EASA
European Aviation Safety Agency

update 2016

FLYING IN THE EU:

MAKING AIRWORTHINESS (SAFELY) AFFORDABLE

Background information

In the context of the EASA General Aviation Roadmap there is an effort to simplify the certification of aircraft and modifications. This should lead to a noticeable reduction in cost and effort to certify a new product or modify an existing one. In turn, this should enable manufactures to develop modern and safe products and operators to retrofit modern equipment at cost affordable to the pilots. There are three ways through which all the above will be achieved:

1. Simplified Airworthiness Procedures

2. Standard Changes and Repairs (CS-STAN)

3. CS-23/Part 23 reorganisation and International Harmonisation

Simplified Airworthiness Procedures

It is proposed to drastically simplify the airworthiness system for the low end of GA with small aircraft and low risk operation by developing simplified entry levels into the EASA system.

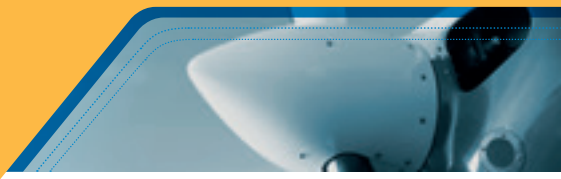
The basic principle is to apply a risk based approach and to use qualified entities and user organisations for oversight or practically combine organisational approvals, while relying on industry standards endorsed by EASA. It is proposed to develop provisions for:

- Introduction of Qualified Entities/User Organisations that perform oversight of organisations and projects. They should ensure independent checking of certification process and compliance demonstration to substitute EASA involvement according defined standards. Type certificates for new models will be issued by EASA based on this verification and approvals for changes/repairs might be issued directly when in the scope of accreditation.

- Practical combination of organisational approvals where the oversight in certification/production is reduced and approved organisations declare compliance with simple airworthiness codes. The approval process and the oversight should be simplified and the regulations and interpretations for DOA and POA need to be adapted to small organisations and a template manual should simplify the approval process.

Also direct benefits should materialise in the actual certification process by providing training to the industry (e.g. workshops) and developing templates and guidance.

The new Standard Changes / Standard Repairs (CS-STAN)



The concept of Standard Changes and Standard Repairs (CS-STAN) is another part of the Agency's efforts to reduce the regulatory burden and to encourage the installation of safety equipment.

For cases where the Agency acknowledges there is little added value in a formal design approval process, CS-STAN allows modification and repairs without the need of approving a modification to the aircraft type design by the Agency or a 'Design Approved Organisation' (DOA). It is quite a radical simplification in the process and acknowledges the competence and responsibility of the releasing maintenance staff.

CS-STAN is in place since July 2015 and allows among other changes:

- to exchange one radio against another radio, or
- to substitute old engine indicators no longer available by new ones, or
- to renew seat upholstery of non-dynamic tested seats, etc.

without having to go through the formal process for approval by Agency or DOA.

The specific objective of CS-STAN is to create safe and cost-efficient Certification Specifications defining detailed acceptable methods, techniques and practices, including requirements for parts marking and instructions for continued airworthiness to serve as acceptable data for implementing standard changes and repairs to

- aeroplanes of 5 700 kg Maximum Take-Off Mass (MTOM) or less,
- rotorcraft of 3 175 kg MTOM or less,
- sailplanes, powered sailplanes, balloons and airships as defined in ELA1 or ELA2.

When using CS-STAN, the level of safety of the aircraft is considered to remain unchanged as long as acceptable methods are followed, and techniques proven by experience are used. Where necessary, additional limitations are given within the specific change/repair.

Next Steps after CS-STAN publication

Following the first step that contained over 20 Standard Changes and Standard Repairs, feedback and suggested additions will be used to further expand the topics that can be addressed using this principle.

CS-23/Part 23 reorganisation and International Harmonisation

Although there is a lot of innovation and new technologies developing, it rarely appears in new general aviation aeroplanes that are certified to CS-23/Part 23. On the contrary to that; for example micro-lights and US LSA aeroplanes do show the latest technologies. The effect is that certified general aviation is hardly renewing itself and is struggling to survive.

In order to revive certified general aviation, the Agency is participating in an international effort and cooperation with the FAA (and others) to reorganise the CS-23/Part 23 certification specifications.

The objective of this reorganisation of CS-23/Part 23 can be seen in two steps. First of all to change the structure of CS-23/Part 23 by:

- separating the design aspects from the safety intent in the rules,
- consolidating the existing design specific requirements in new industry consensus standards,
- re-writing the safety objectives in a new CS-23/Part 23.

The second step that becomes available due to this structure is that new technologies can be introduced in the new industry consensus standards. Of course, these new technologies do need to meet the safety objectives. A very important issue in this reorganisation is that the new safety objective rules are written in a way that allows proportionality with the risks and differentiates in safety levels. It aims to acknowledge that the risks and safety levels are not the same for a basic two-seat aeroplane and a 19 passenger turbine powered aeroplane.

In order to further explain the new concept, its positive effects on safety and costs and to get stakeholders' feedback, the Agency published an Advance Notice of Proposed Amendment (A-NPA 2015-06 - Reorganisation of Part 23 and CS-23). The feedback to this A-NPA has shown support from the majority of stakeholders.

To find out more please visit: http://easa.europa.eu/document-library/notices-of-proposed-amendment

Next Steps

The introduction of this new concept that in the US will be proposed for Part-23 will generate a follow-up NPA for Europe. This NPA, to be issued this summer, will aim for harmonisation with the US proposal in order to promote a global standard for GA certification.

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