European General Aviation Safety Strategy

Introduction

This paper is the response by the appointed group (Annex 2) to the EASA Management Board's (MB) request on 13th March 2012 for a summary of proposed principles and guidelines on the regulation of General Aviation (GA), including rulemaking, certification (as appropriate), oversight and standardisation.

The board's request followed the submission of two papers in March, one from EASA and a joint paper from Europe Air Sports (EAS) and International Aircraft Owners and Pilots Association - Europe (IAOPA). This followed the MB's discussions in December 2011 to put the future regulation of GA on its agenda.

The present document is the result of the group's discussions and of the feed-back received from the EASA MB of June 6th, 2012. It is supported by a more detailed discussion paper but without repeating points made earlier, where possible. Reference to this discussion paper will be useful to better understand the rationale supporting the considerations and proposals of this document.

It is essential to propose a new approach in the way GA is considered, which can prevent placing undue burden on these activities, which might threaten the very existence of the sector, whilst preserving an appropriate level of safety.

Aims and Objective of this paper

The primary aim of this paper is to propose key principles and guidelines. But it represents something far more than this. It signals a genuine attempt to bring about a change of approach in how to achieve an acceptable level of safety by, and sustainable future for, GA.

It also reflects deep concerns from the GA sector representatives, built up over some years now, concerning the overall EU regulatory approach to GA.

Requested Management Board actions

- 1. To consider the paper and to endorse the proposed principles and guidelines.
- 2. To approve the recommended actions A0 A9 listed at the end of this paper.

Background

Most background information is contained in Annex 1 to this paper and in the joint EAS / IAOPA paper. However it is pertinent to draw attention here to ICAO Annex 6 Part II, set out in the supporting group paper, from which the following extracts are quoted:

"Level of safety. The Annex should ensure an acceptable level of safety to passengers and third parties (third parties meaning persons on the ground and persons in the air in other aircraft). Also, as some international general aviation operations (typically under 5.700 kg)......it was therefore, accepted that the passenger in international general aviation aircraft would not necessarily enjoy the same level of safety as the fare-paying passenger in commercial air transport".

"The Commission endorsed the philosophy....for the safety of operations in non-commercial operations where travel is not open to the general public. In such operations the Standards and Recommended Practices need not

be as prescriptive as those in Annex 6, Part I, due to the inherent self-responsibility of the owner and pilot-incommand. The State does not have an equivalent "duty of care" to protect the occupants as it does for farepaying customers in commercial operations"

Scope

The sub-sector of GA addressed in this paper covers non complex aircraft¹ operations with an emphasis on non-commercial operations. This embraces aeroplanes, helicopters, sailplanes (gliders) and balloons (including airships). Their uses range from purely sport and recreational activities to general private flying, owner-operators own business use through to some commercial activities such as aerial work, all of which are included in the scope of the proposed approach.

The key element of the proposed approach is that regulation for GA must be proportionate: specific activities should lead to specific requirements, just fit to mitigate for the risk. Consequently the group chose to adopt a wide area of applicability, and principles and guidelines of a sufficiently general nature to be used as appropriate in different cases. This does not preclude that, when coming to specific regulation elaboration, it will be necessary to identify very precise boundaries for application.

Rationale on certain key issues

1. Why GA should be treated differently to Commercial Air Transport (CAT)

It is important to recognise the differences between commercial and non-commercial environments from a safety management perspective.

- a) **Control of Risk**. End-use stakeholders in non-CAT aviation generally have much more ability to assess and control the risk of the operation. In many cases, with the exception of very limited risk to third parties, the operators are the only stakeholders exposed to risk.
- b) **Level Playing Field**. In the competitive CAT market, driven by a profit motive, a level playing field between actors is necessary to ensure that safety does not enter a vicious downward spiral.
- c) Cost Burden and Economies of Scale. CAT operations are typically much more repetitive than non-commercial operations. CAT aircraft may fly up to 4,000 hours p.a. whereas noncommercial aircraft may typically fly only 50 to 100 hours p.a. This leads to significant economies of scale for CAT in dealing with fixed costs and other resource requirements including those generated by regulatory compliance.
- d) **Flexibility**. CAT operations are usually planned in detail in advance with a limited need for short-term flexibility. By contrast, non-CAT operations are often planned at relatively short notice, tend to be dynamic and may even be opportunistic (e.g. highly weather dependent).
- e) **Private flying** including sporting and recreational / leisure aviation as well as personal transport. This form of flying has only one thing in common with CAT, the 3-dimensional aspect and only three areas of overlap or adjacent proximity, which are use of airspace, communications frequencies, and some airports.

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 $^{^{1}\,}$ 'Complex aircraft' being as defined in the Basic Regulation art. 3 (j) :

⁽i) an aeroplane with a maximum certificated take-off mass exceeding 5 700 kg, or certificated for a maximum passenger seating configuration of more than nineteen, or certificated for operation with a minimum crew of at least two pilots, or equipped with (a) turbojet engine(s) or more than one turboprop engine, or

⁽ii) a helicopter certificated for a maximum take-off mass exceeding 3 175 kg, or for a maximum passenger seating configuration of more than nine, or for operation with a minimum crew of at least two pilots, or (iii) a tilt rotor aircraft;

GA must therefore be treated as a sector in its own right and not as a watered-down "Commercial Air Transport (CAT) by–product."

2. Risk based approach - a proposed acceptable risk hierarchy

Different stakeholders may demand and deserve a different approach to risk management. Some sort of hierarchy is proposed as follows, in descending order of "risk averseness":

- 1. Uninvolved third parties
- 2. Fare-paying passengers in CAT
- 3. Involved third parties (e.g. air show spectators, airport ground workers)
- 4. Aerial work participants / Air crew involved in aviation as workers
- 5. Passengers ("participants") on non-commercial flights
- 6. Private pilots on non-commercial flights

It is therefore highly desirable for GA regulation to consider first the simplest cases of aircraft design, production, licensing and operations etc, and setting the minimum requirements for these cases, then developing specific requirements for less simple cases (in terms of aircraft design, production or type of operations) to be progressively added to cover specific items.

This "building block" methodology should be promoted in GA regulatory structural design. It is the approach being adopted in the work of the current EASA Part M Task Force, though the work of the Task Force is constrained by the framework of the current Basic Regulation and Implementing Rules.

The aim is that the various GA activities are exercised by operators and pilots having the necessary competences to properly manage the risks associated with their specific activity.

3. Level of safety

As highlighted by ICAO and for the reasons mentioned above, the level of safety expected for GA may not be the same as the one required for CAT. The available data in various European States show that the currently observed level of safety for GA activities – in particular the least complex ones - is currently indeed not as high as CAT's.

Public perception seems to accept the current levels of safety demonstrated by the GA community. It is however essential not to compromise that level of safety, by the modification of the regulatory approach.

The group considers that the regulatory approach is not the sole method of assuring a minimum acceptable level of safety, but that both education and the development of an improved safety culture across the community are equally valid. A more liberal attitude to product approvals is also expected to promote innovation and to lead to the rapid introduction of more modern and safer equipment.

Applying safety management principles, careful monitoring of the evolution of the GA safety situation will be of high importance, to be able to take appropriate measures (not necessarily new regulations, as mentioned above) to ensure the safety level remains appropriate.

Transparency for the participants to GA activities will have to be increased: they need to be adequately informed that the level of safety they will encounter may not be the same as in a commercial air transport flight, in order for them to understand and accept the level of safety knowingly.

4. "Grandfather Rights"

For years, before moving towards common safety rules for aviation in Europe a large range of activities had grown under national regulations, and individuals have acquired their "rights to fly" in different countries.

The development of EU common rules is a step forward for ensuring free circulation of people and products, for ensuring where necessary a level playing field, and for continuous promotion of safety.

However, due to the large diversity of former national regulations and situations, and to the absence of a convergence period where rules would have been harmonised as happened in CAT, implementation of new common EU rules will result in preventing the continuation of some activities for some participants. While existing rules do not necessarily remain relevant, and while some practices may be effectively improved by new rules, existing participants should be treated with more flexibility than newcomers in cases where no demonstrable safety problem or unfair competition has been identified. Additional requirements for transition to the new rules are a case in point: where new absolute EU standards cannot be met (such as LAPL medical standards), previously qualified pilots, who have flown satisfactorily and safely with a particular condition, will be disenfranchised.

5. CAT vs Non-CAT

A common characteristic of everything other than commercial air transport is that the purpose of the flight is not to transport fare-paying passengers, but moreover to offer specific activities to the participants in the flight (e.g. sports, recreation, ..); or in the case of aerial work, to provide professional services in which the transported persons are involved participants.

In this respect the user (operator, pilot, sometimes participant involved in the operation of the flight) is motivated, and is also well placed, to assess control and accept the risks associated with the activity, different to a flight involving air transport "consumers".

In this context it should be noted that the current definition of "Commercial Operation" in Regulation 216/2008 is problematic as it may be interpreted as including various small-scale GA activities which have traditionally been considered as non-commercial in many Member States (e.g. cost sharing by private individuals or A-A introductory flights in an aeroclub). Unless the definition is modified to focus on actual professional business activities, it will be difficult to regulate GA in a proportionate manner.

6. Interactions with CAT

Although fundamentally distinct from CAT some of the GA activities interact with CAT operations, especially in terms of sharing the same airspace or airports. This ability to safely use a common area must be maintained without creating additional risk to CAT or GA. This must be taken into account in the building block approach by requiring GA pilots to have appropriate competency and participating aircraft to be appropriately equipped, in regard to the type of airspace or airports that they use.

7. GA community responsibility

Adapting regulatory constraints to GA activities towards more proportionality will undoubtedly place more responsibility on the GA community. The appropriate partnership between regulators and users to promote and maintain safety culture will have to be found. In this perspective, it could be an efficient way forward to organise this bearing of responsibility through formal delegation of tasks from the national authority to competent users' organisations. The use of the Qualified Entity mechanism could be envisaged if issues coming out of application of Annex V criteria – scope and conflict of interest provisions - could be overcome by a flexible approach appropriate to users' organisations in GA, especially at the recreational and sports level.

Recommendations

The proposed European GA Safety Strategy is built upon a limited set of basic principles, listed hereunder.

Principles

- P1. One size does not fit all. GA should be handled quite separately from CAT and merits a different, proportionate approach based on an acceptable risk hierarchy.
- P2. Adopt a philosophy of minimum necessary rules focusing on the main risks.
- P3. Adopt a risk-based approach to targeted safety initiatives and rulemaking, based on risk assessment, and supported by empirical evidence in the form of good quality accident rate and causal data from which statistically significant trends are identified.
- P4. Protect "grandfather rights", unless there are demonstrable and statistically significant safety reasons for not doing so.
- P5. Minimise bureaucracy and apply EU "Smart Regulation Principles", taking into account the specificities of GA.
- P6. Make best use of available resources of expertise and devolve responsibilities and delegate tasks to the level where they can be exercised most efficiently, including to GA organisations.

Guidelines and actions

In order for these principles to be effectively implemented, a set of guidelines (G) and actions (A) are recommended. Detailed recommendations are found in the discussion paper and are summed up in its Annex 1.

Guidelines

P1. Proportionate approach, quite separate from CAT

- **G1.1**: Recognise GA does not achieve nor necessarily aim at reaching an equivalent level of safety as CAT, and ensure this is understood by all GA participants.
- **G1.2**: Do not start work from existing regulation which has essentially been designed for CAT, but take a fresh approach by establishing whether and what regulations are most appropriate to GA in all fields: initial and continuing airworthiness, licensing, operations, airports, and ATM.

P2. A philosophy of minimum necessary rules

- **G 2.1**: Draft regulations on a "minimum necessary" and "focused on the main risks" basis for the relevant activity, starting from the simplest cases in terms of design and operations, and adding "building blocks" as necessary to cope progressively with more complex issues and environments, and possible interfaces with other aviation users.
- **G 2.2**: Where GA can interact with CAT, develop appropriate measures, including regulations as necessary, to prevent undesired events.
- ${\bf G}$ 2.3 : Consider favourably new proposed technologies by OEMs and manufacturers, and demonstration of enhanced safety through an innovative approach.

P3. Adopt a risk-based approach

G 3: Always consider alternative means to regulation, including the "do nothing" option, based on robust risk assessment and cost benefit analysis methodologies specific to the sector.

P4. Protect "Grandfather rights"

- **G 4.1**: Give specific attention to transitional arrangements, so that no activity is stopped, including unexpected specific cases, if it had not raised a statistically significant safety issue prior to the implementation of the new rules. Rely on proven competencies, and on NAAs' oversight and reporting to the Agency for transparency and sharing of good practice.
- **G 4.2**: Accept flexibility for continuation of specific local activities under NAA responsibility when they have not proven harmful to safety, to fair competition or to free circulation.

P5. Minimise bureaucracy and apply the EU "Smart Regulation Principles"

- **G 5.1**: Improve the dialogue with users, starting at the very first step of the rule making process, when the "do nothing" option is considered, and give appropriate explanations throughout the process in response to comments in particular when those comments are rejected.
- **G 5.2**: Have more confidence in participants to "do the right thing", thereby reducing the multiple layering of *a priori* safety nets, and focusing more on declarative processes and individual commitment for managing safety, subject to appropriate downstream oversight by the NAA.
- **G 5.3**: Give special attention to clarity and lack of ambiguity in proposed regulations in order to facilitate the GA community's understanding.
- **G 5.4**: Put more emphasis on soft law than hard law: limit implementing rules to required objectives, and develop technical means in industry standards, in certification specifications or in acceptable means of compliance supported by detailed guidance material, to be defined with users; use standardisation to check relevance and assure dissemination of best practices.
- **G 5.5**: Take into account the best global practices for GA, through consideration of various practices inside and outside EU.
 - **G 5.6**: Adopt a more comprehensive "competency based" approach for personal licensing.
- **G 5.7**: Do not impose inappropriate pressure to build new regulations and give all necessary time for a sound rule-making process in order to get it right at the first iteration.

P6. Make best use of available resources of expertise and delegate responsibilities to the appropriate level G 6.1: Give appropriate privileges to approved organisations to achieve proportionality.

G 6.2: Through an appropriate partnership, enable devolution and delegation of tasks from National Authorities to competent users' organisations.

Actions to be taken and next steps

To implement the principles in line with guidelines the following actions should be launched:

A 0: The Management Board to invite the European Commission to present for endorsement this proposed European GA Safety Strategy to the EASA Committee by October 2012.

A 1: The Management Board to invite the Member States to identify with the Agency before the end of October 2012, specific GA activities (such as cost sharing by private individuals, charity flights or A-A introductory flights in an aeroclub) that they do not consider as commercial air transport activities. On the basis of a review of this survey by the Agency, the Commission to clarify before April 2013 the interpretation of "commercial operations" in relation to certain GA operations. If necessary propose a change to the definitions in the Commission Regulations and / or Basic Regulation, so that the focus on actual professional business activities is explicit.

A 2: The Agency to develop and publish before July 2013 internal guidance material to ensure that the new rule making process is implemented consistently with the above guidelines when applied to GA activities. This should include explicit checking and a statement of compliance with the above principles and guidelines at various steps (RIA, NPA, CRD)³ of the procedure.

A 3: The Agency, and the Management Board to invite the Members States, to devote specific attention to ensuring the proposed regulations and their implementation are kept as simple as possible. When necessary the Agency should provide explanatory guidance in "plain language" to assist regulated individuals in understanding the requirements with which they are required to comply.

A 4: The Agency to implement a specific mechanism in the standardisation process that would enable best practices in GA to be identified, subject to the proactive participation of the GA users' representatives, and disseminated to the GA community, in close interaction with the rulemaking process. A specific item on sharing of good practice should be part of the agenda of standardisation meetings.

The Agency, with the users, to incorporate in this mechanism a way to take into account, when relevant, best practices from non-EU countries with significant GA activity. The example of the Light Sport Aircraft category should be considered as an interesting starting point.

A 5: The Management Board to invite the users to suggest for end of October 2012 to the Agency a short list of items for which non compliance with the above principles and guidelines would have an important impact and that could be solved quickly with a minimum regulatory work (for example, clarifying an interpretation).

A 6: For existing texts, the Management Board to invite the users to identify and transmit to the Agency and Members States before the end of November 2012 the key problems arising from aspects which do not comply with the above principles and guidelines or cannot readily be implemented in accordance with them, including for example problems with application of Annex V to the Basic Regulation, or use of industry standards for product approvals. On this basis the Agency to set up before March 2013 an ordered review process to address this situation, including, as necessary, proposed changes to the Basic Regulation.

In the meantime Member States, the Agency and the Commission to consider and agree how these principles and guidelines might be used in preparing and assessing cases under the flexibility

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² Basic regulation art.3 (i): 'commercial operation' shall mean any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator;

³ Regulatory Impact Assessment, Notice of Proposed Amendment, Comments Response Document

provisions to use consistently between them the procedures under Article 14.4 or 14.6 of Regulation 216, where legally possible.

- A 7: For texts in preparation and on going works, according to their degree of advancement, the Agency and Member States to consider the above principles and guidelines to orientate the work, or to prepare comments and discussions, including in Comitology. This must be implemented as a matter of urgency for the texts currently in the Comitology process (parts OPS-SPO, OPS-CAT-sailplanes, OPS-CAT-balloons).
- **A 8:** The Agency to consider and present to the Management Board in March 2013 a study and possible adaptation of its internal organisation to assure that GA matters are given the necessary resources and attention at the appropriate management level, that they are dealt with consistently throughout all directorates in accordance with above principles and guidelines, and that GA stakeholders can have easy access to the staff of the Agency responsible for GA matters.
- **A 9:** The Management Board to invite key GA users' representative organisations to propose to the Agency by the end of 2012 a team of representatives empowered to represent GA users in the dialogue with the Agency, the EC and the National Authorities.

The Agency to establish by mid 2013 a GA Subgroup of the Safety Standards Consultative Committee (SSCC) in order to periodically examine the implementation of this new approach to GA and the efficiency with which it is done.

Annex 1

Discussion Paper on European GA Safety Strategy

See separate document

Annex 2

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