2)



CAA will accept:

- 2.2.2 **Minor Changes** (to products and TSOA'd articles) approved in the EASA system.
- 2.2.4 Design data for **Minor and Major Repairs** approved in the EASA system.
- 2.2.1 **Non-significant** (definition per Part 21.A.101) **STCs and Major Changes** approved in the EASA system. If the change requires an update to the VTCDs, then the applicant is required to submit details to the CAA if the CAA's type certification basis is modified due to:
 - novel/unusual features; or
 - unconventional product use; or
 - potential development of unsafe conditions; or
 - an Equivalent Safety Finding or Deviation.
- 2.2.5 **European Technical Standard Orders Authorisations (ETSOA).**

2.3 Validation

Two validation paths are available:

*Note: for simplicity, ‘**Validation in line with Level of Involvement Principles**’ is abbreviated to ‘**Technical**’ in the rest of this presentation.*

2.3.1 Streamlined

- CAA validation of EASA Significant STCs and Major Changes.
- EASA validation of CAA STCs, Major Changes, Major Repairs and UKTSOAs when agreed on a case-by-case basis.

2.3.2 Technical (in line with Level of Involvement Principles)

- CAA and EASA validation of Type Certificates and Restricted Type Certificates.
- EASA validation of CAA STCs, Major Changes, Major Repairs and UKTSOAs unless agreed on a case-by-case basis that Streamlined may apply.



2.4 Procedures for Validation

2.4.1 The initial application process for **Streamlined** or **Technical** is similar:

- Application to VA made via CA
(see later material regarding the application process)
- CA confirms:
 - ✓ the project is in scope of the Agreement;
 - ✓ a design certificate has been issued;
 - ✓ that Streamlined or Technical process is applicable; and
 - ✓ that a data pack (including a statement of compliance with the VA's airworthiness and environmental requirements) has been submitted.



2.4.2 VA acknowledges the application and advises the CA of any missing data within 20 working days of receipt.

2.4.3 Streamlined Validation Process

- ☐ Application required to the VA
- ☐ No technical assessment by the VA – Technical Familiarisation only
- ☐ Validation certificate issued by the VA

2.4.3.2 Streamlined validation projects are sequential only. But, if an urgent operational need exists, the Technical Validation procedure (with appropriate LOI) may offer the possibility of concurrent validation.

2.4.3.3/4 Further data to allow a Technical Familiarisation is added to the data pack (see 2.4.1) if necessary.

2.4.3.6 The Technical Familiarisation should be completed within 20 working days of receipt of the pack or conclusion of any meetings.

The validating certificate is then issued within 15 working days.

2.4.4 Technical Validation (in line with Level of Involvement Procedures) Process (1)

- ☐ Application required to the VA
- ☐ Technical assessment by the VA – involvement per LOI procedures
- ☐ Validation certificate issued by the VA

2.4.4.2 VA may decide to limit its involvement to a review of the application.

2.4.4.3 Technical validation may be performed as sequential or concurrent.

2.4.4.4 This paragraph introduces the four phases of the technical validation which are then detailed in paragraphs 2.4.4.5 through 2.4.4.13:

1. General familiarisation – establishment of the VA team
2. Technical familiarisation – establishment of the VA certification basis
3. Determination of VA Level of Involvement
4. Compliance verification – issuance of the validating certificate



2.4.4 Technical Validation (in line with Level of Involvement Procedures) Process (2)

Elements of note relevant to the Applicant in paragraphs 2.4.4.5 through 2.4.4.8:

- 2.4.4.5/6 The Applicant is expected to present an overview to enable VA familiarisation sufficient for the VA to establish its team and initial certification basis. This may include a familiarisation flight for TC projects.
- 2.4.4.7 The VA's certification basis will be recorded in a Certification Review Item CRI A-01
- 2.4.4.8 Validation Items (VI) will be established detailing the areas of interest:
- Generic VIs - typically for standards differences and new standards.
 - Project VIs – new/novel technology, unconventional product use, unsafe conditions, ESF or new interpretations of MOC.

2.4.4 Technical Validation (in line with Level of Involvement Procedures) Process (3)

Elements of note relevant to the Applicant in paragraphs 2.4.4.9 through 2.4.4.13:

- 2.4.4.9 The VA's LOI is proportionate to the projects complexity and size. The Applicant may assist in the identification of previous (similar) validation projects.
- 2.4.4.10 A Validation Work Plan (VWP) may be developed by the VA and any revision to it will be communicated to the Applicant.
- 2.4.4.13 The validation Design Certificate is issued when:
 - The CA has issued its own Design Certificate;
 - The Applicant has shown and declared compliance with the VA's certification basis;
 - The CA has issued a statement of compliance to the VA;
 - All issues have been resolved; and
 - All fees have been paid by the Applicant.



2.4.4 Technical Validation (in line with Level of Involvement Procedures) Process (5)

Technical Validation for (UK) Technical Standard Order Authorisations

2.4.4.14 The CA must assure that the VA's applicable technical performance standards and procedures have been used.

Currently both CAA and EASA use CS-ETSO.

The application pack includes:

- Certification Programme;
- Plans and accomplishment summaries for software and hardware certification;
- Qualification reports; and
- Outline and nameplate drawings.



The validation Design Certificate is issued following review of all required data and approval of all proposed deviations.

Summary of Acceptance and Validation

Design Approval	CAA Validation of EASA Design Approvals		EASA Validation of CAA Design Approvals	
	Modality	TIP Reference	Modality	TIP Reference
Minor Change	Accept	2.2.2	Accept	2.2.2
Minor Repair	Accept	2.2.4	Accept	2.2.3
Non-Significant STC	Accept	2.2.1	*Technical Validation or Streamlined	2.4.4 2.4.3
Non-Significant Major Change	Accept	2.2.1	*Technical Validation or Streamlined	2.4.4 2.4.3
Major Repair	Accept	2.2.4	*Technical Validation or Streamlined	2.4.4 2.4.3
Significant STC	Streamlined	2.4.3	*Technical Validation or Streamlined	2.4.4 2.4.3
Significant Major Change	Streamlined	2.4.3	*Technical Validation or Streamlined	2.4.4 2.4.3
TC or RTC	Technical Validation	2.4.4	Technical Validation	2.4.4
Technical Standard Order	Accept	2.2.5	*Technical Validation or Streamlined	2.4.4 2.4.3

* Technical Validation in line with LOI principles unless a Streamlined Validation process is agreed by both parties on a case-by-case basis (per 2.3.1).

Application process