



Better regulation for general aviation (update July 2010)



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The background behind the “Better regulation for GA”

- The first EU regulation for aircraft airworthiness (Part-21, based on JAR-21) was issued September 2003
- Because of the scope of the Basic Regulation, “JAR-21” became also applicable to aircraft below 2000kg MTOW.
- Comments in the development process of this rule identified the concerns for GA.



The background behind the “Better regulation for GA”

- A similar risk of “over regulated” non complex non commercial operation of GA was identified with the development of the extension of the scope of EU regulations for OPS and FCL. (Opinion 3/2004)



The background behind the “Better regulation for GA”

- EASA raised the issue to propose a new concept for regulation of non complex aircraft, used in non-commercial activities.

MDM.032



The background behind the “Better regulation for GA”

Objectives of MDM.032

- ★ **Develop a concept for regulation of non-complex aircraft used in non-commercial activities.**
- ★ **Develop rules for recreational licence.**
- ★ **Develop rules for operations of these aircraft.**
- ★ **Rethink airworthiness rules**
- ★ **Consider changing the scope of the Basic Regulation.**



The background behind the “Better regulation for GA”

Remark

MDM.032 seems similar to the US Light
Sport Aircraft rule

....but....

US LSA is up to 600/650kg MTOW
MDM.032 is up to 2000kg MTOW



Where are we now?

MDM.032

- Part-M
- Aircraft mechanics licensing
- Part-21
- Pilot Licensing (Covered in FCL/OPS presentation)
- Operations (Covered in FCL/OPS presentation)



Where are we now?

Part-M

(EASA NPA & CRD 2007-08, Opinion 02/2008)

Part-M (Regulation (EC) No 2042/2003) has been amended by (EC) 1056/2008. Introducing the simplification of rules for non-commercial non-complex aircraft maintenance and including pilot owner maintenance.

Aircraft mechanics licensing

(EASA NPA & CRD 2008-02, Opinion 04/2009)

Opinion No 4/2009 "Aircraft maintenance licences for non-complex aircraft" was published in December 2009. Adoption by the Commission is expected ... after which the related AMC/GM will be published by EASA.



Where are we now?

Part-21

(EASA NPA 2008-07)

“ELA process”, “standard changes and repairs” and “CS-LSA”

Objective:

- ★ The intention is to create a lighter regulatory regime based around a new process for the European Light Aircraft (ELA).



Part-21: NPA 2008-07

➤ Overview:

- ★ ELA is not a new category of aircraft defined by criteria such as stalling speed or certification code, but is a substantially simpler new process for the regulation of aircraft and related products, parts and appliances.
- ★ The intention is to issue type certificates for the type and certificates of airworthiness for the individual aircraft.
- ★ The ELA is sub-divided into two sub-processes: ELA 1 (E.g. aeroplanes below 1000kg) and ELA 2 (E.g. aeroplanes below 2000kg)
- ★ For ELA, define parts that don't need a form 1
- ★ Create a concept of standard changes and repairs
- ★ Create a CS-LSA Light Sport Aeroplanes (Aeroplanes below 600/ 650 kg)



Part-21: NPA 2008-07

Important “restriction” of this NPA

**The proposed changes are within the
framework of the Basic Regulation
(216/2008)**

**It only simplifies the existing
certification process**



Part-21: CRD 2008-07

- More than 800 comments received
- The proposal was received with mixed feelings!
- *It is not what we want i.e. more like the US LSA rule which does not have organisation approvals or significant FAA involvement!*



Part-21: CRD 2008-07

The Agency recognises that staying within the framework of the Basic Regulation does not entirely solve the issue for GA.

Phase 1 (MDM.032)

Modification of Part-21 and amendment of CS's

Phase 2 (BR.010)

A new proposal (NPA) proposing modifications to the Basic Regulation.



Part-21: CRD 2008-07

CRD Results

1. *Type certificates and restricted type certificates*
2. *Criteria for ELA 1 and 2*
3. *Demonstration of capability for design*
4. *Demonstration of capability for production*
5. *Combined POA/DOA*
6. *Qualified entities*
7. *Parts that do not need an EASA Form 1*
8. *Changes to CS-LSA and use of Industry Standards*
9. *Standard changes and repairs*
10. *Harmonisation with FAA*



1. Type certificates and restricted type certificates

- Issue restricted type certificates for aircraft that use non-certified engines and propellers
- This has no consequences for the operation of such aircraft as the draft OPS rules would only be limited by limitations included in the data sheet.



2 Criteria for ELA 1 and 2

Two sub categories are retained however:

- ELA 1 applicability is amended to:
 - ✦ Aeroplanes up to 1200 kg
 - ✦ Hot-air ships to 3400 m³ and 4 occupants
- ELA1 or 2 is made applicable to special aircraft with specific criteria (gyroplanes, ultra-light balloons, flex-wing aeroplanes, and unmanned aircraft).

Note:

ELA1 up to 1200kg needs to be revised in Part-M.



CS's for aeroplanes up to 1200kg

- **CS-LSA (new) Up to 600kg/650kg**
Referring to appropriate ASTM standards with additional appendix for night VFR.
- **CS-VLA Up to 890 kg**
In the feature increase to 3 seats, IMC and VFR based on existing Special Conditions (task VLA.008)
- **CS-23Light (new) Up to 1200 kg**
The CS-23Light will be based on FAR-23 at amendment 7 (new tasks)
- **CS-22**
In the feature up to 900 kg (task 22.010)



CS's for aeroplanes up to 1200kg

For the long term, a rulemaking task will be created to evaluate the benefits of merging CS-VLA, CS-23Light and harmonise with the FAA.



3 Demonstration of capability for design

- The minimum requirement remains the certification programme for ELA1 and alternative procedures to DOA (AP-DOA) for ELA 2.
 - ★ The certification programme does not provide privileges after TC or STC
- AMC will be developed for simplified compliance showing to Subpart J
- AMC containing a Standard handbook



4 Demonstration of capability for production

- The proposal for the Production Organisational review is not kept because there were marginal differences and limited benefits.
 - ✦ Experience shows that POA can be issued for very small organisations.
- Instead the Agency will draft a standard detailed exposition as AMC material.
- Acceptance of industry approvals can not be accepted within the current Basic regulation. These approvals are not issued and controlled as required by the Basic Regulation.



5 Combined POA/DOA

- The concept is kept even when implementing will be difficult.
- The privilege to do repair and overhaul raised concerns regarding fairness to approved maintenance organisations and is therefore not kept for maintenance.



5 Combined POA/DOA (2)

Maintenance for ELA 1 is possible via:

- Pilot owner maintenance (M.A.803)
- Release by certifying staff (M.A.801(c))

Note

Future SMS implementation objective should provide a consistent framework that would provide flexibility for organisations that conduct business in more than one sector.



6 Qualified entities

- Many valid comments
 - ✦ the expected benefits
 - ✦ their exact role
 - ✦ their level of involvement in certification activities
 - ✦ how they will be accredited
 - ✦ what would be the limitations put on their scope and area of coverage (the possibility of having pan-European organisations was specifically asked)
 - ✦ what would happen if a qualified entity ceased to exist
 - ✦ the resources for the Agency to adequately monitor the accredited qualified entities
 - ✦ how would they exist in parallel with National Authorities



6 Qualified entities (2)

- An internal working group has reviewed the outsourcing of activities.
- Follow-up steps
 - ✦ Define areas of outsourcing
 - ✦ Introduce details clarifying Appendix V (BR) in the call for tenders
 - ✦ Issue call for tenders

Note!

EASA Management board has not yet approved the policy



7 Parts that do not need an EASA Form 1

- Comments showed that the proposal was too ambitious.
- New proposal:
 - ★ Both ELA 1 and 2; EASA Form 1 required for primary structure, flying controls or life limited parts.
 - ★ In case of ELA 1 the owner is able to produce a declaration of conformity
- AMC will provide more details
- No limitations to non-commercial operations.



8 Changes to CS-LSA and use of Industry Standards

- In general supported.
- The scope of CS-LSA is not equal to LSA in the US.
- Higher performance requires additional requirements. (EASA will add Appendices)
- The CS-LSA will contain references to accepted standards (Specific issue)
- The European and US system are different, however we aim for harmonised standards
- EASA plans to participate in the SATM process.



9 Standard changes and repairs

- The proposal is retained and specific paragraph are proposed for Part-21.
- A first issue of a new CS containing standard changes and repairs will be based on AC 43-13 1B and 2B
- The standard changes or repairs will be deemed approved by the Agency when it is designed in accordance with the envisaged CS.
- The installation of the repair will be done in accordance with Part-M.



10 Harmonisation with FAA

- A harmonised standard should result in an aircraft that is certifiable in the same configuration in the country of manufacture as for import to the US.
- Two main issues:
 - ★ US-LSA import
 - ★ EU-LSA export to US



US-LSA import

- LSA design outside EU need to comply with EU regulations; and therefore:
- Issuance of TC or RTC for type design
 - Issue a CofA for the individual aircraft
 - Statement of conformity for production
 - Import of used aircraft might not be possible



EU-LSA export to US

FAA Order 8130.2F section 6

- Eligible for LSA only when no aircraft airworthiness certificate (or equivalent) was previously issued
 - ★ This is for individual aircraft
 - ★ Used aircraft have a problem
- The aircraft is required to be eligible for a CofA (or equivalent) in the country of manufacture.
 - ★ A TC or RTC in Europe is fulfilling this



General conclusion and observation MDM.032

MDM.032

- The Comment response Document is being drafted and should be published in two steps:
 - ★ First publication (CRD 2008-07 Part I) containing a detailed Explanatory note and the Part-21 resulting text.
 - ★ Second publication (CRD 2008-07 Part II): CRD with all comments and responses and the proposed new CS-LSA will follow after Part I
- The opinion to amend Part-21 before the end of 2010
- CS-LSA publication before the end of 2010.



General conclusion and observation MDM.032 (2)

What does MDM.032 bring for GA?

➤ Positive

- ★ Acceptable standards
- ★ Standard changes and repairs
- ★ Better AMC/GM for GA organisations

➤ Negative

- ★ To many different standards
- ★ Still demanding organisation approvals
- ★ Fees and charges
- ★ Basic Regulation still applicable without adapted level of regulation for GA.



What is the next step?

Rulemaking task BR.010

➤ **Phase 2 of a Better regulation for GA**



Task BR.010

- 1. Propose the necessary modifications to the basic regulation and EASA implementing rules to achieve an adapted level of regulation for ELA1 for airworthiness, maintenance, operations and licensing.**
- 2. Harmonise the above with other authorities**
- 3. Improve the approach to orphan aircraft**
- 4. review the essential requirements for airworthiness to avoid any unwanted effects on the small aircraft**
- 5. Propose that a Type Certificate for engine and propellers is not needed for some ELA aircraft.**
- 6. Ensure that self-sustained powered sailplanes equipped with a turbojet are non-complex aircraft**



BR.010

- A study was started in January 2010 to review a sample of existing micro-light regulations, evaluate them in consultation with stakeholders and issue recommendations in relation with point 1 of task BR.010.
- The purpose is comply with the recital 5 of the basic regulation and to provide ideas for point 1 of the task BR-010.
- The study runs until end 2010



BR.010

- This rulemaking task starts in 2010 and is expected to deliver an opinion to change the Basic Regulation in 2013.
- Preparation of the ToR is in progress with consultation of stakeholders



Short term solution

Permit to fly for LSA

- Short term temporary solution for airworthiness using Part 21A. 701 (15)
- Limitation to non-commercial activities
- Main issue: conformity issue and therefore need for a Part-21 sub-part F approval
- Still under discussions with NAA:
 - ✦ Need for further review and for a procedure



Summary/ Conclusions

- Phase 1, Changes within the framework of Part-21 finishes by the end of 2010
- This is followed by the adoption process in the Commission.(1 year)
- Phase 2, Change to the Basic Regulation starts in 2010 and finishes in 2013.



Summary/ Conclusions (II)

- Permit to fly for LSA:
 - ★ Short term temporary solution for airworthiness
- Two steps approach was presented:
 - ★ ELA
 - ★ Task BR.010 and its supporting study



**Thank you
for your attention**