



**COUNCIL OF
THE EUROPEAN UNION**

Brussels, 27 June 2013

11558/13

**AVIATION 92
RELEX 578**

"I" ITEM NOTE

From : General Secretariat of the Council
To : COREPER

Subject: Preparation of the 38th Session of the ICAO Assembly
- European Union coordination of a common position

On the basis of a draft presented by the Commission services, and following consultation of the European Civil Aviation Conference (EACA) and EUROCONTROL and their non-EU Member States, the Working Party on Aviation examined the text of four Working Papers to be submitted by the European Union and its Member States to the 38th Assembly of the International Civil Aviation Organisation (ICAO), which will be held from 24 September to 4 October 2013 in Montréal.

At its meeting on 24 June 2013, the Working Party reached agreement on the text of the papers as set out in the Attachments A-D to the Annex to this note, and decided to submit them to COREPER for final approval.

In the light of the above COREPER is invited:

- to confirm the text of the Working Papers as set out in Annexes I – IV;
- to authorise the Presidency to submit these papers on behalf of the European Union and its Member States to the 38th Assembly of ICAO.

INFORMATION NOTE

First batch of Working Papers for the 38th ICAO Assembly

Through its information note of 9 January 2013 (AVIATION Working Document 2013/1) the Commission informed Member States of the on-going preparations for the 38th Assembly of the International Civil Aviation Organisation (ICAO).

On that occasion it was explained that the preparations for, and the drafting of Assembly Working Papers was taking place in various expert groups (for safety, for security, for air navigation, for air transport and for environment), comprised of numerous experts from EU Member States, from non-EU ECAC Member States, from the ECAC Secretariat, from Eurocontrol, from the Sesar Joint Undertaking, from EASA and from the Commission.

In its meeting of 14 January 2013, the Aviation Working Party discussed and agreed, as proposed, the way forward, in particular in relation to the preparation of Working Papers for the Assembly. It was notably agreed that, while the preparations for and the drafting of the Working Papers for the Assembly will take place in various expert groups, all these papers will eventually be brought before the Aviation Working Party (and submitted afterwards for approval by Coreper). In addition, through ECAC the support of the non-EU European States would be sought, thus ensuring to the maximum extent possible that a pan-European input can be provided to the Assembly.

The preparation of a first batch of Working Papers for the Assembly has been finalised. Further Working Papers will follow once their preparation by the relevant experts will have been finalised. These first papers relate to aviation safety, and will be discussed in the Assembly's Technical Commission:

- "Annex 19 – A new Annex, and next steps" (attachment A)
- "Consolidated aviation safety knowledge management" (attachment B)
- "Difficulties encountered during major safety investigations: a European perspective" (attachment C)
- In addition, attachment D contains an Assembly Information Paper on the "European Strategic Safety Initiative (ESSI)".

Within ECAC, these papers have received the agreement of the Directors General for Civil Aviation of the ECAC member states.

As soon as these papers will have been approved, they can be forwarded to ICAO.

ASSEMBLY — 38TH SESSION
TECHNICAL COMMISSION

Agenda Item 31: Aviation Safety: Annex 19

ANNEX 19 – A NEW ANNEX, AND NEXT STEPS

(Presented by Lithuania on behalf of the European Union and its Member States¹ and the other Member States of the European Civil Aviation Conference²)

EXECUTIVE SUMMARY

New Annex 19, which becomes effective later this year, consolidates the existing requirements under State Safety Programmes (SSP), Safety Management Systems (SMS) and for the protection of safety data. Work has already started on a second iteration of the Annex, the content of which is not yet agreed, and this paper explores a number of ideas for ways of ensuring that this second version builds successfully on the first, including through practical support for SSP implementation by States at different levels of compliance maturity.

Action: The following recommendations, relating to the development of the next iteration of new Annex 19 and on securing international support for implementation of the Annex, are proposed for consideration by the Assembly:

- a) States should be encouraged to consider implementing programmes for the sharing of experience of SMS (within and between Regions), and for the familiarisation of regulators with SMS;
- b) the Council should encourage the harmonisation and reinforcement of the quality of training in SSP and SMS implementation, including through the promotion of a ‘Safety Culture’ approach; and
- c) the Council should consider a phased approach, under Annex 19, to the implementation of safety management, as a means of ensuring that the benefits of Annex 19 are available to States at all levels of compliance maturity.

¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

² Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, the Republic of Moldova, Monaco, Montenegro, Norway, San Marino, Serbia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and Ukraine.

1. INTRODUCTION

A New Annex

1.1 For the first time in 30 years, the Chicago Convention is to have a new Annex. Working from a draft which drew together existing material, a new Panel consisting of representatives from twenty States and seven international organisations, spanning all aviation disciplines, produced a new draft Annex in less than 90 days. The States presenting this paper recognise the exceptional effort by the ICAO Secretariat in supporting the delivery of Annex 19, which was adopted by the ICAO Council, by 33 votes to 0, in February 2013.

1.2 It is important now not to rest on the completion of this first phase of the work, but to press ahead with implementation of the new Annex and at the same time to proceed to its second iteration.

Annex 19 Content

1.2 The first edition of the Annex requires very few new actions by regulators or industry. It does however seek to elevate the importance of SSP, SMS and data protection within State's priorities; to provide a single coherent document covering these issues; and to enhance standardisation between related SARPs in different areas. This reflects the conviction that safety management is the best approach to achieving continuing safety improvements in the increasingly complex aviation environment. The Annex spans all disciplines, and therefore has to accommodate different approaches to the management of risk.

Implementation

1.3 Implementation of the Annex will involve the amendment of ICAO documents and training material, and the Panel has also begun to discuss the possibility of a phased approach to implementation, under which there would be outlined a recommended focus for States at differing stages of compliance maturity.

1.4 States may also wish to propose an international programme of support activity to improve the uptake and success of the Annex. This might take the form of SMS/SSP experts facilitating the sharing of experience of and familiarisation with SMS/SSP amongst States, within or between Regions, and actions to enhance the quality of training provided globally on SMS implementation, such as an industry accreditation scheme for commercial SMS training providers. Guidance and supporting material is already provided by ICAO, and might be supplemented by additional tools such as those produced by the Safety Management International Collaboration Group. Safety Culture too is important, especially in SMS implementation, and could be promoted using a range of methods, with account taken of cultural considerations.

2. DIRECTIONS FOR THE NEXT ITERATION OF ANNEX 19

General Aims

2.1 The content of the next iteration of Annex 19 has not yet been determined by the Panel. As with the present version, the aim should be a text which is simple, practical and usable, which avoids complex terminology, and which focuses on the key issues for aviation safety. It may include, for example, links to guidance on concepts and tools which support successful implementation of SMS, such as "Safety Culture". Once the recommended draft of the next version of the Annex is complete, the Panel will need to become involved in generating further guidance material, such as updates to the Safety Management Manual and the Safety Oversight Manual.

Compatibility with Other ICAO Ambitions

2.2 Annex 19's compatibility with other ICAO documents and objectives is important in achieving a coherent, joined-up suite of ICAO material for States to use. Safety Oversight, the Continuous Monitoring Approach (CMA), Acceptable Level of Safety and other concepts are clearly not 'owned' by the Annex 19 Panel. However, as the content of Annex 19 will interface with these areas, it will make sense for the Annex to promote, for example, data collection in a way that is compatible with the aims of CMA. The Annex will need to maintain its simple and clear structure, and thus remain user-friendly for States. It will also need to emphasise the importance of a holistic approach to managing safety at the level of the State (but without of course the State taking responsibility itself for service providers' operations).

2.3 A phased approach to implementation might be considered (see below), similar in principle to that described in the Global Aviation Safety Plan. This would of course need to be co-ordinated with the ICAO oversight teams. As with the development of the present version of Annex 19, any such development will require extensive liaison with, and consideration of the inputs from such other ICAO groups as the Safety Information Protection Task Force.

Phased Approach to Implementation

2.3 Under a phased approach to implementation, the aim would be to produce material that allowed participation by, and benefitted, States at all levels of compliance maturity. It might for example suggest different actions by States at different levels of maturity, and allow those in the earlier stages of achieving compliance to focus on implementing the more fundamental SARPs. Such a concept would require careful development and co-ordination, before it could be implemented.

3. THE NEED FOR AN INTERNATIONAL SUPPORT PROGRAMME

Supporting Member States

3.1 The safety management approach is not free from possible misinterpretation. It might for example be supposed, mistakenly, that SMS replaces compliance, or somehow makes it less important, even though the ICAO material underlines that compliance with existing requirements is fundamental to the risk management system. If expertise in SMS is insufficient, or compliance de-prioritised, then safety could actually decline instead of improve. Working with SMS requires high levels of knowledge, and new skills, on the part of both the industry and the regulator. SMS (and SSP too) are important enablers of a fully operational CMA.

3.2 To make an SMS work in industry requires commitment, training and expertise, but the number of aviation professionals who currently understand it well is still small. In States, Inspectors performing industry oversight will have to be well prepared, if they are to be effective in SMS evaluation. They may need to undergo specialist training in the relevant techniques in order to be able to assess SMS effectiveness during their routine oversight activities. It may therefore be beneficial to organize joint industry/authority training, in order to facilitate a common understanding of how to characterize an effective SMS. To be cost effective, such training might be organised on a regional basis. In the European region there is already some experience of SMS experts assisting State inspectors in SMS evaluation.

Industry Training

3.3 Expertise in industry is likewise important for the implementation of effective SMS. Commercial training providers and consultants are widely available but the content and quality of this training is variable. As SMS becomes increasingly important, there may be value in considering whether industry accreditation schemes could improve the consistency and adequacy of training for service providers. Uptake of industry

initiatives could be encouraged, including through the pooling of the expertise, tools and data in such organisations as IATA, AEA, and the FSF.

Supporting Material

3.4 Supporting material for Annex 19 users will be increasingly important as SMS implementation evolves. This may include Panel support to the development of future versions of the Safety Management Manual, the circulation of material and tools developed internationally (such as those produced by the Safety Management International Collaboration Group), user-friendly pamphlets on specific subjects, risk assessment or SMS tools designed for use on the internet or smart-phone “apps”, as well as other material or best practice that may emerge, and may be provided by a range of sources within a co-ordinated plan. There should also be a wide ranging communications plan, covering *inter alia* the availability of a consistent set of core messages for use in local briefings, conferences and aviation press articles,

4. CONCLUSION

4.1 The following recommendations, relating to the development of the next iteration of new Annex 19 and on securing international support for implementation of the Annex, are proposed for consideration by the Assembly:

- a) States should be encouraged to consider implementing programmes for the sharing of experience of SMS (within and between Regions), and for the familiarisation of regulators with SMS;
- b) the Council should encourage the standardisation and reinforcement of the quality of training in SSP and SMS implementation, including through the promotion of a ‘Safety Culture’ approach; and
- c) the Council should consider a phased approach, under Annex 19, to the implementation of safety management, as a means of ensuring that the benefits of Annex 19 are available to States at all levels of compliance maturity.

ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 31: Aviation Safety – Emerging Issues

**CONSOLIDATED AVIATION SAFETY KNOWLEDGE MANAGEMENT: AN ENABLER
OF IMPROVED OPERATIONAL SAFETY**

(Presented by Lithuania on behalf of the European Union and its Member States³ and the other Member States of the European Civil Aviation Conference⁴ and by EUROCONTROL)

EXECUTIVE SUMMARY

Aircraft manufacturers predict that potentially, by 2030, there will be one commercial aviation accident every three months. In order to address this clearly unacceptable societal risk there is a need, complementary to the sharing of safety data, for a consolidated and industry-wide approach to safety knowledge management, building on the foundations of State Safety Programmes and operators' Safety Management Systems, and on the structure of new ICAO Annex 19. Such an approach would be dependent on but not restricted to safety data sharing, and would provide a more rounded explanation, rationale and context for the data, to aid understanding of how best to improve operational safety.

Such an approach should be cost-neutral for the aviation industry, simply bringing together already existing elements. States and aviation service providers would benefit greatly from a wider dissemination of information of a good quality, helping them implement efficient and cost effective safety improvement activities. Implementation of a sound, global knowledge management approach would help meet these information needs, and avoid duplication of work.

Action: The Assembly is invited to recommend to the ICAO Council that consideration be given, in particular and most immediately by the Safety Management Panel in its further work on Annex 19, to the promotion widely of a consolidated, industry-wide approach to safety knowledge management.

³ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

⁴ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, the Republic of Moldova, Monaco, Montenegro, Norway, San Marino, Serbia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and Ukraine.

1. INTRODUCTION

1.1 Aircraft manufacturers predict that potentially, by 2030 there will be one commercial aviation accident every three months, based on the current accident rate and the expected recovery in air traffic growth. This is an unacceptable societal risk, which if realised would undermine the sustainable economic viability of the aviation industry.

1.2 ICAO has been very successful in leading aviation safety by providing States with a solid framework of systems and approaches to safety enhancement, for example State Safety Programmes, Eight Critical Elements of a State's Safety Oversight System, and implementation of Safety Management Systems. Moreover, new Annex 19 is set to give further impetus to a structured approach to safety management. However, to reduce the accident rate even further in the future, there is a need, complementary to the sharing of safety data, for a fully consolidated industry-wide approach to safety knowledge management. Safety data and information, widely disseminated and of a good quality, are the 'lifeblood' of the systems mentioned above, and there is a need to use them to energise future operational safety improvements.

2. OBJECTIVE AND SCOPE

2.1 The aim of this paper is to champion the concept of consolidated aviation-wide safety knowledge management as a key enabler of future aviation safety improvement.

2.2 The paper describes the limitations in the current uses of aviation safety data as such an enabler, and sets out the potential benefits of an aviation-wide safety knowledge management approach, together with the underlying principles and elements that would support such an approach.

3. CURRENT LIMITATIONS

3.1 Within the aviation safety management system framework, aviation service providers deliver operational safety improvements through the processes of hazard identification, risk assessment and mitigation. However these processes currently rely on fragmented knowledge, often restricted to the individual aviation service provider or State, complemented by somewhat ad hoc global aviation safety knowledge management.

3.2 Current safety knowledge management is largely dependent on, but is not restricted to, safety data-sharing. Simply trying to improve the collection, storage and sharing of the "lifeblood" data is not enough to keep the industry safe in the longer term. There is a need to convert the facts and figures into real knowledge – safety intelligence – that provide an overall explanation, a context and a proactive, robust and systematic understanding of how exactly to improve operational flight safety.

4. BENEFITS

4.1 The essence of a globally consolidated aviation safety knowledge management approach is industry-wide learning and sharing of best practices. It is only through such an approach that the aviation community can collate and learn the lessons from the infrequent - in statistical terms – safety occurrences. The proposed approach would systematically bring together diverse elements in the aviation safety knowledge chain, providing a more cost effective and efficient way of undertaking safety improvement activities, whilst reducing duplication.

4.2 Moving from a mainly safety data-sharing oriented regime to a full aviation safety knowledge management concept is fully in line with emerging Annex 19 developments, and in Europe is fully consistent with future EU aviation safety direction and policy.

5. SAFETY KNOWLEDGE MANAGEMENT AS A PRINCIPAL ENABLER OF IMPROVED OPERATIONAL SAFETY

5.1 The application of an approach of the kind described here to the process of operational safety improvement would ensure that States and aviation service providers could implement operational safety improvements more efficiently, and thus be better prepared to respond to the safety challenges of the future.

5.2 It is suggested that a safety knowledge management approach⁵ should be built on the following principles and elements:

- a) **Comprehensiveness.** Complete coverage of best practices from all segments of aviation, different geographical regions, and varying operational environments.
- b) **Traceability.** The origin of the best practices, regulatory requirements, safety management practices and evidence of resilience and vulnerabilities must be traceable.
- c) **Accessibility, Quality and Credibility.** Universal access for aviation safety professionals is key. The safety knowledge itself must be credible and reliable.
- d) **Availability and ease of use.** The number of aviation safety knowledge elements is vast. An intelligent mechanism with a rapid search capability to locate the desired information is essential.
- e) **Flexibility.** The approach and the related process would need to be sufficiently flexible to allow for changes in structural elements.
- f) **Efficiency and sustainability.** The approach must not impose any additional burden on the aviation community, and should make full use of existing processes and tools.

6. CONCLUSION

6.1 The Assembly is invited to recommend to the ICAO Council that consideration be given, in particular and most immediately by the Safety Management Panel in its further work on Annex 19, to the promotion widely of a consolidated, industry-wide approach to safety knowledge management.

⁵ The prototype of a tool underpinned by the principles presented at paragraph 3.2 here is the SKYbrary web-based platform, a partnership project of EUROCONTROL, ICAO, the Flight Safety Foundation, the UK Flight Safety Committee, the European Strategic Safety Initiative of EASA, the FAA-led Commercial Aviation Safety Team, the International Federation of Airworthiness, and the Safety Management Systems International Collaboration Group.

ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 31: Aviation Safety – Emerging Issues

**DIFFICULTIES ENCOUNTERED DURING MAJOR SAFETY INVESTIGATIONS: A
EUROPEAN PERSPECTIVE**

(Presented by Lithuania on behalf of the European Union and its Member States⁶ and the other Member States of the European Civil Aviation Conference⁷)

EXECUTIVE SUMMARY

The quality of major safety investigations into accidents and serious incidents involving large aircraft is sometimes lessened by difficulties associated with the defective application of the provisions of Annex 13. As a result, safety lessons go unlearned. This paper considers a variety of such circumstances and proposes ways in which the quality of investigations and their benefits for safety may be enhanced.

ACTION:

The following recommendations are proposed for consideration by the Assembly:

- a) Whenever the State of Occurrence decides not to investigate a potentially serious incident, it should consider delegating the investigation, partially or wholly, to another State having a particular interest in the investigation, such as the State of the Operator or the State of Manufacture, as allowed under Annex 13;
- b) States should ensure that their Investigation Authority is functionally independent of any entity whose interests could conflict with its own or impair the objectivity with which it discharges its duties;
- c) States should develop cooperation arrangements between their investigation authorities, of either a bilateral or regional network character, including to support the dissemination of investigation reports (see below);
- d) States should ensure the better dissemination of safety investigation reports, including through their electronic publication and the production of courtesy translations into English;
- e) ICAO should help ensure that States' safety investigation authorities have unrestricted access to all evidential material, by raising Annex 13 Recommendation 5.4.3 to a Standard and providing guidance on the establishment of protocols or agreements between national safety investigation authorities and judicial authorities.

⁶ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

⁷ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, the Republic of Moldova, Monaco, Montenegro, Norway, San Marino, Serbia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and Ukraine.

1. Introduction

1.1 In the course of major safety investigations into accidents or serious incidents involving large aircraft, whether conducted in Europe or elsewhere, investigation authorities are regularly confronted with difficulties arising from the defective application of the provisions of Annex 13. This impairs the quality of investigations and prevents the aviation community from benefitting from safety lessons.

1.2 This paper considers such difficulties, and proposes actions intended to improve the quality of investigations and their impact on safety. Issues around the protection of safety information, while extremely important, are excluded here as being more properly discussed in the context of the report of the work of the Safety Information Protection Task Force.

2. Key principles of Annex 13

2.1 Annex 13 sets down a number of principles designed to guarantee the effectiveness and quality of safety investigations, addressing such key issues as timeliness of investigation, powers of delegation, the involvement of other parties, and public reporting. The Annex underlines in particular that the sole objective of safety investigations is to allow safety lessons to be drawn.

2.2 These principles make it clear that while the sovereignty of each ICAO Contracting State is of course to be respected, an accident and the lessons its investigation may yield belong to the international aviation community. The investigation is not so to speak the "property" of the State of Occurrence: the dissemination of its final report and the lessons learned contribute greatly to preventing a recurrence, within a 'total safety system' approach.

3. Difficulties being encountered

3.1 Delegating an investigation

3.1.1 Annex 13 requires the State of Occurrence to investigate all accidents and serious incidents involving aircraft above 2,250kg. It can however happen that the State of Occurrence, having perhaps limited resources or simply different investigative priorities, will classify an event as an incident, requiring no investigation, whereas the State of the Operator, State of Design or State of Manufacture may judge that an investigation needs to be conducted. Although the possibility granted by Annex 13 of delegating an investigation addresses such a circumstance very well, it is not always made use of, even where there is no objective reason not to do so.

3.2 Independence and competence

3.2.1 Investigators must be independent in the conduct of their investigation, and may not receive instructions from any outside body. Although today the investigating authority is often linked more or less directly to the civil aviation authority, investigators are nonetheless generally able to avoid

conflicts of interest.

3.2.2 But the effectiveness of the investigation authority is not of course guaranteed by its independence. Investigators must also have professional competence and be able to bring sound judgment to the data and expertise provided by their advisers. This is a potential difficulty for many investigating authorities, which are constrained in conducting major investigation by a lack of resources - whether human, financial or (commonly) both.

3.2.3 An accident always calls into question the operator's ability to conduct operations safely, and may do the same in respect of the administrative authority's capacity to provide a sound safety environment. The independence of the investigating authority is a key factor in avoiding any risk of distortion of the analysis of the accident.

3.3 *Consultation and publication of final reports*

3.3.1 Although modern communication means are used increasingly to issue final reports etc, many investigation authorities are still able to publish only in paper form. This naturally leads to final reports having a much smaller readership – and smaller still, in the case of the (many) reports published only in the national language.

3.4 *Relationship between judicial and safety investigations*

3.4.1 The relationship between judicial and safety investigations raises complex issues, not least because the former will reflect legislation which differs from one country to another. Annex 13, and more recently the relevant EU legislation, has established the principle that the conduct of the judicial investigation must not impede that of the safety investigation. However, the solution proposed for cases where arbitration is needed to address a conflict between the two forms of investigation is not always practicable.

3.4.2 Difficulties may arise, for example, over access to the accident site, examination of the wreckage, or access to data captured in flight and/or voice recorders. Investigating judges sometimes keep recorders under guard for long periods, or prohibit their read-out outside the State even when there is no *national* capability to do so. Failure to read recorders promptly may pose a serious threat to safety, when a design or system defect is suspected.

3.4.3 Decisions to undertake a destructive investigative procedure, sometimes unavoidable, may be also blocked by judicial authorities, if there is no agreement in place with safety investigators. Finally, the safety investigation may be placed under the control of the judicial authorities, limiting the safety investigators' role to that of providing technical expertise.

4. Proposed action

(a) *Ensure that all accidents and serious incidents are properly investigated*

4.1 Authorities lacking the capacity to conduct a major accident investigation should be supported by another authority (or authorities) in possession of the appropriate resources. A number of scenarios for this can be envisaged:

- Investigation delegated by the State of Occurrence: Annex 13 contemplates the delegation of investigations by the State of Occurrence, a provision of which however insufficient use is made, in particular in relation to potentially serious incidents.
Whenever the State of Occurrence decides not to investigate a potentially serious incident, it should consider delegating the investigation, partially or wholly, to another State having a particular interest in the investigation, such as the State of the Operator or the State of Manufacture, as allowed under Annex 13.
- Assistance from other authorities, whether bilaterally or regionally: Where such delegation would be inappropriate, in particular for major accidents, an authority without the capacity to conduct a full investigation should request support from another authority. In the absence of advance arrangements, this will often be the State of Design or Manufacture.

4.2 Some States have signed bilateral agreements with other authorities to secure support for investigations, on request, and on a larger or smaller scale. This support is generally limited to recorder read-outs, but may also involve methodological support, technical expertise or the participation of investigators. It is usually provided for free, although some agreements provide for financial compensation

4.3 An alternative approach involves mutual assistance on a regional basis, whereby the States within a region are able to call upon one another's resources in order to undertake investigations otherwise beyond their capability.⁸ This also enables States to better determine the size of their investigation authority. Another alternative is the establishment of a regional investigation authority, though very few examples exist.

In order to address situations beyond their own investigative capacity, and to avoid the burden of maintaining an oversized authority, States should be encouraged to develop agreements for assistance and cooperation. Different frameworks can be considered: bilateral agreements with one or more major investigation authority; the creation of a regional network for assistance; or the establishment of a regional authority.

⁸ Examples within Europe are offered by the European Civil Aviation Conference's 'ACC' group, and the EU's *European Network of Civil Aviation Safety Investigation Authorities*.

(b) Strengthen the independence of the Investigation Authorities

4.4 Annex 13 requires the accident investigation authority to be independent in its conduct of investigations, but does *not* require the authority *itself* to be independent from other entities, such as the national civil aviation authority. It is desirable to go a little further than this, as EU legislation now does, to require a “functional independence” which avoids conflicts of interest and possible external interference in determining the cause(s) of an event.

The investigation authority should be functionally independent of any other party or entity, the interests of which could conflict with the task entrusted to it or influence its objectivity.

(c) Ensure better access to reports

4.5 The regular dissemination of safety learning to the aviation community contributes to the fight against the loss of collective memory. When safety learning is missed, forgotten or loses its former prominence, “old” accidents can re-occur. The safety investigation authority is thus an important actor in the dialogue on aviation safety matters at the national level, and in the ‘total safety system’ context.

All reports published by investigation authorities should be downloadable from an internet website, and those of international interest should preferably be accompanied by a courtesy translation into English, leaving the original language text as the work of reference. In each case this might be achieved with the support of another State.

(d) Ensure a proper balance between the prevention of future accidents and the proper administration of Justice

4.6 The Annex 13 provision regarding the timely access of safety investigators to all evidential material, unimpeded by judicial investigations or proceedings, has presently the status of a recommendation.

To ensure its better applicability, this provision should be raised to a Standard and guidelines prepared on the setting up of protocols or agreements between accident investigation authorities and judicial authorities.

5. Recommendations

5.1 The Assembly is invited to consider the recommendations in the Summary/Action box at the head of this working paper.

ASSEMBLY – 37TH SESSION
TECHNICAL COMMISSION

Agenda Item: *to be determined – Information Paper*

THE EUROPEAN STRATEGIC SAFETY INITIATIVE

(Presented by Lithuania on behalf of the European Union and its Member States⁹ and the other Member States of the European Civil Aviation Conference¹⁰)

SUMMARY

The European Strategic Safety Initiative (ESSI) was launched in 2006 and is now a mature initiative. It is a voluntary and privately funded safety partnership aimed at further enhancing safety in Europe, and for the European citizen worldwide. Facilitated and administered, but not owned, by the European Aviation Safety Agency (EASA), ESSI brings together European aviation authorities and the industry, and international partners like ICAO and the FAA, and has since 2010 been managed in compliance with ISO 9001:2008 requirements. It contributes to the development and implementation of the European Aviation Safety Plan, and has produced several safety management and safety promotion documents.

1. INTRODUCTION

1.1 The European Strategic Safety Initiative (ESSI)¹¹ was launched in April 2006 by EASA as the successor to the Joint Aviation Safety Initiative of the Joint Aviation Authorities. Its inception was described in WP/195 presented to the 36th Session of the ICAO Assembly, and a report on its progress was presented in WP/198 to the subsequent Session in 2010. The present information paper focuses on ESSI's activities and achievements over the past three years.

1.2 ESSI has throughout its existence redefined and revitalised cooperative safety efforts in Europe with a new objective, a new regulator-industry partnership approach and a new process. It is now a mature initiative, working as a voluntary and privately funded safety partnership to further enhance safety in Europe and for the European citizen worldwide. ESSI is facilitated but not owned by EASA, and its participants are drawn from the EASA and ECAC States, bringing together European aviation authorities and

⁹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

¹⁰ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, the Republic of Moldova, Monaco, Montenegro, Norway, San Marino, Serbia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and Ukraine.

¹¹ <http://www.easa.eu.int/essi/>.

the industry, and international partners such as ICAO and the US FAA. More than 150 civil and military organisations today take part in the ESSI, with participants coming mainly from the civil side.

1.3 ESSI has maintained and further developed its cooperation with the US Commercial Aviation Safety Team (CAST) and with other major safety initiatives worldwide, such as the International Helicopter Safety Team (IHST) and the US General Aviation Joint Steering Committee (GA JSC), as well as with ICAO under both the Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) and the Regional Aviation Safety Group Europe (RASG-EUR) initiatives.

1.4 Administered by EASA, ESSI has since 2010 been managed in compliance with ISO 9001:2008 requirements.

1.5 ESSI continues to have three components: the European Commercial Aviation Safety Team (ECAST), the European Helicopter Safety Team (EHST) and the European General Aviation Safety Team (EGAST). It contributes to the development and implementation of the European Aviation Safety Plan, and has produced several safety management and safety promotion documents.

2 EUROPEAN COMMERCIAL AVIATION SAFETY TEAM

2.1 ECAST¹² is the fixed-wing Commercial Air Transport (CAT) component of the ESSI. Co-chaired by EASA and IATA, ECAST brings together more than 75 organisations and cooperates with the US CAST and ICAO COSCAP programmes, and with the ICAO RASG-EUR initiative. Its activities mainly address safety analysis, Safety Management Systems (SMS) and safety culture, runway safety, ground safety, Flight Data Monitoring (FDM) and prospective safety.

2.2 ECAST has identified best practices regarding SMS organisation and produced guidance on safety culture assessment, hazard identification and risk management. The Airlines Risk Management Solutions Working Group, a team associated to ECAST, has published an innovative operational risk assessment method (called ARMS) for airlines and other aviation organisations. Risk assessment is one of the most challenging part of risk management.

2.1 ECAST sponsored the 2nd edition of the *European Action Plan for the Prevention of Runway Incursions*, published by EUROCONTROL. A wide array of stakeholders in Europe and worldwide are also addressing runway excursions, and the first edition of the *European Action Plan for the Prevention of Runway Excursions* was published in January 2013. This was developed by a working group led by EUROCONTROL with support from ECAST.

2.2 ECAST has also established a Ground Safety Working Group, the deliverables from which include a proposal for a Ground Safety Training Syllabus, research on Human Factors in ramp safety, and Ramp Resource Management training syllabus and course material. The Working Group has also contributed to the first edition of the IATA Ground Operations Manual, released in 2012, and encourages the use of the IATA ground products family: the Airport Handling Manual, the IATA Safety Audit programme for Ground Operations (ISAGO), the IATA Ground Operations Manual, and the Ground Damage Data Base.

¹² <http://www.easa.eu.int/essi/ecast>

2.3 The European Operators FDM Forum is voluntary initiative developed under the aegis of ECAST. It aims to assist operators in the implementation of an FDM programme and in drawing safety benefits from it by sharing best practices. Participation has been expanded to European and non-European aircraft operators, associations, flight crew associations, aircraft manufacturers, research and educational bodies, and aviation regulators. The forum organised two successful Conferences in Cologne in 2012 and 2013.

2.4 EASA has cooperated with the Future Aviation Safety Team, a group associated with both ECAST and US CAST, on prospective safety (dealing today with the risks of tomorrow). In 2012, a project team led by EASA published a *Methodology to Assess Future Risks*, as a deliverable of the Emerging Issues section of the European Aviation Safety Plan¹³.

3 EUROPEAN HELICOPTER SAFETY TEAM (EHEST)

3.1 EHEST¹⁴ is the helicopter team of ESSI, and the European component of the International Helicopter Safety Team. (IHST). It plays an essential role in the development of the helicopter section of the European Aviation Safety Plan.

3.2 The world accident rate for civil helicopters is still much greater than that of fixed wing aircraft. Although few exposure data are available for certain regions or certain types of operations, the accident rate for civil helicopters can be estimated at around 0.80 per 100 000 hours.

3.3 IHST was established in the US in 2006 with the objective of achieving an 80% reduction in the accident rate by 2016 for civil and military operations. EHEST was established at the end of 2006 to address the specificities of the safety of helicopter operations in Europe. It brings together helicopter and component manufacturers, operators, regulators, helicopter and pilots associations, research institutes, accident investigation boards and some military operators, from across Europe. Co-chaired by EASA, the European Helicopter Operators Committee (EHOC) and Eurocopter, it brings together around 50 organisations to address a broad spectrum of helicopter operations, from Commercial Air Transport to Specialised Operations (Aerial Work) and General Aviation, and flight training activities.

3.4 EHEST has an analysis team (the European Helicopter Safety Analysis Team), an implementation team (the European Helicopter Safety Implementation Team) organised in different sub-teams specialised in training, SMS and operations, technology, maintenance and regulation, and a communication team. It published in 2010 an analysis report of 311 helicopter accidents in Europe between 2000 and 2005, on the basis of which five implementation sub-teams were formed to address training, SMS and operations, technology, maintenance and regulation aspects.

3.5 EHEST deliverables include a Safety Management Toolkit based on the European Ops Implementing Rules and Acceptable Means of Compliance on Management Systems published in 2012, and several safety leaflets and videos on high priority safety topics. These include Loss of Control in Degraded Visual Environment, Vortex Ring State, Loss of Tail Rotor Effectiveness Static and Dynamic Rollover, pre-flight risk assessment, helicopter airmanship, off-airfield landing sites, pilot decision making, risk assessment in training, auto-rotation in training, and passenger management. The EHSIT has also published a Maintenance Toolkit in cooperation with the IHST, and is currently developing a Flight Crew Training Instructor Manual.

¹³ <http://www.easa.eu.int/sms>

¹⁴ <http://www.easa.eu.int/essi/ehest>

4 EUROPEAN GENERAL AVIATION SAFETY TEAM (EGAST)

4.1 Launched in late 2007, EGAST¹⁵ is the third ESSI team, and addresses fixed-wing General Aviation (GA). In Europe, as in other regions of the world, this is a dispersed community, with sporting and recreational aviation embracing a wide spectrum of activities, ranging from powered flying, ballooning and gliding to more recently invented pursuits such as sky-surfing, micro light flying and paragliding.

4.2 Building on existing initiatives taken at the national level or within GA manufacturer, organisations and associations, EGAST is co-chaired by EASA, the European Airshow Council (EAC) and the European Council for General Aviation Support (ECOGAS). It encompasses more than 50 organisations and cooperates at the international level with the General Aviation Joint Steering Committee co-chaired by the FAA and with the Aircraft Owners and Pilots Association's (AOPA) Air Safety Foundation.

4.3 EGAST's objective is to further improve GA safety through safety promotion, education and the sharing of good practices. It is organised around four activities: data analysis at European level, safety promotion, interface with research, and communication.

4.4 EGAST identifies, develops and shares safety leaflets and videos on risk awareness and decision making enhancement for the GA pilot and the GA community in Europe. Recent publications include videos on Loss of Control, human error, and the use of parachutes, and safety leaflets have been issued on collision avoidance, pilot decision making and weather anticipation, navigation in day VFR using advanced technologies, and stall/spin Loss of Control. In addition, safety promotion material (including posters) from European National Aviation Authorities and GA associations are made available to the community through the EGAST website.

5 ACTION BY THE ASSEMBLY

5.1 The Assembly is invited to take note of the development of the European Strategic Safety Initiative.

¹⁵ <http://www.easa.eu.int/essi/egast>