



**European Network
of
Civil Aviation
Safety Investigation Authorities**

ANNUAL REPORT

2013

FOREWORD

BY THE CHAIRMAN OF THE EUROPEAN NETWORK OF CIVIL AVIATION SAFETY INVESTIGATION AUTHORITIES



After three years, the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) is about to reach its cruising speed.

ENCASIA was established by Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation. Article 7 of this Regulation describes the ENCASIA areas of responsibilities. A key objective for ENCASIA consists of further improving the quality of investigations conducted by European safety investigation authorities and to strengthen their independence.

This report summarizes the third year of ENCASIA's activities. Training has been a priority as well as the setting up of a peer review programme that aims to support each safety investigation authority. I am also pleased to present the first outputs of the safety recommendation database that has been analyzed by ENCASIA. This represents a very important tool for the aviation community in Europe to continue to further improve safety.

The year 2013 has seen the creation of a new Annex on Safety Management, which was numbered Annex 19. At EU level, the revision of Directive 2003/42/EC on occurrence reporting will also lead to the exploitation of more safety-related events. It is indeed important to use the vast quantities of data that are now produced by new systems (on-board and ground-based) as well as through mandatory and voluntary reporting schemes. The Regulation on the investigation and prevention of accidents and incidents has also enlarged the role of safety investigation authorities by defining the concept of safety investigations and by putting more emphasis on the investigation of incidents, especially when it is expected to draw safety lessons from them. Article 4(4) enables the safety investigation authority to extend its activities to the gathering and analysis of aviation safety related information, in particular for accident prevention purposes. Therefore, it remains essential that safety investigators have access to incidents and occurrence databases to encourage safety action and safety recommendations based on all types of occurrence for the prevention of air accidents.

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This report mentions safety recommendations that are based on safety studies and on the analysis of a series of investigations. ENCASIA has facilitated the issuance of common safety recommendations from various authorities related to similar occurrences. The Network has continued to grow to find its place in the overall European safety scheme.

In 2014, ENCASIA will further develop its work programme and will foster cooperation among its Members with the support of the Union. Our next step will consist of presenting our various and growing outputs on a website so that ENCASIA will be better known by the European citizens.

Finally I would like to welcome the safety investigation authority of Croatia to ENCASIA. Croatia has joined the European Union on the 1st of July 2013. This has changed the status of the Croatian representative to a full ENCASIA member from an observer.

I look forward to working with the 28 ENCASIA members and with our observers.

Ulf KRAMER

ENCASIA Chairman and
Director of the German Safety
Investigation Authority (BFU)

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INTRODUCTION

Regulation (EU) No 996/2010 established the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) and has put strong emphasis on the coordination role of Safety Investigation Authorities (SIAs) and its reinforcement in a European context, in order to generate real added value in aviation safety. This is to be achieved by building upon the already existing cooperation between such authorities and the investigation resources available in the Member States. SIAs should be able, in each Member State, to conduct efficient and independent investigation and participate in the prevention of accidents through their activities. ENCASIA seeks to recognise and reinforce SIAs with a well-defined role and tasks.

ENCASIA is composed of the heads of the Safety Investigation Authorities in each of the Member States and/or, in the case of a multimodal authority, the head of its aviation branch, or their representatives, including a chairman chosen among these for a period of three years.

This 2013 report is the third ENCASIA annual report related to the implementation of its work programme. It will, in particular, highlight the first sponsored activities on training, the recent developments regarding the Working Group on Peer Reviews (WG5) as well as the creation of the new Working Group on safety recommendations (WG6). It also includes basic safety statistics in Appendix 1. They show that aviation safety has greatly improved, especially for Europe where there were no fatal accidents involving air transport airplanes in 2013. On the other hand, it remains important to keep recording and studying these other accidents, so that safety lessons can be learned from these tragedies where European citizens can be involved.

This report will be transmitted to the European Parliament and to the Council and made available on the Commission's webpages:

http://ec.europa.eu/transport/modes/air/safety/accident_investigation/authorities_en.htm

1) REINFORCING THE ESTABLISHMENT OF ENCASIA

1.1) ENCASIA's legal personality

ENCASIA's legal personality was established in September 2012 under Belgium Law. It is represented by a non-profit organization ("Association Sans But Lucratif": ASBL). As stated in the bylaws, ENCASIA asbl¹ was created for the sole purpose of representing the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) as established by Article 7 of the Regulation (EU) No 996/2010 on the investigation and prevention of civil aviation accidents and incidents.

A copy of the ENCASIA asbl bylaws is publicly available on the website of the official Belgian Journal:

http://www.ejustice.just.fgov.be/tsv_pdf/2012/10/01/12162581.pdf

1.2) Commission's grant

The practical result of having a legal personality has enabled ENCASIA to open a bank account in order to receive grants from the European Commission as foreseen by Article 7(7) of the Regulation (EU) No 996/2010. In 2013, ENCASIA managed to use the Commission's grant to organize training courses that are further described in this report. This grant of approximately €100,000 was called ENCASIA-1.

On 18 September 2013, the ENCASIA plenary meeting approved the project for a second grant (also of approximately €100,000) subsidized by the European Commission (called ENCASIA-2). This grant will support: a training session to be held in Germany (on the model of the two previous ones) plus the peer review programme, which would cover the training and onsite visit of reviewers in four Member States for 2014. 50% of the grant will finance the training project with an EU dimension on ATM and airports and the other 50% will be devoted to the "Peer reviews" programme.

1.3) Relations with other safety groups

Next to ENCASIA, there are other groups dedicated to accident/incident investigation matters but within a broader geographical scope.

ECAC ACC: The European Civil Aviation Conference (ECAC) has established for many years the group of experts in accident/incident investigation (ACC). Its

¹ Statutory registration number: 848.835.815

Address: ENCASIA asbl / CCN, 2ème étage, bureau 2-023 / Rue du Progrès, 80 – Boite 5 / 1030 Bruxelles

Chairman is Mr. Jurgen Whyte (Ireland). The ECAC ACC Group, with its wider membership and many observers, has the ability to reach out and bring a more international dimension to its discussions and activities. ACC is a working body able to adopt broad general positions, rather than a decision-making entity. ENCASIA and ACC complement each other's actions through careful coordination to prevent duplication in their activities.

Mr. Kramer presented ENCASIA activities during the two 2013 ACC meetings respectively held in Brussels in May 2013 and in Derby (UK) in October 2013. ACC meetings have dedicated time for the yearly exchange of accident and serious incident data in a structured manner. These sessions, focused on the sharing of data and experience, have proved being useful to discuss existing safety concerns.

ESASI: The European Society of Air Safety Investigators held its annual seminar in Madrid in April 2013. This seminar offered to ENCASIA a platform to have direct outreach with the European Industry which has been usually well represented during these seminars. This enabled them to keep abreast of the recent developments in the field of civil aviation safety investigation in Europe. It is important to note that the military safety specialist have been largely influenced by the civilian initiatives. They have been interested in copying the same schemes articulated around cooperation and exchanges of best practices. For the first time, they held a concomitant meeting with ESASI in order to establish a European group of military safety investigators.

Looking forward, ENCASIA will get ahead with the 2015 ISASI² seminar, which will be held in Germany in August 2015. This seminar will provide for ENCASIA an international platform to display its more prominent role of an aviation safety entity on a global level.

Eurocontrol workshop: On 18 June 2013, several ENCASIA members participated to a workshop organized by Eurocontrol on Go-Around. That safety forum highlighted some general findings such as:

- The average go-around rate is one out of 500 flights
- Less than 5% of unstabilized approaches lead to go-around.
- One in ten go-around presented some levels of risks.

This typology of accidents has represented a safety priority over the past year. In the list of fatal accidents that occurred in 2013 (see Appendix 1), it can be noted that the accident during go-around in Russia was the one that caused the most victims (50 fatalities).

² International Society of Air Safety Investigators

Through collaboration with all these entities, ENCASIA aims at participating in the exchange of information and best practices for safety purposes and, while remaining the core working body on safety investigations in Europe, aims at ensuring complementary work and good cooperation with already existing groups.

1.4) Preventing accidents by investigating incidents

The list of fatal accidents involving air transport aircraft in appendix 1 shows that no fatal accident took place in Europe in 2013. This positive indicator in public transport results from the continuous efforts of all the whole aviation community and represents an encouragement to pursue work on serious incidents. On the other hand, safety in general aviation remains to be enhanced with regards to numbers of fatal accidents.

Safety investigation authorities have the obligation to investigate serious incidents. The guidance to define a serious incident can be summarized in the Appendix of Regulation (EU) No 996/2010 and in Annex 13, Attachment C, paragraph 2: *“The incidents listed are typical examples of incidents that are likely to be serious incidents. The list is not exhaustive and only serves as guidance to the definition of serious incident.”* This important paragraph provides some flexibility to safety investigation authorities to select serious incidents. Through its Working Group on the "Inventory of best practices of investigation in Europe" (WG2), ENCASIA has also started to collect the practices of European SIAs regarding "the decision to open an investigation".

To make such decisions, the safety investigation authorities must first be aware of all incidents immediately in order to start an investigation and to preserve key evidence. Article 9 of Regulation (EU) No 996/2010 already states that: *“Any person involved who has knowledge of the occurrence of an accident or serious incident shall notify without delay the competent safety investigation authority of the State of Occurrence thereof.”* Presently, the notification of incidents is organized at the level of each Member State in line with Articles 4 and 5 of Directive 2003/42/EC. Therefore, it is important that the future Regulation on occurrence reporting will maintain safety investigation authorities in the loop so that they can start an investigation without delay. It is also important to have (or develop) a mechanism that strikes a balance between:

- having access to all incidents and
- setting up a selection process at the level of the operators and regulators to avoid data overflow.

The SIA has the prerogative to determine if the incident needs to be investigated or not. It also has the responsibility to ensure that safety data flow to the relevant stakeholders, in particular for information it deems relevant to the prevention of an accident or serious incident, to persons responsible for aircraft or aircraft equipment

manufacture or maintenance, and to individuals or legal entities responsible for operating aircraft or for the training of personnel³.

2) ENCASIA's work programme

ENCASIA has an annual work programme, which consists of managing the existing six working groups as well as making progress regarding the establishment of advance arrangements according to Article 12(3).

On 4 July 2013, the ENCASIA chairman, deputy chairman and the heads of the ENCASIA working groups (WG) held a coordination meeting to discuss priorities for the next actions of the Network's work programme. It has also enabled to discuss common needs, to review common areas of work and to plan the way forward. It was recognized that the activities undertaken by WG5 on "Peer Reviews" would somehow overarch the ones from the other working groups.

2.1) Working Group 1 (WG1): "Network Communication and Internet Presence"

The first working group deals with network communication and Internet presence. Its goal is to facilitate internal communication between ENCASIA Members and to make ENCASIA and its safety related activities more visible to the public through a website.

With regard to internal communication, ENCASIA has continued to operate the CIRCA BC platform provided by the European Commission.

WG1 finalized the structure and content of the ENCASIA website that was approved by the plenary meeting of 18 September 2013. The establishment of this website will remain a priority.

2.2) Working Group 2 (WG2): "Inventory of best practices of investigation in Europe"

Article 7(3) of the Regulation stipulates that *"In order to achieve the objectives set out in paragraph 2, the Network shall be responsible, in particular, for: [...] promoting best safety investigation practices with a view to developing a common Union safety investigation methodology and drawing up an inventory of such practices"*.

WG2 developed a questionnaire, which aims at listing references and practices used by national Safety Investigation Authorities. It has reviewed about seventeen responses. Several were accompanied by copies of investigation manuals and others by a rough description of the practices. Copies of manuals available in English have been easy to share. Some Member States also have their procedures written in

³ Art 15(2) of Regulation (EU) No 996/2010

English but for the majority, this has not been the case. The analysis of the questionnaires has also led to the identification of domains where variability existed and that could be subject to harmonization (such as report writing, the submission of draft final reports and decision to investigation incidents).

Regarding the term “best practices”, WG2 has first developed definitions to clarify “good practices”, “best practices” and “recommended practices” (see Appendix 2). It has also prepared an electronic document/interface to centralize the various procedures, based on the different stages of an investigation. These practices have been laid out in accordance with the various steps of an investigation and with the ICAO standard chapters on factual information. WG2 has worked with the other working groups, in particular:

- With WG1 on the need of having an electronic structure to store and access all the information gathered during the inventory process. In that respect, CIRCA BC has already enabled the sharing of information and documents. However, this system lacks some flexibility, such as the creation of more detailed sub-folders and the use of dynamic links. WG2 has recommended developing such interface on a more centralized and user-friendly system;
- With WG5 (Peer Reviews) about the sharing the results of the WG2 questionnaires, thus avoiding overlaps. The reviews should efficiently complement or enhance the WG2 questionnaires. "Peer Reviews" also represent the next step to further collect good practices by physically visiting safety investigation authorities and to feed them to WG2.
- With WG6 on safety recommendations, WG2 transferred its results to this new group specifically tasked on this subject.

2.3) Working Group 3 (WG3): "Procedures for asking and providing help"

In accordance with Regulation (EU) No 996/2010, WG3 has been tasked to prepare procedures for requesting and providing help among ENCASIA Member States. This should allow each safety investigation authority to fully perform an investigation, with the assistance of other Member States where relevant.

WG3 has prepared specifications for an ad-hoc system (extranet automated tool) in line with the preliminary procedures, which are tied to the nature and scope of the occurrence that could need assistance. This project has been broken down in three phases. In the short term, some data of public nature already available on CIRCA-BC are foreseen to be centralized on the ENCASIA website. In the meantime, WG3 has regularly updated and disseminated the list with H24 emergency numbers and permanent email inboxes to ENCASIA Members.

The second phase will improve the sharing of more data/procedures/resources availabilities in a user-friendly manner, probably through restricted webpages.

On the basis of the feedback received after the first two phases, the third phase will endeavour to refine the specifications, in particular on automated communications among ENCASIA members in the aftermath of accidents.

The guidance on mutual assistance in case of a major accident has been largely based on the ECAC Code of conduct⁴. WG3 was asked to plan a crisis simulation/exercise for ENCASIA Members to test the various procedures and the existing guidance.

The lessons learned from such exercise will help to consolidate and complete the procedures and the guidance material.

2.4) Working Group 4 (WG4): "Training of investigators"

WG4 delivered the final version of its guidance manual on training in a reformatted version with illustrations to make it more eye-friendly. This document will be made available on the future ENCASIA site. The manual notably covers basic and advanced courses, as well as specialty training courses. The two ENCASIA-sponsored training courses were organized in the light of this manual. They are further described in Chapter 3.1 that specifically deals with ENCASIA training courses.

In liaison with the Training Steering Committee that has mainly dealt with financial aspects, WG4 has coordinated the implementation of these two investigator training courses. More ENCASIA-sponsored training courses will be organized in 2014. Such common training sessions will contribute to the gradual harmonisation of training standards for European safety investigators.

2.5) Working Group 5 (WG5): "Peer Reviews"

The WG5 Terms of Reference were adopted by the plenary meeting on 31 January 2013 (see Appendix 3). It was already acknowledged that the task would be a complex one. The group defined the term "Peer Review" and studied the differences between the concepts of "audits" and "peer reviews". A table summarizing the main characteristics was established from the experience of the work carried out during the Peer Review Programme of National Supervisory Authorities (NSAs).

WG5 has continued to develop the Peer Review process and guidance material, though due to other commitments the group has effectively reduced to five active

⁴ The ECAC Code of Conduct on cooperation in the field of civil aviation accident/incident investigation had 31 signatories as of the 1st of December 2009
https://www.ecac-ceac.org//publications_events_news/ecac_documents/codes_of_conduct

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members. The objective of the Peer Review process, within a European Safety Investigation Authority (SIA), is to improve aviation safety by:

- Assisting individual European SIA's in establishing a capability for the investigation of civil aviation accidents and serious incidents.
- Verifying that investigations are conducted by a permanent national SIA in an effective and independent manner.
- Spreading best practice across SIA's and the harmonization of practices where multiple SIA are involved.
- Helping States to meet the requirements of Regulation (EU) No 996/2010.

The Peer Review process consists of four elements:

- A questionnaire and guidance document against which the SIA and the Peer Review panel can determine if the SIA is capable to meet its obligations to investigate aircraft accidents and serious incidents.
- An annual two-day training event opened to one representative from each SIA; the primary aim of this event is to train the reviewers on how to carry out Peer Reviews. However, the secondary aim is to spread information on good practices across the European SIAs and to provide an opportunity for individuals across Europe to meet and share experiences.
- A one day site visit, which is an opportunity for the Peer Review panel, and observers, to consolidate the information in the questionnaire and to exchange ideas on good practices.
- A summary report of the Peer Reviews, which will be available to the Commission and all members of ENCASIA.

The development of the draft questionnaire has raised numerous comments, notably regarding the involvement of EASA, the scope of the questionnaire with regard to the questions provided by the Commission on compliance, the protection of information collected during the Peer Review process and the possible use of the "Peer Reviews" results by the Commission.

WG6 prepared a financial proposal for the introduction of Peer Reviews in 2014, which was adopted in principle by the ENCASIA plenary meeting of 18 September 2013.

The scope and objective of the "Peer Reviews" has been agreed by ENCASIA and all SIAs were given the opportunity to review the proposed questionnaire during 2013. The finalised questionnaire and draft summary report will be submitted to ENCASIA for approval during the meeting on 22 January 2014.

In conclusion, Peer Reviews will foster the dissemination/cross-fertilization of best practices amongst the safety investigation authorities so that each authority can

ultimately harmonize them. Peer Reviews are foreseen to be beneficial for both sides: the reviewers and the ones who will be reviewed. They are expected to start with four Member States that would volunteer for this programme.

2.6) Working Group 6 (WG6): "Safety Recommendations"

WG6 has specifically addressed the use of the new EU safety recommendations database, also called SRIS (Safety Recommendations Information System). The group has mainly focused on the areas of improvement in the existing SRIS database, the development of guidelines and common procedures as well as the promotion of a consistent use of SRIS.

The Joint Research Centre (JRC) has been involved in the working group through technical support on the tool (defining functionalities and the interface). Various views can be displayed when taking into account the various possibilities of customization that are offered by ECCAIRS and SRIS (which is built on an ECCAIRS plat-form). The JRC developed a Windows interface to SRIS as well as a new interface for the SRIS public part, which can be made available onto the ECCAIRS portal. It will modify some views and have them tested before their adoption by the plenary meeting. The next step will consist of exploring how to link SRIS to the ECR. Getting occurrence data has already been successfully tested. When implemented, this functionality should avoid unnecessary duplication of efforts and respect the confidentiality provisions of the applicable legislation.

The functionality to duplicate a SR was made available to all users, as it helps to save time when an occurrence has multiple SRs. The overview of the SRIS content showed that great progress was made with entering data on addressees. On the other hand, more work will be needed on other fields, such as the field "Headline", as different approaches have been noted.

In terms of guidance, WG6 recommended that as far as possible each SR should be addressed to a single addressee. It facilitates the follow-up of the safety recommendation, especially if two addressees have diverging responses. The new ICAO guidance material⁵ is in line with the WG6 recommendations: "*In order to ensure that appropriate action is taken, each safety recommendation should be issued to a specific addressee⁶. (...)*"

It is later mentioned that: "*Consideration should be given as to whether a safety recommendation should prescribe a specific solution to a problem or whether the*

⁵ DOC 9756 AN/965 - Manual of Aircraft Accident and Incident Investigation - Part IV Reporting - Second Edition (advance unedited) - 2013
⁶ Ibid. Paragraph 4.5

recommendation should be flexible enough to allow the addressee latitude in determining how the objective of the recommendation can be achieved⁷."

Accordingly, SIAs have been invited to draft SRs that are more problem-oriented rather than solution-oriented. It has also been recommended to set up a dialogue with the addressee during the SR drafting phase.

WG6 has also started a review of the taxonomy of addressees in coordination with the ECCAIRS group on taxonomies and CICTT (CAST ICAO Common Taxonomy Team).

Cost benefit analyses have been considered as being outside the scope of safety investigation (as the SIA should focus on safety matters and not on implementation). Plus a cost analysis of a solution would imply that investigators are pre-empting the solution.

Remaining challenges

The numbering of SR remains a difficult issue as several SIAs need to have their own reference number to cope with their specificities (e.g. if they are multimodal).

Article 18(5) of Regulation (EU) No 996/2010 states that "*Safety investigation authorities shall similarly record in the central repository all safety recommendations received from third countries*". For the time-being, SRIS does not enable such data-entries. In addition, the follow-up of these SR seems problematic. A solution could be to share the same taxonomy with third-country safety recommendation databases (mainly with ICAO, the United States and Canada).

There is currently no consistent approach for closing safety recommendations. When EASA enters a SR into the Terms of Reference of the RMT (Rule-Making Tasks), it considers the SR as closed whereas most SIAs consider it remains open.

WG6 has worked on harmonizing the SRIS database notably by analysing and reviewing its content. Such work also encompasses the adoption of a common doctrine of drafting (or not) safety recommendations. This approach as well as the procedures will be shared in Europe and with third countries.

3) Specific 2013 activities

3.1) ENCASIA training courses

The Commission grant called "ENCASIA-1" enabled to organize two training courses.

The **first training course**, organized by ENCASIA, was held on 15-17 May 2013 in the premises of the Air Accidents Investigation Branch (AAIB) in Farnborough, UK.

⁷ Ibid. Paragraph 4.7

The training programme covered the management of site hazards and personnel safety required during investigation activities and the recovery of flight data for investigators. In addition to the lecturers who also participated to the courses, there were 22 attendees, representing 22 different Members States. Five SIAs could not send any representatives, mainly due to workload constraints, in relation to the unpredictability of the activities.

The objective of this session was to provide investigators with a harmonized and ENCASIA-developed risk assessment framework, so that the safety of all participants at the accident sites can be assured. It was also about facilitating investigators coordinated and harmonized access to crash sites in Europe and about gaining access to crash sites abroad in line with the ENCASIA training guidelines and the NTSB requirements (OSHA 29CFR part 1910.1030-USA).

The session also enables mutual sharing of good practices on PPE (Personnel Protective Equipment). These objectives were met thanks to the active involvement of the ENCASIA speakers and the commitment of the AAIB-UK. The efficient role of the subcontractor (B&S Europe) who handled logistics was also acknowledged as crucial.

The **second training course** was held on 21-23 October 2013 in the premises of the Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile (BEA) in Le Bourget, France. The training programme focused on the harmonisation of the response for a major safety investigation occurring in an EU Member State or involving an EU member State's accredited representative. The training program also dealt with technical issues such as:

- The coordination required in a safety investigation for the examination of aircraft parts or systems;
- Different types of computation that can be performed using available recording data.

In addition to the lecturers who also attended the courses, there were 28 attendees, representing 25 different Members States. Eight safety investigation authorities and EASA participated as lectured.

3.2) Exploiting the Safety Recommendations Information System (SRIS)

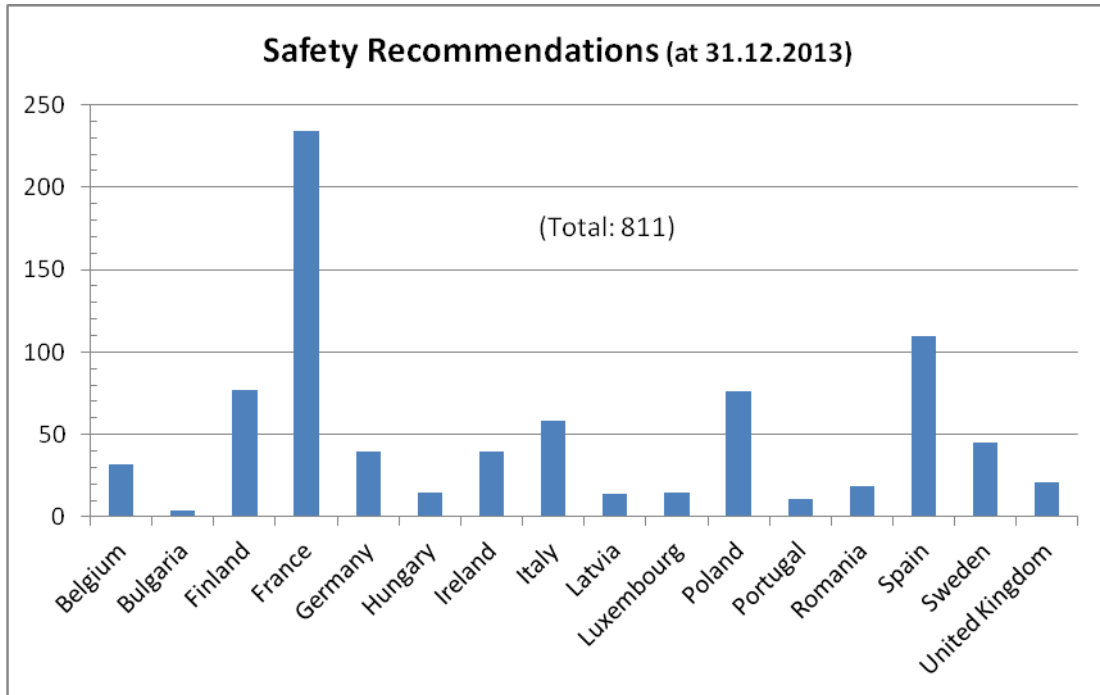
After slightly less than two years of operations, 811 safety recommendations were recorded in SRIS at the 31st of December 2013.

Note: By the end of 2012, SRIS contained 239 safety recommendations. This represents an increase of nearly 240%.

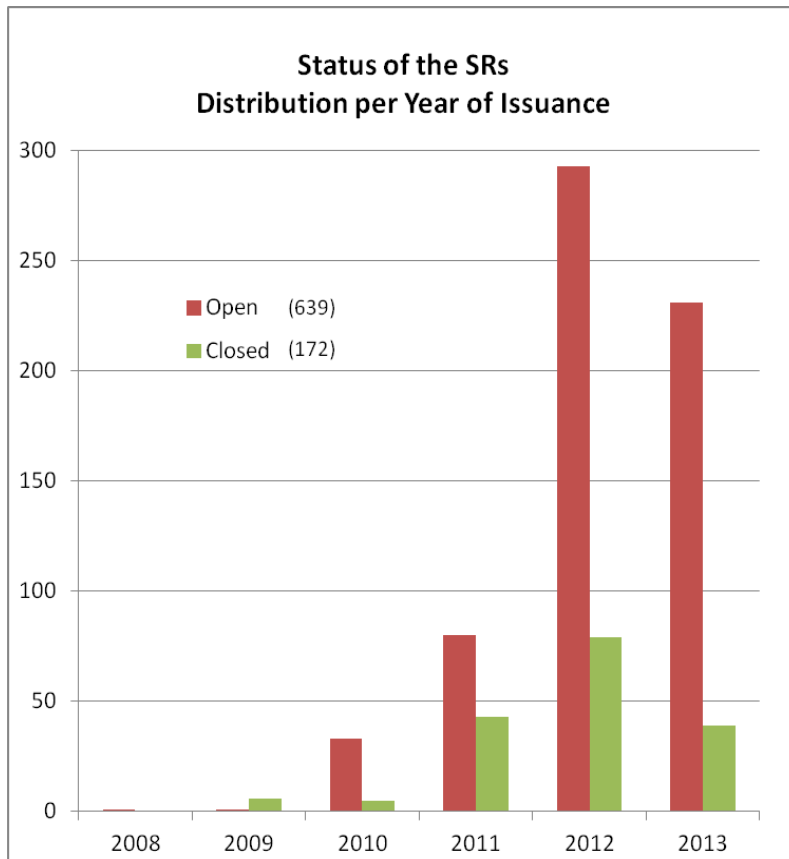
The following chart represents the breakdown per Member State. Sixteen Members States have been using SRIS, but in some countries, a safety investigation is not

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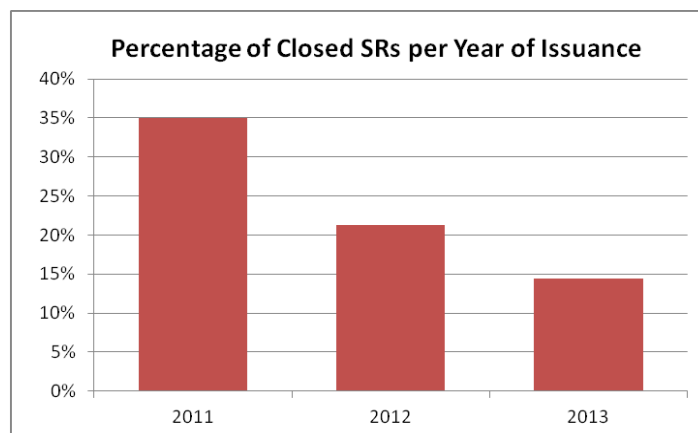
necessarily concluded by safety recommendations. Although Member States have different approaches for issuing SRs, WG6 has already noted the beginning of converging trend.



The status of the SRs is considered closed in the 21.2% of the cases. The following chart shows the distribution of the status as a function of the year of issuance.



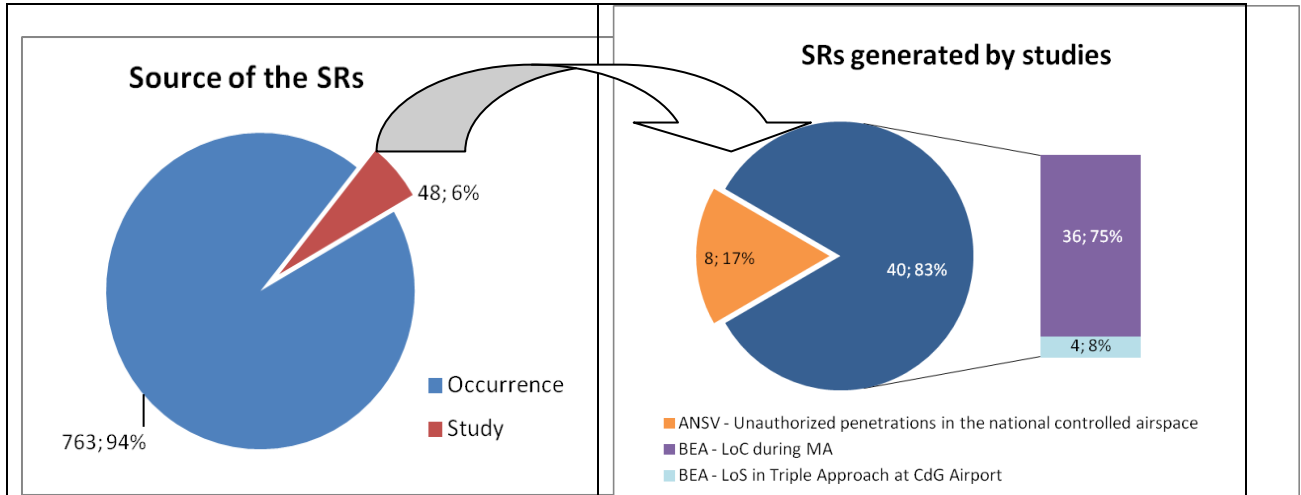
The closure trend has logically increased with the pass of time as shown by the next chart.



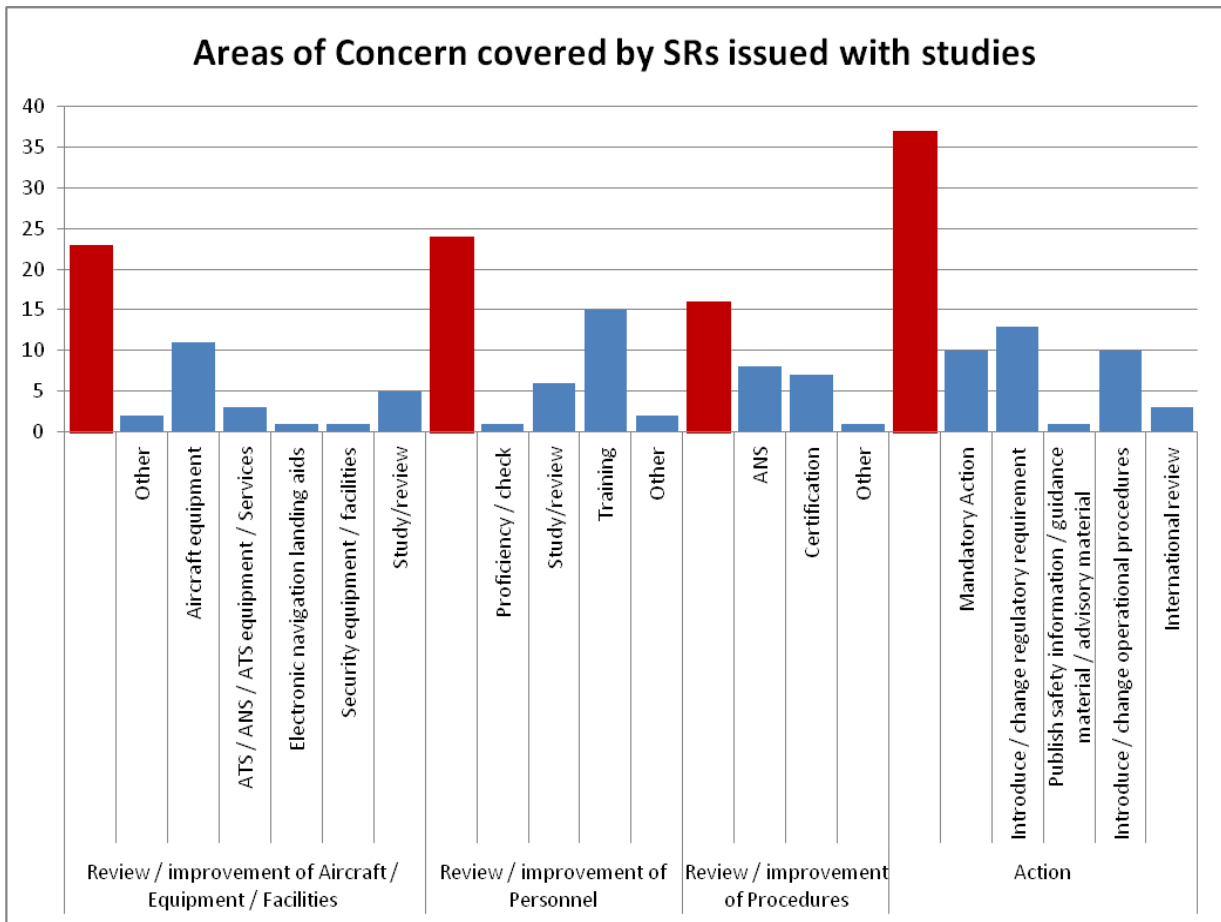
Regulation (EU) No 996/2010 (Recital 28; Article 2(15); Article 17(2)) stipulates that safety recommendations can be released after a safety study, thus having a greater evidential basis leading to safety actions. The SRIS recommendation database now contains about 6% of SRs that are based on safety studies issued in 2013, covering the issues of “Loss of Control during Go-Around procedures”, “Loss of separation in

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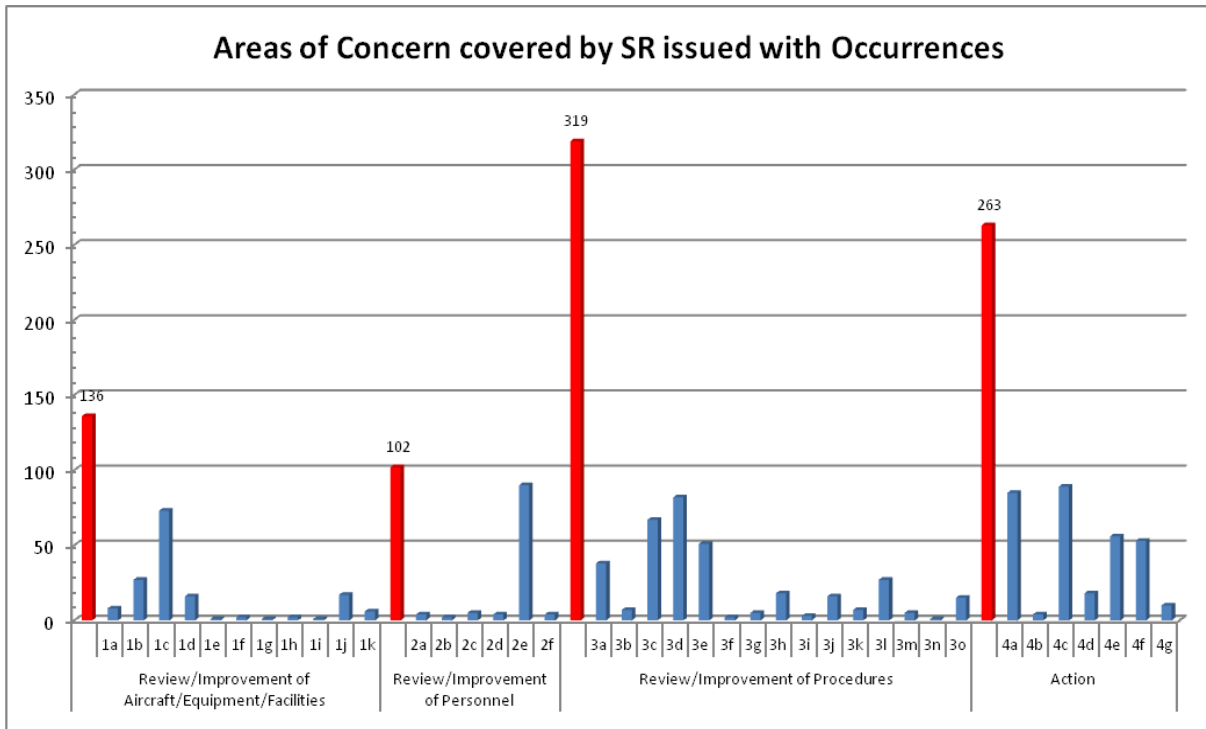
Triple Approach at Paris - Charles de Gaulle Airport”, “Unauthorized penetrations in the Italian controlled airspace”, in the proportions showed in the following charts.



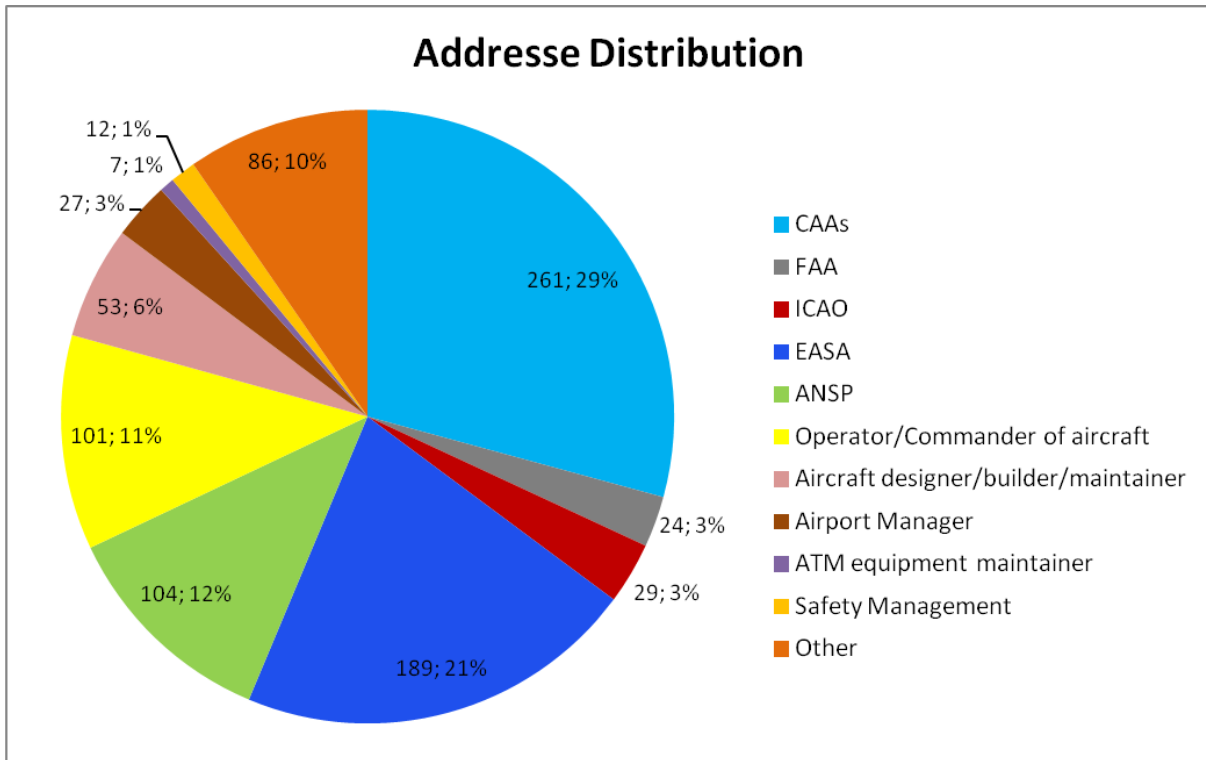
This specific set of SRs covered a wide range of topics as described by the following histogram, with particular emphasis on “Training”, “Introduction/Change of regulatory requirements”, “Improvement of aircraft equipment”, “Introduction/Change of operational procedures”.



However, a different situation can be observed when the areas of concern associated to the SRs issued in the course or at the end of the investigation of occurrences are considered. In this case, the highest percentage of recommendations are related to the area of “Review/improvement of procedures” (38.9%) with special focus on “aircraft maintenance inspection”, “aircraft operations” and “ANS” (see hereafter as respectively indicated in 3c, 3d, and 3e).



The following breakdown shows that the national civil aviation authorities and EASA are the main SR addressees with respectively 29% and 21% of the total. The Air Navigation Service Providers (ANSPs) are in third position with 12%. One can also note the proportion of safety recommendations addressed to entities such as the operator or commander of the aircraft, the aircraft manufacturer, the airport manager, the ATM equipment maintainer or safety management. This later reference has raised questions about the taxonomy.



Accident and incident reports are generally more effective when they reference similar cases, which may then support common safety recommendations. Such an independent compilation of events also provides more validated data for the risk analysis process, which is often performed by regulators.

SIRS contains a set of safety recommendations that have been jointly conceived, drafted and finally issued in July 2012 by three different European SIAs⁸ in a common effort to address similar events having occurred over a short period of less than four months. Analogous initiatives are to be encouraged and expanded for cases where similarities can be identified during ongoing investigations in third countries. In these cases, the SIA involved as an accredited representative should promote an effective coordination and provide relevant safety information to prevent accidents to the appropriate persons responsible for aircraft manufacture or maintenance, for operating aircraft, etc. In addition, it would be in a good position to exploit SRIS and encourage common safety recommendations that would then be supported by more occurrences.

⁸ Denmark, Hungary and Italy

In accordance with the Commission Decision of 5 December 2012 on access rights⁹, all safety recommendations contained in the SRIS database are made available to the general public through the following public website:

<http://eccairs-dds.jrc.ec.europa.eu/pubsr/sr/>

3.3) Update on advance arrangements

The 2013 work programme also includes the action to make progress regarding the establishment of advance arrangements according to Article 12(3), which states: *"Member States shall ensure that safety investigation authorities, on the one hand, and other authorities likely to be involved in the activities related to the safety investigation, such as the judicial, civil aviation, search and rescue authorities, on the other hand, cooperate with each other through advance arrangements"*.

For a majority of Member States, these advance arrangements have either been in the process of being updated or contacts with other authorities have been made. However, the establishment of such arrangements has often been difficult, in particular when dealing with judicial authorities and confidentiality aspects. To help making process, the advance arrangements that have been concluded are shared by ENCASIA on CIRCA-BC. These difficulties are also regularly discussed during plenary meetings.

On 18 September 2013, the European Commission informed ENCASIA Members that it had started EU-Pilot procedures towards a number of Member States in relation to this provision.

⁹ Article 2 of Commission Decision of 5 December 2012 on access rights to the European Central Repository of Safety Recommendations and their responses established by Article 18(5) of Regulation (EU) No 996/2010

CONCLUSIONS (THE WAY FORWARD)

ENCASIA has become an established European entity that started working in accordance with Regulation (EU) No 996/2010. ENCASIA is a collective entity that needs the involvement of all Member States to maintain successful and meaningful inputs for aviation safety.

The European Union has been fortunate not having to face any major fatal accident since 2009. ENCASIA has continued to proactively work to help prevent accidents and has also strived to prepare reacting to such occurrences. Depending on the nature and especially the location of the accident, Europe's capacity to conduct a major public transport accident investigation could be challenged. Therefore, ENCASIA has pursued several avenues to pool resources and to provide strong guarantees that all Member States will have the necessary support to face a major public transport accident.

The year 2014 will be marked by the foreseen review of Regulation (EU) No 996/2010 according to Article 24, where it is stated that *“This Regulation shall be subject to a review no later than 3 December 2014. Where the Commission considers that this Regulation should be amended, it shall request the Network to issue a preliminary opinion, which shall also be forwarded to the European Parliament, the Council, the Member States and EASA”*. The Regulation already provides a sound environment for independent and effective safety investigations. ENCASIA has put emphasis on the resources and on the independence of each national safety investigation authority as well as on its own status. These points have also been expressed by some Members when answering the European Commission's questionnaire on this matter.

In 2014, ENCASIA will keep implementing its ambitious work programme to reinforce its place in the overall European safety scheme.

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APPENDICES

Appendix 1: List of 2013 Fatal Accidents involving commercial activities

Date	Location	Aircraft type	Air carrier	Number of fatalities
15-JAN-2013	Pellston Regional Airport, MI (PLN), USA	Cessna 208B Super Cargomaster	Martinaire	1 fatality
23-JAN-2013	Queen Alexandra Range, Antarctica	DHC-6 Twin Otter 300	Kenn Borek Air	3 fatalities
29-JAN-2013	Almaty Airport (ALA), Kazakhstan	Canadair CL-600-2B19 Regional	SCAT	21 fatalities
13-FEB-2013	Donetsk Airport (DOK), Ukraine	Antonov 24RV	South Airlines	5 fatalities
04-MAR-2013	Goma Airport (GOM), D.R. Congo	Fokker 50	CAA	7 fatalities
08-MAR-2013	Dillingham Municipal Airport, AK (DLG), USA	Beechcraft 1900C-1	ACE Air Cargo	2 fatalities
07-APR-2013	São Tomé Island Airport (TMS), Sao Tome	Beechcraft 1900C-1	Sahel Air Service	1 fatality
29-APR-2013	Bagram Air Base (BPM), Afghanistan	Boeing 747-428BCF	National Airlines (National Air Cargo)	7 fatalities
10-JUN-2013	N'Gaoundéré Airport (NGE), Cameroon	Cessna 208 Caravan I	CotonTchad	1 fatality
29-JUN-2013	Francistown Airport (FRW),	Embraer EMB-110P1	Batair Cargo	2 fatalities

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	Botswana	Bandeirante		
06-JUL-2013	San Francisco International Airport, CA (SFO), USA	Boeing 777-28EER	Asiana Airlines	3 fatalities
07-JUL-2013	Soldotna Airport, AK (SXQ), USA	DHC-3T Texas Turbine Otter	Rediske Air	10 fatalities
14-AUG-2013	Birmingham-Shuttlesworth International Airport, AL, USA	Airbus A300F4-622R	UPS	2 fatalities
22-AUG-2013	Ivanhoe Lake, NT, Canada	De Havilland Canada DHC-3T Vaz	Transwest Air	1 fatality
09-SEP-2013	Viña del Mar Airport (KNA), Chile	Dornier 228-202K	CorpFlite	2 fatalities
25-SEP-2013	Hudson Bay, ON, Canada	Cessna 208B Grand Caravan	Morningstar Air Express	1 fatality
03-OCT-2013	Lagos-Murtala Muhammed International Airport (LOS), Nigeria	Embraer 120RT Brasilia	Associated Aviation	16 fatalities
10-OCT-2013	Kudat Airport (KUD), Malaysia	DHC-6 Twin Otter 310	MASwings	2 fatalities
14-OCT-2013	Loreto Airport (LTO), Mexico	Cessna 208B Grand Caravan	AereoServicio Guerrero	14 fatalities
16-OCT-2013	Pakse Airport (PKZ), Laos	ATR-72-212A (ATR-72-600)	Lao Airlines	49 fatalities
03-NOV-2013	Riberalta Airport (RIB), Bolivia	Swearingen SA227-AC Metro III	Aerocon	8 fatalities
10-NOV-2013	Red Lake Airport, ON (YRL), Canada	Swearingen SA227-AC Metro	Bearskin Airlines	5 fatalities

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		III		
17-NOV-2013	Kazan Airport (KZN), Russia	Boeing 737-53A	Tatarstan	50 fatalities
25-NOV-2013	Kibeni, P.N. Guinea	Cessna 208B Grand Caravan	Tropicair	3 fatalities
29-NOV-2013	Bwabwata National Park, Namibia	Embraer ERJ 190-100 IGW (ERJ-1	LAM	33 fatalities
29-NOV-2013	Saint Mary's Airport, AK (KSM), USA	Cessna 208B Grand Caravan	Era Alaska	4 fatalities
02-DEC-2013	La Alianza, Arecibo, Puerto Rico	Swearingen SA227-AC Metro III	IBC Airways	2 fatalities
11-DEC-2013	Kalaupapa Airport, HI (LUP), USA	Cessna 208B Grand Caravan	Makani Kai Air	1 fatality
26-DEC-2013	Irkutsk-2 Airport, Russia	Antonov 12	Irkut	9 fatalities

TOTAL: 29 fatal accidents and 265 fatalities

Note: The worst accident in 2013 happened on November 17 when a Tatarstan Airlines Boeing 737 crashed while on approach to Kazan, Russia, causing 50 fatalities.

Source: <http://aviation-safety.net>

Appendix 2: WG2 definitions for “Good”, “Best” and “Recommended” Practices

Practice: A practice is one way of achieving an objective or a step in the safety investigation process. It can be formalized by written procedures or adopted informally through accepted working practices.

Good Practice: A “Practice” is considered as a “Good Practice” when it used regularly, considered to be useful and efficient in a given context, and the safety investigation authority concerned have adopted it as their preferred method of operation.

Comments: a Practice collected via WG2 Questionnaire is considered as a “Good Practice” since answering SIA agreed to share it with other SIAs, meaning that the answering SIA considers that this practice is useful and adapted to its context (the cost/benefit trade-off is considered satisfactory in the SIA situation). Peer review process is likely to collect “Good Practices” in the future by physically visiting SIA.

Best Practice: “Best Practice” is a generic term equivalent to “Good Practice”.

Recommended Practice: A “Recommended Practice” is a “Practice” approved and published by ENCASIA with the aim of harmonising practices that involve multiple European safety investigation authorities.

Appendix 3: Terms of Reference ENCASIA WG5 "Peer Reviews"

Objective

In accordance with Regulation (EU) No 996/2010 Recital 15¹⁰ and in application of Regulation Articles 7 paragraph 2¹¹ and paragraph 3(c)¹² this working group shall prepare procedures for the scope and conduct of Peer Reviews among ENCASIA Member States. The purpose of the Peer Review is to aid in the sharing of best practice, improve the quality of investigations and strengthen the independence of Safety Investigation Authorities (SIA). Peer reviews may contribute to the implementation of the Regulation.

Program

Based on EU Regulation No 996/2010 this working group will develop guidance material for the conduct of Peer Reviews among SIAs within Member States. In completing this task, the working group will consider, but is not limited to, the following elements:

- Definition of Peer Reviews;
- Scope of Peer Reviews;
- Criteria against which a Peer Review is carried out;
- Confidentiality;
- Peer Reviews Reporting procedures;
- Coordination of Peer Reviews;
- Manpower for Peer Reviews;
- Scheduling of Peer Reviews;
- Allocation of costs;
- Subcontracting administrative functions of Peer Reviews;
- Training of personal undertaking Peer Reviews;
- Follow up actions of Peer Reviews.

Outputs

The Working Group should provide the Chairman of ENCASIA with:

- Regular updates on the progress of the Working Group;
- A final report recommending how Peer Reviews might be carried out within Member States.

¹⁰ Recital 15. "The safety investigation authorities play a core role in the safety investigation process. Their work is of the utmost importance in determining the causes of an accident or incident. It is therefore essential that they should be able to conduct their investigations entirely independently and also that they should possess the financial and human resources required to conduct effective and efficient investigations."

¹¹ Article 7, paragraph 2. "The Network shall seek to further improve the quality of investigations conducted by safety investigation authorities and to strengthen their independence. In particular, it shall encourage high standards in investigation methods and investigator training."

¹² Article 7, paragraph 3.c. "...coordinating and organising, where appropriate, 'peer reviews'"

-END-

