



**EASA**  
European Aviation Safety Agency

GA Road Map: Working towards



Simpler, lighter, better rules for  
*General Aviation*

# GA Roadmap highlights & Status AERO 2016

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Content:

Why the GA Roadmap project?

The cornerstones of the GA Roadmap

The project organisation

GA Roadmap key issues



# Motivation and problem



Avert a dramatic loss of activity as a result of complex and disproportionate rules



Necessary to adopt a specific new approach for GA in order to assure a sustainable development of the sector in Europe





# The cornerstones of the GA Roadmap

## Founded on:

1. Agreed risk hierarchy
2. Agreed strategic principles
3. Cooperation of all stakeholders
4. Commitment at all levels
5. A Basic Regulation that promotes and accommodates the principles



# Strategic direction - six principles

**P1:** One size does not fit all (reduce cliff-effect)

**P2:** Philosophy of minimum necessary rules

**P3:** Adopt a risk-based approach (risk-hierarchy)

**P4:** Protect “grandfather rights”

**P5:** Apply EU “Smart Regulation Principles”

**P6:** Make best use of available resources/expertise



# Cooperation of stakeholders



Member States



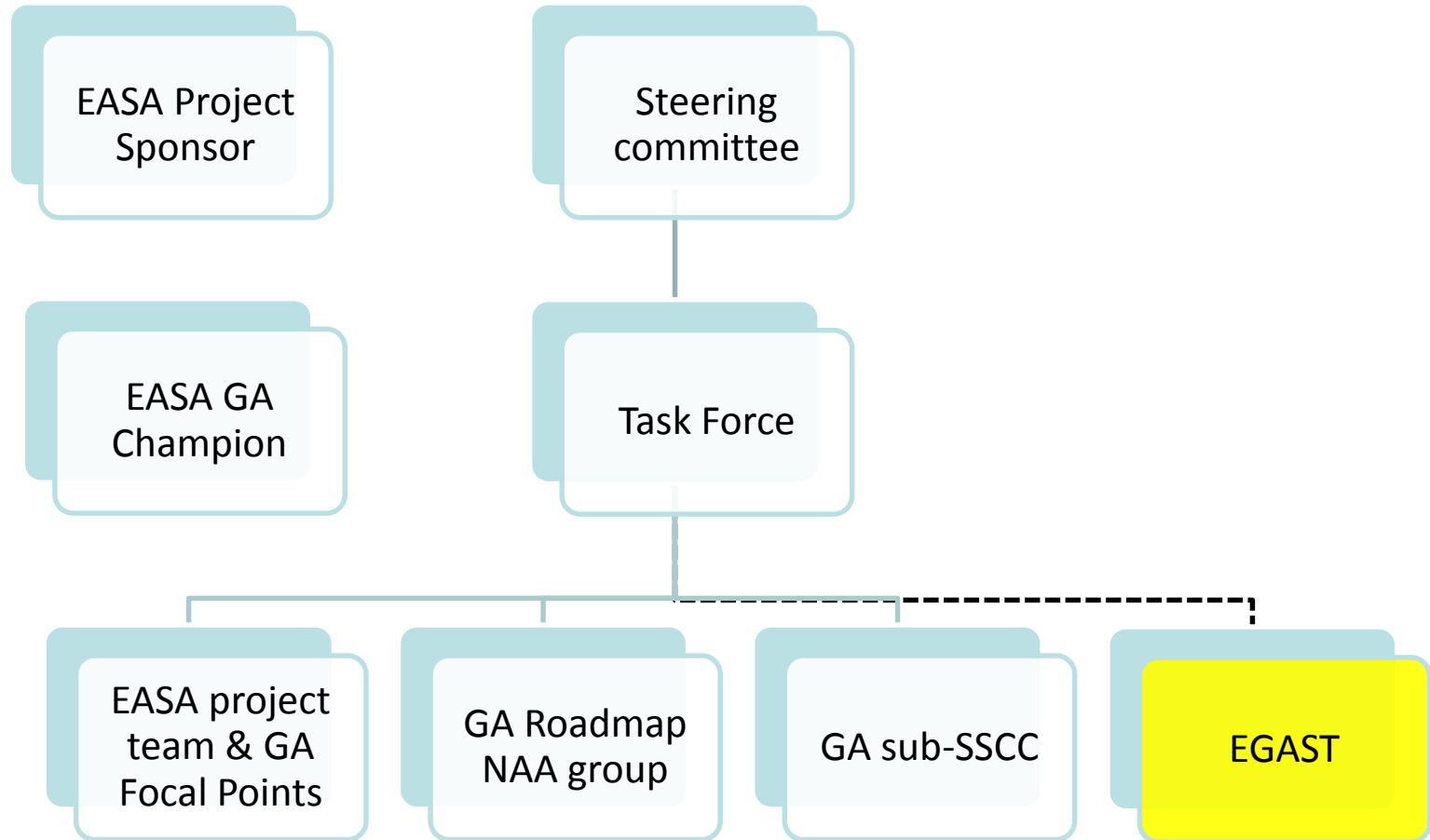
Success when  
all partners  
work together



GA users/industry



# Commitment at all levels





# GA Roadmap Key issues

- **Changes to the Basic Regulation**

- **Part M Light**

(AERO Mini conference on 21/04)

- **Instrument Flying Rules (IFR) Flying**

(AERO Mini conference on 22/04)

- **Aircraft changes and repairs made easy**

- **More options for pilot training**

(AERO Mini conference on 22/04)

- **Air Operations Balloon Regulation**

- **Simpler Certification**

- **Reorganisation of CS-23 using Industry standards**

- **Communication & Technical Training**





# Part ML & Combined organisation CAO

- It is simple to understand
- Does not require approval of maintenance programme by the national authorities
- Airworthiness reviews can be performed also by maintenance organisations independent certifying staff
- New Part for combining Part 145 and CAMO activities in one organisation



# Instrument Flying Rules (IFR) Flying

- Aim is to make the IFR flying more accessible to GA pilots
- Basic Instrument Rating (BIR)
- Modular and competency based approach
- Scope; Single-pilot aeroplane class ratings, except HPA
- Higher approach minima to mitigate the lower requirements
- Crediting provisions towards the existing CB-IR(A)
- NPA publication planned Q3/2016



# CS-STAN easier changes and repairs

A new CS-STAN was published 9<sup>th</sup> July 2015

- Part-21 allows Standard Changes and Repairs that do not require approval when CS-STAN is followed
- Released by appropriately qualified mechanic
- CS-STAN contains only a first limited number of topics
- Next revision of CS-STAN is about to start



- Reduction of admin
- Promoting safety enhancements

## Group Systems—Communication:

- CS-SC001a — Installation of VHF voice communication equipment
- CS-SC002a — Installation of a Mode S elementary surveillance equipment
- CS-SC003a — Installation of Audio Selector Panels and Amplifiers
- CS-SC004a — Installation of antennas

## Group Systems — Electrical:

- CS-SC031a — Exchange of conventional Anti-Collision Lights, Position Lights and Landing & Taxi lights by LED type lights

## Group Systems — Avionics/NAV/Instruments:

- CS-SC051a — Installation of 'FLARM' equipment
- CS-SC052a — Installation of moving-map systems to enhance situational awareness
- CS-SC053a — Installation of Radio Marker Receiving equipment
- CS-SC054a — Exchange of Distance Measurement Equipment (DME)
- CS-SC055a — Exchange of ADF equipment
- CS-SC056a — Exchange of VOR equipment

## Group Cabin:

- CS-SC101a — Installation of Emergency Locator Transmitter (ELT) equipment

## Group Survivability Equipment:

- CS-SC151a — Installation of headrest
- CS-SC152a — Changes to seat cushions including the use of alternative foam materials
- CS-SC153a — Exchange of safety belts — torso restraint systems

## Group Powerplant:

- CS-SC201a — Exchange of power plant instruments
- CS-SC202a — Use of Avgas UL 91
- CS-SC203a — Use of Avgas Hjelmcø 91/96 UL and 91/98 UL
- CS-SC204a — Installation of external powered engine preheater

## Group Flight:

- CS-SC251a — Installation of an Angle of Attack (AoA) indicator system



# More options for pilot training

- New training organisation concept for pilot training towards non-commercial licences and ratings.
- On-going discussion on whether the organisation should have a 'light' approval or only provide a declaration prior to commencing training activities
- Continues oversight to be more performance based and take a proportionate approach in any case.
- Scope LAPL, PPL, SPL, BPL
- Workshop 19 May for MS and industry representatives to discuss the new training organisation concept prior to Opinion
- Opinion publication planned for Q2/2016

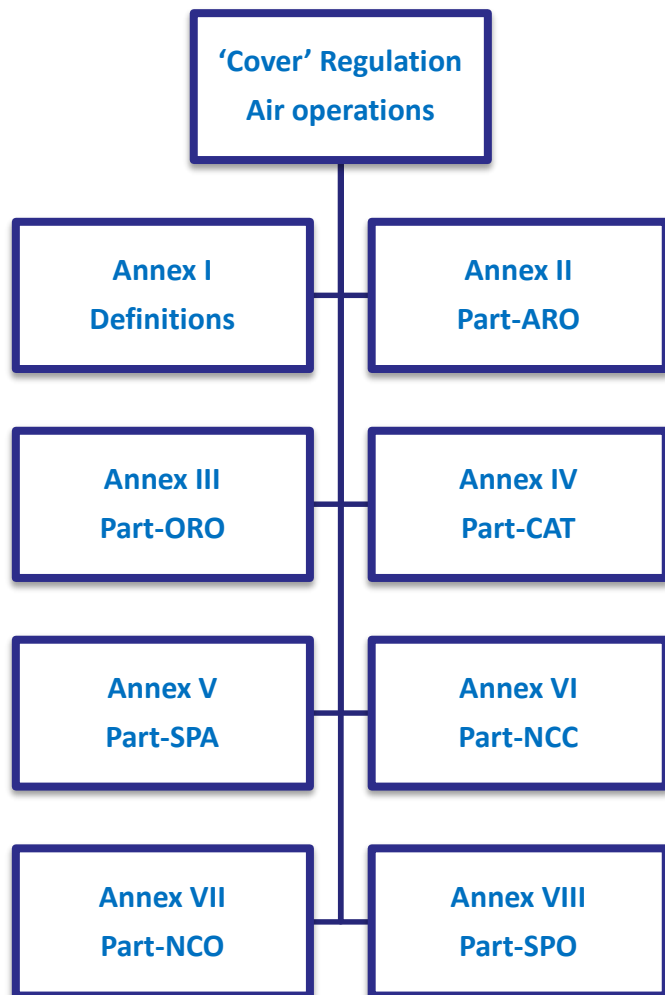


# Air operations Balloon Regulation

- For the 1<sup>st</sup> time, the needs of a specific group are being addressed in a separate rule
- Rules are specific to balloon operations and risks, and therefore easier to handle for balloon operators
- Balloon Rules have been extracted from the complex Air Operations Regulation annexes
- The scope will be extended in the near future to include flight crew licensing and cross-refer to Part-M Light so as to have a single 'balloon book' in place for balloon operators


















# AIR OPS rule structure (Reg. 965/2012)



- **Part-ARO:** Authority requirements – AIR OPS
- **Part-ORO:** Organisation requirements – AIR OPS
- **Part-CAT:** Commercial air transport operations
- **Part-SPA:** Operations requiring specific approvals
- **Part-NCC:** non-commercial operations with complex motor-powered aircraft  
**Part-NCO:** non-commercial operations with other-than-CMPA
- **Part-SPO:** specialised operations, e.g. aerial work



# AIR OPS rules - applicability for balloons

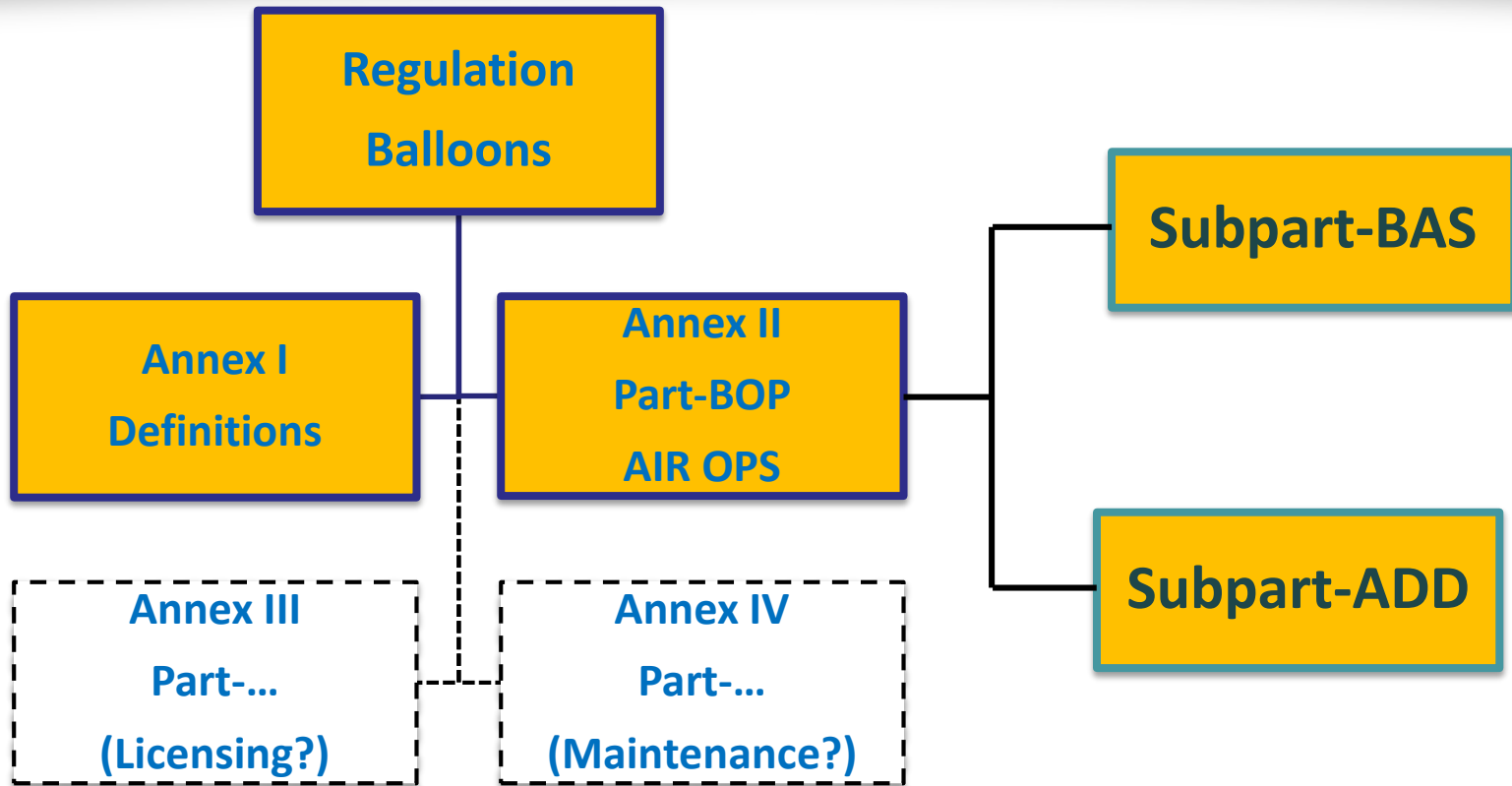
	CAT operator	NCO operator	SPO operator
<b>Cover Reg.</b>			
<b>Definitions</b>			
<b>Part-ARO</b>			
<b>Part-ORO</b>			 If commercial
<b>Part-CAT</b>			
<b>Part-SPA</b>	 *	 *	 *
<b>Part-NCC</b>			
<b>Part-NCO</b>			 If non-commercial
<b>Part-SPO</b>			 if commercial

\* in principle





# Proposed new regulation for Balloons



BOP = Balloon Air Operations

BAS = basic operational requirements

ADD = additional requirements for commercial operations



## Objective:

- Introduce flexibility and simplification in Part-21 certification for GA that is proportionate to risks and meets an acceptable safety level
- Two steps



## Simplification:

- Introduction of AMC/GM specific for simple products and small organisations (e.g. practical combined approval, templates) to simplify approval processes.

(Short term “low hanging fruit” tools)



Mit Sicherheit zum Ziel

- Faced problems
- Other projects
- RMT.0689
- Next steps

## Simpler Certification:

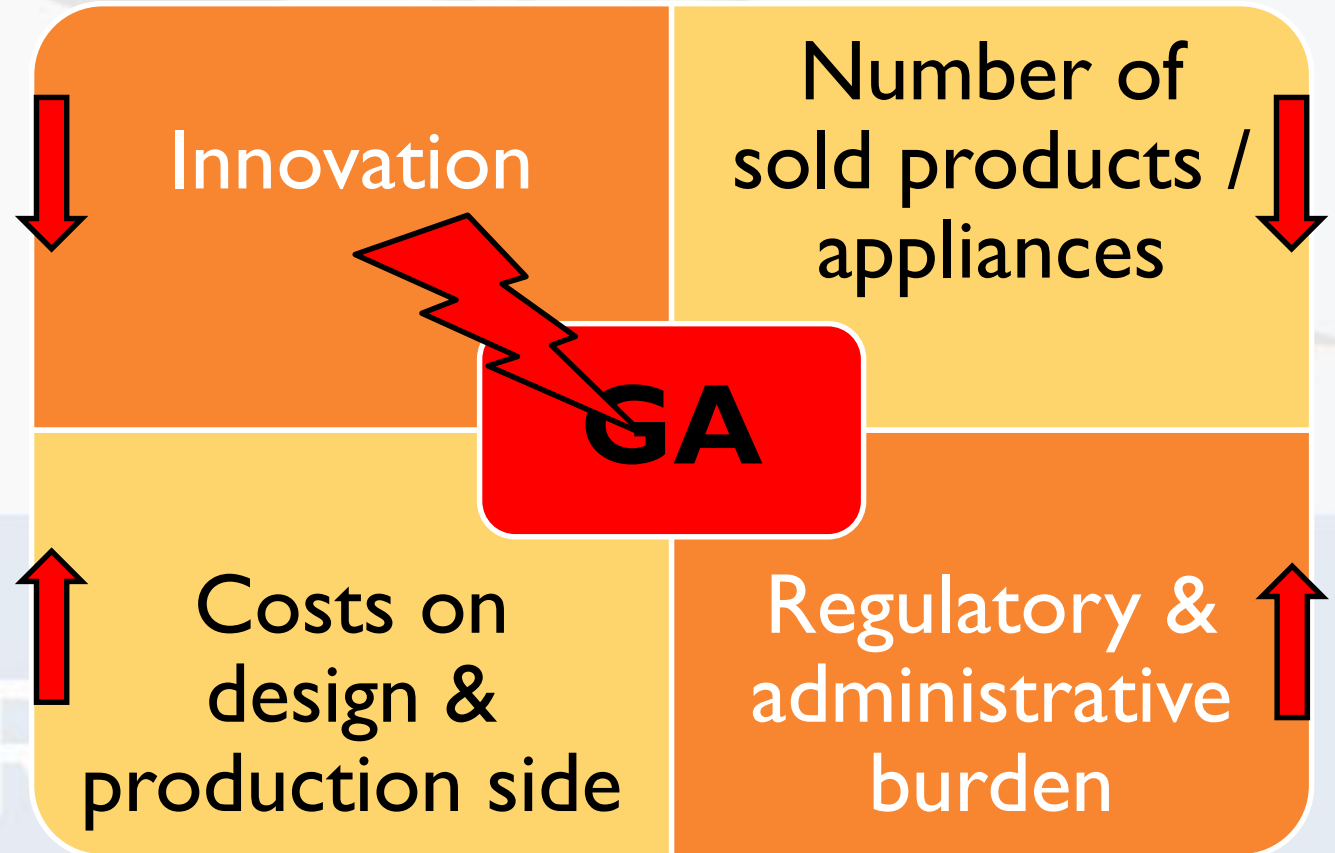
„Drastically simplify the airworthiness system for small low risk GA aircraft by developing simplified entry levels into the EASA system“

# GA Roadmap

GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT

- Faced problems
- Other projects
- RMT.0689
- Next steps

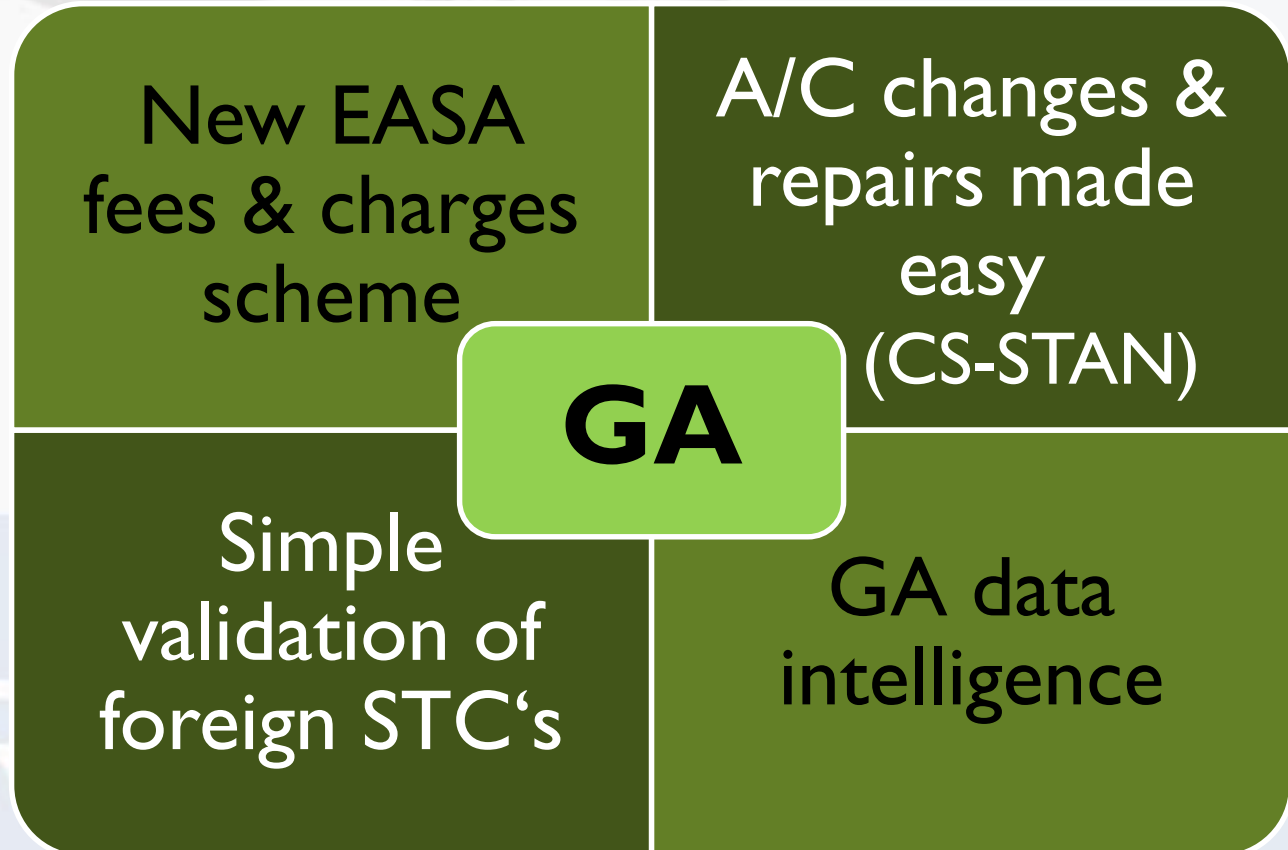
# Faced problems in the world of GA design and production



GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT

- Faced problems
- **Other projects**
- RMT.0689
- Next steps

# Other GA Roadmap projects affecting this status



GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT



## We need to move ahead and start ASAP

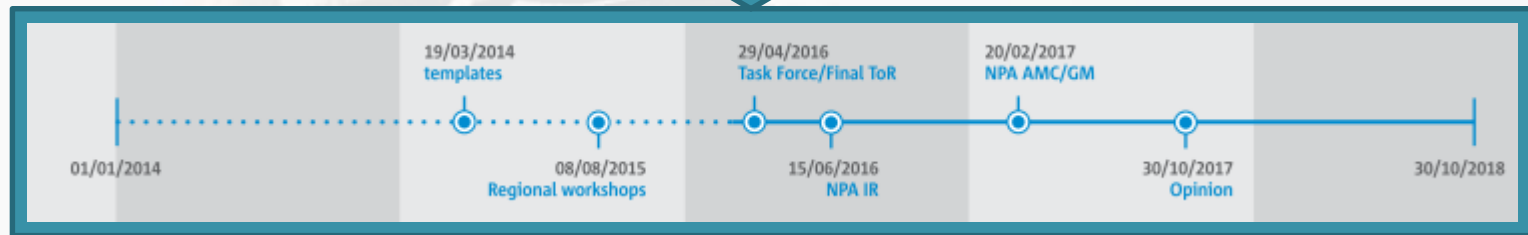
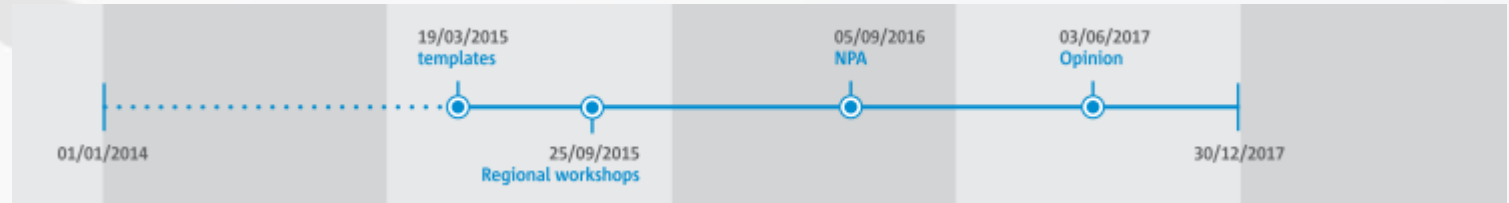


The Task Force should have people who have vision and experience from the affected GA as well as experience outside the certified world.

Not just theory but also Pilot cases necessary!

- Faced problems
- Other projects
- RMT.0689
- Next steps

# Next steps & LBA support



Unfortunately not plenty of resources are available for such a comprehensive & additional tasks.



LBA Agreed to take an active part on this project also due to the high number of effected German stakeholders.

**Let's try to cut the regulatory complexity rather than to unravel it.**



- Faced problems
- Other projects
- RMT.0689
- Next steps

**Thank you very much for your attention.**

**Any Questions?**

**What is your opinion on content and priority of this task?**

**What are your main concerns as affected stakeholder?**

**We wish you a nice time at the AERO exhibition!**

**Please feel free to visit the LBA stand A5-310  
And EASA stand A5-300!**

GA Roadmap  
GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT



# Reorganisation of CS-23/Part 23

- EASA and FAA working on a similar change to CS-23/Part 23
  - objective based rules
  - Supported by consensus standards providing technical details
  - aiming to reach harmonisation



## 1. **Part 23/CS-23 rule**

- Safety objectives, not design specific
- Future design solutions are already covered
- Easier to harmonize & less need for amendments

## 2. **Airworthiness Design Standards (ADS)**

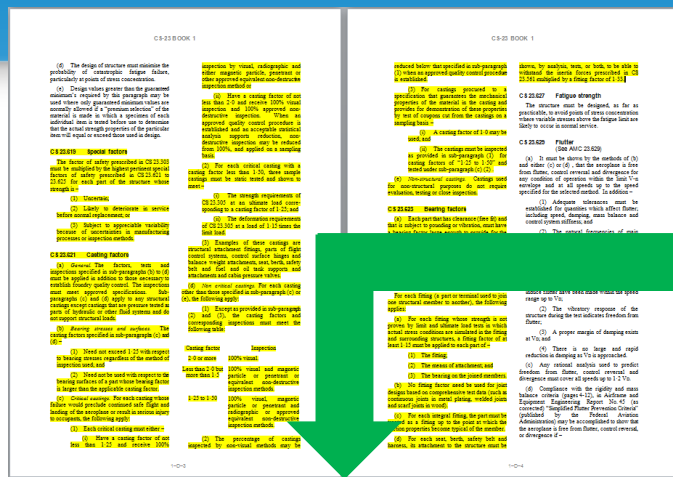
- Technical details covered by standards developed via a consensus process
- Easier to develop revisions or new standards

## 3. **AMC List of accepted ADS in CS-23**

- Acceptance of Standards remains EASA RMP
- Revision of the accepted ADS list can follow a shortened rulemaking process



# CS-23/Part 23 'The rule'



Consensus Standard  
(ASTM F44)  
(All design details)

## 23.619 Special Factors of Safety (v4)

(a) Special factors of safety must be established and applied in the design of each part of the structure whose critical design value is:

- (1) Uncertain;
- (2) Likely to deteriorate in service before repair;
- (3) Subject to appreciable variability in manufacturing processes or inspection methods.

(b) Special factors of safety must be established and applied in the design of each part of the structure whose exposure, accounting for the effects of the special factors of safety, is:

- (1) Inspection;
- (2) Structural analysis;
- (3) Sampling;
- (4) Process control.

(c) The factor of safety for each part of the structure in 23.301(a) of this part must be multiplied by the highest pertinent special factors of safety.

To be compared/harmonised  
with NPRM § 23.515

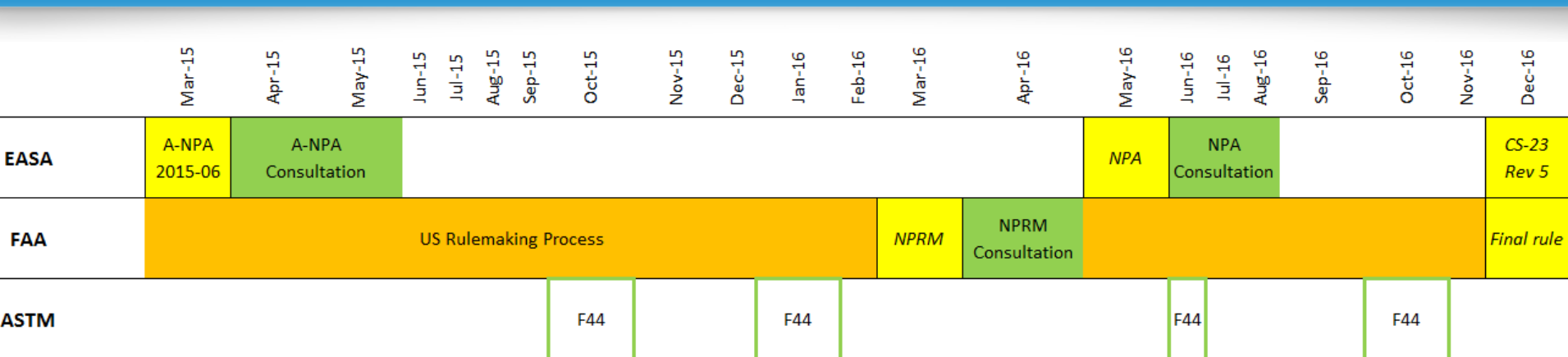


- One means to show compliance to the rules is being developed by ASTM F44
- These should also as harmonised as possible and.....
- Represent a globally accepted consensus standard.

European participation is appreciated, promoted and vital for harmonisation



# CS-23/Part 23 time-line



- 1) FAA NPRM published 14/03/2016
- 2) FAA NPRM 60 days commenting period
- 3) EASA NPA drafting
- 4) CS-23/Final rule issued at approximately the same time



# GA Roadmap Highlights: Roadshows

## ❑ Very successful start of GA Roadshows:

- 8th March in Bonn/Germany – organised by the LBA and the DAeC
  - Already two weeks after announcement, the event was fully booked.
  - **A full day event** was dedicated to give an update of the GA Roadmap to the 150 participants representing the big variety of GA stakeholders.





# GA Roadmap Highlights: Roadshows

- 9<sup>th</sup> April in Vienna/Austria – organised by the Austro Control
  - In the frame of the Season Opener which was attended by more than 300 interested GA representatives – most of them were pilots – an intensive one hour presentation was given by a GA Roadmap Project Team member
  
- More GA Roadshows to come in 2016:
  - 4th June in Sweden
  - 2d July in Sywell, UK
  - 8th October in Paris, France
  - Spain (tbc)
  - Croatia (tbc)





# To find out more!

Planning info is provided on the poster

More details are in 5 leaflets, available here and at the EASA stand

For more updates please follow the EASA website:

GA Road Map: <http://easa.europa.eu/ga>





**EASA**  
European Aviation Safety Agency

**Many thanks for your attention!**

**Your safety is our mission.**

An agency of the European Union

