

The European Aviation Safety Agency

A Royal Aeronautical Society Discussion Paper

Introduction

1. The European civil aerospace and aviation industries need an effective, efficient and independent pan-European safety regulatory system. Industry has wanted a common certification authority in Europe to stop the increasing fragmentation among different authorities in the Member States. Such a system has been evolving for over 40 years. But a system based hitherto on voluntary participation and, where needed, enforcement, was increasingly inappropriate to the developing requirements of European-wide companies and operations

2. The creation of a European agency with legal powers is, therefore, welcome in principle and should play a central role in the promotion of the interests of safety in European civil aviation. The European Aviation Safety Agency (EASA) which became operational in September 2003 has encountered difficulties. These are generally seen as part of the transition process and in due course will be resolved. The Society, however, is concerned that these problems will not be resolved fast enough or, more seriously, EASA will embed processes that will have negative safety consequences over the longer term.

3. This discussion paper will first briefly examine the rationale for EASA, then consider the realities exposed by the transition from a national to European regulatory regime and finally point to possible routes and options to improve EASA's approach to regulation formulation and implementation.

From national to European regulation ó the rationale for a pan-European approach

4. EASA does not mark an abrupt shift from a national to a European system, or an imposition of a European bureaucracy for its own sake. The development of collaborative civil aircraft from Concorde and into Airbus had encouraged bi- and multi-lateral approaches. As a result, various National Aviation Authorities (NAAs) were already very much engaged in European certification questions both prior to and within the Joint Aviation Authorities (JAA). The JAA worked on a voluntary basis to agree a set of common rules which handled safety-related activities on a co-operative basis.

5. In spite of the harmonisation work led by the national administrations through the JAA, there are still considerable differences between national practices. It is not unusual for a manufacturer to have to produce different versions of the same type of aircraft or of its equipment according to the country where it will be used. Furthermore, the requirements imposed on operators vary from one country to another and sometimes create disparities between airlines that are in competition with one another in the same markets.

6. The growth of European aerospace, notably through Airbus Industrie, pointed to the need for a standardised and centralised approach to certification and other safety issues. There was also some concern that the absence of a European body comparable to the US FAA might put European aerospace at a competitive disadvantage. EU expansion had also included a number of former Soviet Bloc countries with a different and often unsatisfactory experience. Finally, the emergence of a single European market for air travel, commitments to a Single European Sky and the rapid growth of intra-European air travel generally, pointed to the creation of a single, uniform authoritative approach to European civil aviation safety regulation.

The European Aviation Safety Agency

7. The European Aviation Safety Agency is a Community Body independent in relation to technical matters and has legal powers to enforce its actions and rulings. Its job is to assist the Community in:

- Establishing and maintaining a high, uniform level of civil aviation safety and environmental protection in Europe



An Airbus A380 at Frankfurt Airport.

- Facilitating the free movement of goods, persons and services
- Promoting cost efficiency in the regulatory and certification processes.
- Assisting Member States in fulfilling their ICAO obligations on a common basis.
- Promoting world-wide Community views regarding civil aviation safety standards.

8. Its main tasks are:

- To issue type certificates and provide other safety-related services, such as operational, maintenance and licensing aspects, to industry.
- In addition to advise the EU and Member States on safety issues and to ensure correct implementation of these rules in the Member States through standardisation and inspections.

9. EASA will not replace national authorities, but will co-operate with them in safety-related issues; the Agency and national authorities are two pillars of a new regulatory system. There is a clear division of labour between the Agency and its partners in the Member States and only those tasks which are better executed in a central body are transferred to the Agency. All other tasks remain with the national authorities. This sharing of responsibility clearly distinguishes EASA from the US FAA.

10. The Agency will develop expertise in all the fields of civil aviation safety in order to assist the Community Institutions in the development of legislation and implementing rules related to the safety supervision of aeronautical products, as well as supervision of organisations and personnel involved in their operation and of any other related areas. In order to guarantee the full autonomy and independence of the Agency, it has an autonomous budget whose revenue comes essentially from a contribution from the Community and from fees paid by the users of the system. EASA is run by a Management Board with representation from the Commission and the Member States.

11. The Management Board has the power to establish the budget, verify its execution, adopt the appropriate financial rules, establish transparent working procedures for decision making by the Agency and appoint the Executive Director.

12. Again it should be emphasised that the creation of EASA was seen as an evolutionary step, benefiting from, and largely inheriting, the work of

existing national agencies and the JAA system. The key requirement was to facilitate the transfer of functions and tasks from the Member States, including those stemming from their co-operation through the Joint Aviation Authority, to the Agency efficiently and without any reduction in the current high levels of safety and without any negative impact on certification and operational schedules.

13. As a first step, EASA is remitted to handle the certification of aeronautical products and of organisations and personnel involved in their design, production or maintenance. However, the Commission, assisted by the Agency, will progressively propose the necessary amendments of the Regulation to extend its scope to all other domains of civil aviation safety, with operational and licensing responsibility passing to EASA in 2006. Since its inception, EASA has issued over 20,000 certificates and major certification projects including the Boeing 787, A380 and the Trent engine for the A380 are underway. The A380 is under the full project control of EASA having taken over from the French national agency.

The Future

14. EASA's role is shortly to be expanded to include air operations, flight crew licensing and oversight of third country aircraft. EASA will thus be taking over the rule making and supervisory responsibilities in these areas from the JAA. The EU is also proposing that EASA will become responsible for the European air traffic system and aerodrome safety standards. EASA is also actively pursuing links with the FAA and other overseas regulatory agencies and will act as the focal point for the EU's international air safety diplomacy.

Realities ó a problematic transition

Staffing and funding

15. EASA was set up and given significant responsibilities without adequate staffing and resources. Critics also feel that restrictive appointment rules are preventing recruitment of highly qualified and experienced engineers who, however, lack the formal qualifications specified by the European Commission. Currently 150 officers and administrators are in its Cologne headquarters, hopefully rising to 350 by end of 2006. This is much fewer than a typical major national authority and already EASA recognises that expansion will be needed. Staffing reflects 18 EU nationalities and the intention is to recruit more personnel from Central and Eastern Europe. The wide geographic scope is believed to bring a wider representation and experience of safety issues in specific regions, as well as a wider functional experience from large aircraft to balloons. Care is needed, however, to ensure that overall safety is not affected due to the requisite level of experience needed within EASA becoming diluted.

16. For example, the current A380 certification team is headed by EASA but supported by national experts: there is a risk that, as EASA captures more of responsibility risk, it will not have the expertise to meet these requirements.

17. There are significant gaps in expertise including human factors. There is no specialised department nor at the moment are there any personnel dedicated to this function. This is a major deficiency in its ability to understand the underlying air safety problems caused by lack of appreciation of the human factors issues.

18. The problems are likely to be exacerbated by an impending budgetary crisis. EASA is suffering from a major income shortfall which would have been met by slowing or stopping certification work. This was rejected by the Management Board but, with no additional funding, EASA may run out of money by the late spring or early summer.

A slower process

19. EASA has taken over the certification responsibilities of the JAA and intends to start a standardisation programme based on an audit and review of the regulatory set-ups of the Member States. In practice, while EASA has got on with certification work, the work has been largely sub-contracted to the national aviation authorities. It has struggled to cope with its initial staffing levels and expertise. The result has been to slow down the process and is less efficient than the JAA system. The additional bureaucratic steps are causing delays to industry ó months as opposed to the days response achieved by the NAAs.

20. EASA is required to recover cost of services and activities. Though macro aspects are funded by CEC, EASA bills industry, either directly or through contracts with the NAAs, for the services provided. But slow

invoicing, a highly bureaucratic process, and because the NAAs have to wait for an EASA contract before working with industry, it is leading to a slow down of the whole system.

Structural issues

21. A key requirement is to have clear and well known routes to obtaining information and details of requirements. For example, there is now no circulation process by which the industry can routinely obtain hard copies of EASA documents and thus set up their own document libraries for rapid reference. Equally the NAAs are now unlikely to provide such a central library. Websites are not the complete answer. Downloads are problematic and website management is still something to be desired. All of this is a particularly hard problem for smaller companies.

Research issues

22. The transfer of regulatory research to EASA has also been affected by the lack of in-house resources and expertise. The NAAs, for example, have already begun to divert resources to areas where they retain direct responsibility and will increasingly leave issues such as aircraft certification to EASA. However, EASA has yet to start work on these issues, leaving something of an *interregnum*. Again, this is not to argue the case for reverting to a national approach, given the trend towards European co-operation and the increasing need to establish international norms and standards. The problem is that EASA's transition problems are retarding European responses to emerging concerns and issues. However, given proper planning, effective management and adequate resources, EASA would be the appropriate focus for this activity, with again the possibility of delegating certain topics to be managed by appropriate NAA(s).

Possible *é*lostí capability

23. There is a danger that NAAs are already anticipating the transfer of functions and responsibilities to EASA. They are diverting resources to areas where they will still retain competence or other national aspects of aviation regulation not covered by EASA. This is potentially depriving aerospace companies, especially small suppliers, of easy and convenient access to advice on certification questions with no immediate alternative. Websites are useful but there is no substitute for personal contact. EASA does not yet have this level of expertise and service delivery.

Links with FAA

24. While these seem to be fairly well established, there is the need for EASA to boost its capabilities to ensure that it is not dominated and/or overwhelmed by nationally-driven FAA pressures.

Longer term safety concerns

25. While the creation of EASA and its current transition problems will not immediately threaten European safety standards, there is some concern that, unless EASA moves rapidly towards a more stable state, there could be issues further ahead. This might compel national authorities to take emergency action.

Self awareness and accountability

26. Several critics of the EASA transition have pointed to a leadership problem and the failure to establish a proper feeling for accountability based on a genuine appreciation of aviation and its safety culture at the top of the organisation. While the EASA management has sought to make some changes, some things have not improved and both it and the Commission have been accused of complacency and an initial refusal to recognise problems. All of the major aerospace countries are increasingly concerned at the state of affairs. There are general deficiencies in EASA communications issues and its approach to the customer. In particular it has failed to establish clear customer targets.

The Way Forward

27. In order to move the debate forward about the future of EASA, the Society would make the following observations:

- There is a clear and obvious need for a European-level safety agency with power to enforce decisions and to establish the highest possible uniform standards to ensure the safety of European citizens. In principle, EASA fulfils this fundamental requirement.
- However, the Society is concerned that too much is currently expected of EASA. The Agency is still developing expertise and competence and there are concerns that it is not yet fully able to discharge its existing responsibilities. Yet the Commission is already seeking to expand its scope. This timetable must be relaxed with EASA assuming additional powers and responsibilities only when it has clearly demonstrated to industry the technical competence so to do.

- The EASA Executive and Management Board should make it clear to the Commission that aviation safety cannot be rushed to meet external administrative or political targets.
- EASA and the NAAs should be prepared to continue to act in parallel in order to ensure continuity of expertise and client access. Such delegation should not be seen as an attempt to undermine the competence and authority of EASA but as an appropriate application of the principle of subsidiarity.
- In particular, the Commission proposal to transfer operational and licensing responsibilities to EASA during 2006 should be delayed until EASA has proven competence in this area.
- National agencies should not anticipate EASA taking up further functions and continue to sustain basic national capabilities in core safety and certification areas until EASA has demonstrated full competence.
- The relationship between EASA as supranational body and industry must be carefully considered, with a slower more transparent process of transfer of authority and better consultative relationship with industry. There is a need for a clearly defined timetable and transition plan for the transfer of functions from the NAAs to EASA. This would enable all of EASA's clients to prepare in a timely way for the changes and to assimilate all of the information necessary to adapt their own internal procedures.
- There is a particular need to clarify the boundaries between national and European level responsibilities. This is especially important for the supplier sector which has less direct and higher level contact with the Agency. For example, EASA's future policy relative to organisational approvals and who will be responsible for these, needs clarification.
- EASA should perhaps seek generally to act more as an auditor of national systems and to function as a guarantor of quality, especially in the smaller states.
- While its primary responsibility is to aviation safety, EASA should also recognise that it has a service function to industry and that it should publish clearly defined customer service targets. In particular, it should ensure that the time taken to process certification applications should not be worse than achieved by NAAs and that EASA should regularly publish details of its administrative performance.
- EASA should seek to adopt a 'ebusiness friendly' approach. It is important that EASA remains accessible to the needs of commercial enterprises. EASA's location in Cologne poses particular problems for SMEs used to dealing with NAAs when they have a non-routine issue to resolve and when they may be called upon to make multiple visits to EASA. EASA should investigate means of ensuring effective and efficient methods of direct communication with industry.
- Equally, without compromising safety, EASA also has a responsibility to improve the competitiveness of the European civil aerospace and aviation industries. In this respect the cost to industry for certification and other safety regulation should not exceed those of the most efficient NAA. In this respect, EASA's scale of charges should not increase to the point that they pose an unacceptably burden of costs on industry, especially SMEs. ♦

This Discussion Paper was prepared by an *ad hoc* working group drawn from the Society's Specialist Groups. It comprised: Capt David Rowland, FRAeS, Chairman; Professor Keith Hayward, FRAeS, rapporteur; Carey Edwards, MRAeS; Maurice Hudson, MRAeS; Howard Leach, MRAeS, MRAeS; Keith Mans, FRAeS; Peter Moxham, FRAeS; Brian Perry, FRAeS; Dr Mike Steeden, FRAeS; Simon Talbot and Iain Young, FRAeS.

Enthusiast Day at the Farnborough International Airshow

The Farnborough International Airshow will take to the skies for the 45th biennial exhibition and flying display and will maintain its status on the airshow calendar as one of the most diverse and largest aerospace exhibitions exclusive to the UK.



Farnborough itself lays claim to aviation connections from the very beginning of man's quest for flight. This historic landmark venue opens its gates over the weekend to demonstrate to the public a plethora of civil and military aircraft aerospace technology, from the turn of the last century to the present day.

Make more of your day by visiting the show on the Enthusiast Day

The Farnborough International Airshow is held from 17-23 July 2006 and traditionally opens its gates to the public at the weekend. The show this year will offer Royal Aeronautical Society members the opportunity to visit the show on the Enthusiast Day. The Enthusiast Day will be held on Friday, 21 July, which is also one of the 'Private Trade Days'. The purpose of the Enthusiast Day is to offer those that have a devoted interest in aerospace the chance to witness the exhibits, the static display and, of course, the ever popular flying display away from the crowds of the general public. The Trade Day activities are extended on this special Friday to incorporate extra features and an enhanced flying display including the world-famous Red Arrows and the A380, giving its first public UK demonstration.

The Enthusiast Day package is available only to Royal Aeronautical Society members who are aged 16 and over. The package includes a Daily Entrance Ticket for Friday, 21 July, grandstand (tiered seated area) ticket, souvenir programme and free parking.

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