TERMS OF REFERENCE

Task Nr:	RMT.0039 (23.005)
Issue:	1
Date:	23 May 2012
Regulatory reference:	COMMISSION REGULATION (EC) No 1702/2003[1] 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 (Part-21)
Reference documents:	Decision No 2003/14/RM[2] of the Executive Director of the Agency of 14 November 2003 on certification specifications, including airworthiness codes and acceptable means of compliance for normal, utility, aerobatic and commuter category aeroplanes (CS-23); CFR14 PART-23 Amendment 62: Certification of Part-23 Turbofan and Turbojet-Powered Airplanes and Miscellaneous Amendments; EASA Special Conditions applicable to CS-23 Aeroplanes.

1. Subject: Incorporation of standard Special Conditions in CS-23 and harmonisation with FAR-23

2. Problem/statement of the issue and justification; reason for regulatory evolution (regulatory tasks):

The applicability of CS-23 in the commuter category is limited to propeller-driven twin engine aeroplanes only; it does not cover jet-driven aeroplanes. Furthermore, CS-23 does not contain adequate or appropriate safety standards for High Performance Aeroplanes (HPA). Therefore, Special Conditions (SCs) have been raised for the certification basis in accordance with Part 21A.16B to provide adequate and appropriate safety standards for those products.

Other existing SCs are not specific to HPA aeroplanes, but are applicable to a wider range of products: some SCs are applicable to all CS-23 aeroplanes and others apply only to aeroplanes incorporating a certain technology or performing certain specific operations.

Even though some of these SCs have been used for many years in several certification projects, they are not publicly available. This lack of publicly available information results in an additional workload both for the industry and EASA:

- At the industry level, manufacturers may not be aware of acceptable solutions to comply with the rules before the start of the certification process. This results in a lack of efficiency of the certification process.
- At EASA level, the workload related to management of all these SCs increase with

[1] Regulation as last amended by Commission Regulation (EC) No 1194/2009 of 30 November 2009.

[2] Decision as last amended by Decision 2010/008/R of the Executive Director of the Agency of 28 September 2010.

each new SC.

Under paragraph 21A.16A Airworthiness Code of Annex 'Part-21' of Regulation (EC) 1702/2003, there is an obligation on the Agency as follows: '*The Agency shall issue in accordance with article 14 of the Basic Regulation airworthiness codes as standard means to show compliance of products, parts and appliances with the essential requirements of Annex I to the Basic Regulation. Such codes shall be sufficiently detailed and specific to indicate to applicants the conditions under which certificates will be issued*.'

Article 14 (now Article 19) of the Basic Regulation EC 216/2008 (BR) is more specific and states that Certification Specifications (CSs) and Guidance Material '*shall reflect the state of the art and the best practices in the field concerned and be updated taking into account worldwide aircraft experience in service, and scientific and technical progress*.'

Incorporating all the standard SCs in a new amendment to CS-23 would be in line with the above provisions of the BR and its implementing rules.

Furthermore, the FAA published in December 2011 Amendment 62 to Part-23. This Amendment incorporates a number of FAA exemptions, Special Conditions and Equivalent Level of Safety (ELOS) findings usually used for the certification of Part-23 Turbofan and Turbojet-Powered Aircraft.

This updated Part-23 also incorporates miscellaneous Amendments.

Harmonisation of CS-23 and the FAA Part-23 will facilitate validation and reduce the burden for the industry.

For some requirements, FAA and EASA have not yet agreed on a common position. Those points will need further discussions between EASA and FAA and, therefore, are not in the scope of this rulemaking task.

NOTE: A Regulation harmonised between FAA and EASA would be a good starting point for the rulemaking activities resulting from the Part-23 Aviation Rulemaking Committee (ARC) recommendations on 'Reorganisation of Part-23'.

3. Objective:

- Increase the efficiency of the certification process from a manufacturer's point of view by making publicly available EASA information which is currently not accessible before the start of the certification process.
- Decrease EASA workload related to Special Conditions management using a 'good housekeeping' policy by incorporating the Agency's SCs into CS-23 to better reflect the state of the art and best practices.
- Harmonise CS-23 as far as possible with Part-23 Amendment 62.

The list of SCs proposed to be part of this rulemaking task is provided in section 4 of this Terms of Reference.

4. List of Special Conditions:

The following EASA Special Conditions are proposed to be transposed into the CS-23:

- SC-B23.0045-01: Performances
- SC-B23.0049-01: Stall Speed
- SC-B23.0143-01: Manoeuvre Margin
- SC-B23.0201-01: Wings Level Stall
- SC-B23.0203-01: Turning Flight and Accelerated Turning Stalls
- SC-B23.0253-01: Airborne Deceleration Devices
- SC-B23.1587-01: Landing Distance Factors
- SC-C23.0301-01: Dynamic Response

- SC-.C23.0333-01: Out-of-Trim Conditions (Structures)
- SC-C23.0335-01: Speeds Margins
- SC-C23.0365-01: Pressurisation into Non-pressurised Areas
- SC-C23.0427-01: Round-the-Clock Gust
- SC-C23.0441-01: Yawing Manoeuvre
- SC-C23.0571-01: Sonic Fatigue
- SC-D23.0631-01: Bird Strike
- SC-D23.0703-01: Take-off warning system
- SC-D23.0729-01: Extension and Retraction Systems
- SC-D23.0731-01: Wheels
- SC-D23.0735-01: Brakes and Braking Systems
- SC-D23.0783-02: Doors
- SC-D23.0831-01: High-Altitude Operation
- SC-E23.0981-01: Fuel Tank Ignition Prevention
- SC-E23.0967-01: Fuel Tank Installation
- SC-E23.1093-01: Cold Soaked Fuel
- SC-E23.1183-01: Lines, Fittings and Components
- SC-E23.1195-01: Powerplant Fire-Extinguishing System
- SC-F23.1309-02: Protection from Effect of HIRF
- SC-F23.1309-03: Protection from the Effects of Lightning Strike
- SC-F23.1309-04: FADEC Integration
- SC-F23.1309-05: Integration of Systems and Structures
- SC-F23.1353-01: Battery Endurance Requirement (High Altitude)
- SC-F23.1435-01: Hydraulic System
- SC-30-04: Icing Qualification of External Probes

The following Certifications Review Items (CRIs) are also proposed to be transposed as Acceptable Means of Compliance (AMC) or Interpretative Material (IM) into the CS-23:

- CRI D-51: Wheel and Tyre Failures Modes
- CRI D-53: Tyres

4. Specific tasks and interface issues (deliverables):

- Review Part-23 Amendment 62 and compare it with the current CS-23 and Special Conditions to determine common requirements for inclusion in CS-23.
- Draft a NPA proposing an Amendment to CS-23 incorporating the EASA Special Conditions for CS-23 aeroplanes and the items of Part-23 Amendment 62 identified above.

5. Working methods (in addition to the applicable Agency's procedures)**:**

Agency

RIA type: light

6. Time scale, milestones:

NPA: January 2013

CRD: October 2013

Decision: April 2014