COMMISSION STAFF WORKING DOCUMENT

on the implementation of Regulation (EU) No 996/2010 on the investigation and prevention of accidents and incidents in civil aviation
Executive Summary

This Commission Staff Working Document summarises the Commission's findings on the implementation and the functioning of Regulation (EU) No 996/2010 on the investigation and prevention of accidents and incidents in civil aviation (the Regulation). It provides detailed feedback on the achievements made since its entering into force five years ago. It puts in perspective the main objectives of the Regulation, highlights some of the difficulties met during the implementation of the Regulation and underlines the achievements of the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA). The Staff Working Document also describes a number of possible improvements which could be achieved within the existing legal framework, for example through more formalised cooperation. Finally, it notes that the Commission intends to evaluate in 2016/2017 whether there is a need for a revision of the existing rules and for additional measures to be taken.

Foreword

Civil aviation safety is an underlying demand from the flying public and from European citizens. It is thus a requirement for the aviation system to guarantee that every possible effort is done to enhance flight safety.

Professional investigations into accidents and incidents are a fundamental part of the safety system, through the validated and comprehensive data they provide to the decision makers as well as through the incentive to safety improvements that their recommendations represent. They also create an unbiased and neutral evaluation of the effectiveness of the organisation and procedures of the civil aviation safety system.

In this respect, a properly managed investigation is not only essential for aviation safety, it is also a factor of stability. An immediate and satisfactory reaction to air disasters is essential to maintain the public’s confidence in the quality of the civil aviation safety system. The credibility of the process cannot be achieved without an independent, effective and competent investigation and without timely and unbiased release of information on its progress and findings.

1. INTRODUCTION

1.1. Background on the legal framework

Since the 1944 Chicago Convention, a complex and sophisticated system has been established, within the framework of the International Civil Aviation Organisation (ICAO), in order to enable the organised exploitation of accidents and incidents. States have transcribed international standards from Annex 13 to the Convention into their national law and regulations in order to implement them. Accident investigations have generally co-existed with judicial procedures.

In the European Union, Directive 94/56/EC, adopted in November 1994, standardised and accelerated the implementation of Annex 13 provisions. It helped to clarify the status of the investigations and to facilitate the contacts with justice representatives and the
information of the public. The time needed to legally establish those standards which were already in common use all over Europe, the differences of structure retained for the national accident investigation units underlined the complexity of this subject and of its deep links with the national culture and ways.

In 2009 the European Commission conducted a comprehensive review of EU legislation on civil aviation accident and incident investigations, with a view to updating it. It was felt that the investigation of air accidents required more diversified expertise and resources than it was the case in the decade before. The EU institutional and legal framework had also changed substantially, notably with the European Aviation Safety Agency (EASA) having become responsible for certification of aircraft in the Union. This review resulted in the adoption of Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 (the Regulation), which is the current legal framework for conducting civil aviation accident and incident investigations in the Union.

Late 2013, the Commission has started an examination of the Regulation pursuant to its Article 24, which states that it shall be subject to a review no later than 3 December 2014. It sent a questionnaire to the Member States (MS), to the European Aviation Safety Agency (EASA) and to relevant stakeholders. The consolidated feedback is appended to this report (see Annex: Summary of a targeted consultation on the implementation and functioning of Regulation (EU) No 996/2010 conducted in 2014).

1.2. Main objectives of Regulation (EU) No 996/2010

From the impact assessment\(^1\) and the discussions held in 2010, the main drivers to repeal Directive 94/56/EC and to adopt a Regulation of the European Parliament and of the Council were the following ones:

- Strengthen the investigating capacity of the Member States (especially of the smaller ones). Such capacity was to be reinforced through the establishment of a European Network of accident investigation bodies;

- Clarify the role of EASA in accident investigations: Since 2003 EASA is the authority responsible for aircraft certification in the Union. One of the main points of debate between the Commission and the MS was the role of EASA in accident investigations. Some of the MS were concerned that too close involvement of the Agency could affect the independence of investigations. It is not the role of EASA to conduct the investigation – this is the competence of the independent national bodies. However, EASA, as an authority responsible for aircraft certification needs access to information from accident investigations, to be able to take safety action if needed;

- Ensure [full] separation between accident investigations and judicial (especially criminal) proceedings;

- Strengthen implementation of safety recommendations (mandatory replies to every safety recommendation and establishment of a European database of safety recommendations);

• Better protect the rights of the victims of air accidents and their relatives (obligation for airlines to have list of passengers quickly available after an accident, obligation for the MS to have plans of assistance at the national level).

When preparing its proposal, the Commission took into account that one of the important objectives was to strengthen the required legal certainty on accident investigation. To identify all circumstances of an accident, the national Safety Investigation Authority (SIA) must be objective, impartial and able to withstand political or other interference or pressure. Its only objective should be the enhancement of safety, and the investigation should be independent from any other proceedings which could conflict with this objective. Thus, the principle of independence of investigations was fully respected by all the options analysed in the impact assessment.

Of the different options on the table, the one chosen in the Commission’s proposal was the third option: "Establishment of the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA)", which had the biggest added value for Europe and ended up being the closest to the Regulation. It was the most proportional option, fully respecting the principle of independence of safety investigations and allowing, without establishing new structures, to enhance the efficiency of accident investigation in the Union. This option addressed the problem areas identified, without going beyond what was strictly necessary. It had limited risks compared to the other options and, by relying on co-regulation and support for voluntary cooperation, was also in line with the EU objectives of "Better Regulation".

2. IMPLEMENTATION

2.1. Overview of the implementation

Being directly applicable in the MS, the Regulation did not face any issues regarding transposition. Article 4 of the Regulation mandates the establishment of a permanent national safety investigation authority (SIA) capable of independently conducting a full safety investigation, either on its own or through agreements with other safety investigation authorities. The SIA also has to coordinate the investigation at national level, in particular with the local judicial authorities. The Commission noted that most Member States have implemented secondary legislation to be in line with the requirements of the Regulation. Regarding cooperation at national level, the European Commission identified that the provisions of Article 12(3) \(^2\) were slow to be implemented. This led to eighteen pre-infringement procedures, among which seven were escalated to letters of formal notice on this key issue of cooperation at national level.

Regarding resources, it appears that the national investigation capacity of SIAs has globally remained unchanged since the entry into force of the Regulation. A few Member States have experienced increased capacity, whereas some others, due to external reasons, such as the economic crisis and cuts in government spending, have rather experienced decreased investigation capacity. On this point and in general terms, the

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\(^2\) Article 12(3) of Regulation (EU) No 996/2010 stipulates: “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.”
The effect of the Regulation, in terms of increased capacity, was offset by the consequences of the economic crisis.

Overall, this Regulation has strongly contributed to the harmonisation of safety investigations at the European level and the organisation of the coexistence of the safety and judicial investigations, in particular thanks to the advance arrangements required in Article 12(3). In terms of functioning, cooperation between SIAs and the relationship with EASA have greatly improved, which was one the main Regulation’s goal because Directive 94/56/EC predated the creation of EASA. The other objectives of the Commission’s proposal have also been addressed. They mainly consisted of strengthening cooperation to endeavour using the resources available in the Union more efficiently.

The European Commission has also monitored the establishment of civil aviation emergency plans at national level. These plans must also cover assistance to the victims of civil aviation accidents and their relatives. The following paragraphs provide more details on key features of the Regulation and their implementation.

2.2. Permanent National Safety Investigation Authority

Article 4 of the Regulation mandates the establishment of a permanent national safety investigation authority (SIA). One of the main objectives of the Regulation was to strengthen the independence of the national SIAs in line with ICAO Annex 13. The term "independence" is used in several provisions of the Regulation, especially in conjunction with the absence of external interference and conflict of interest. In most case, the Regulation did not have any practical effect on the independence of SIAs, which had already been established under the repealed Directive 94/56/EC. Nonetheless, the qualification of "authority" has contributed to change the perception of some organisations who now consider the SIAs more independent than before the adoption of the Regulation. In a number of Member States, the internal status of SIAs also got stronger through the advance arrangements to be established (see paragraph 2.4).

On the other hand regarding staff, Article 4.6(c) and its reference to "at least one available investigator" have been criticised by a number of SIAs, as it could be interpreted that a SIA only requires one investigator. However, it should be highlighted that this provision refers to at least one investigator being "available", which could be understood as requiring at least one on-duty investigator being able to perform the function of the investigator-in-charge, which would mean at least two individuals in reality.

Regarding the conduct of a full investigation, Regulation (EU) No 996/2010 is in line with international standards and recommended practices for aircraft accident and incident investigation. The provisions in ICAO Annex 13 already foresee the following participants in international investigations where the State of Registry, the State of the Operator, the State of Design, the State of Manufacture and the State of Occurrence have well-defined roles and rights. This means that there are core players in an investigation, and should the state of occurrence be a small EU MS, it can already benefit from the support of this core team of accredited representatives and advisors.

In addition, ENCASIA has worked on mutual assistance through a number of initiatives, including investigator training, simulation/table-top exercises, development of ad-hoc procedures, inventory of best/good practices, etc.
2.3. Safety Recommendations

According to the Regulation, a ‘safety recommendation’ means a proposal of a safety investigation authority, based on information derived from a safety investigation or other sources such as safety studies, made with the intention of preventing accidents and incidents. This definition and the subsequent provisions of the Regulation give a specific and formal role to SIAs in issuing safety recommendations (SRs), when necessary. Safety recommendations often conclude investigation reports, which have a public status according to Annex 13 and the Regulation. In addition, SRs can also be released through letters, interim statements/reports or safety studies. In all these cases, having them publically available represents strong incentives for their addressees to effectively react.

The Commission has developed and implemented the database referred to in Article 18(5) on safety recommendations, which is called SRIS (Safety Recommendations Information System). It also published a Commission Decision in order to define access rights to this database. The Commission Decision 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 on the investigation and prevention of accidents and incidents in civil aviation" was adopted on 5 December 2012 and published in the European official Journal on 14 December 2012.

As mentioned in Article 2 of this Decision, "All safety recommendations contained in the database mentioned in Article 1 shall be made available to the general public through a public website."

The Joint Research Centre (JRC) of the European Commission made those SRs publicly available on the Internet thanks a link on the ECCAIRS Web Portal:


At the end of 2015, after nearly four years of operations, 1810 safety recommendations were recorded in SRIS. Twenty five Member States as well as Iceland, Norway and Switzerland have entered data in SRIS. Keeping in mind that not every safety investigation is concluded with safety recommendations, this can clearly be considered a high degree of participation.

Regarding the follow-up of safety recommendations, the Regulation enacted more stringent constraints that before, but endeavoured to remain consistent with Annex 13 whose recent edition (13 edition – November 2010) had also introduced revised provisions addressing safety recommendations to include a 90 day time frame for actions to be taken.

EASA, being a frequent addressee of safety recommendations (SRs), has found that the time constraints for the follow-up of SRs were quite unpractical. This is especially the case for the 90 day provision set up in Article 18 that could lead to overly optimistic expectations regarding SR outcomes. Most Member States have not encountered such difficulties, but some concur to consider that the time constraints are challenging.

A future alternative would be to more extensively use SRIS to make the process more efficient. Most safety investigation authorities having used SRIS are positive about this tool and its potential safety benefits.

2.4. Advanced arrangements

The MS, the Commission and ENCASIA through its work programmes have all taken 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".

To solve problems for Member States that had issues with the relationship between the national SIAs and the judicial authorities, the requirement of advanced arrangements was brought in to clarify the respective roles. As the national systems are considerably different, ranging from well-established independent SIAs backed with a strong national legislation to newly established SIAs where the national judicial authorities have strong traditions, the situation has varied among the Member States. In most of them, the discussions on advanced arrangements have contributed to improve the situation. The pre-infringement procedures started by the Commission have also helped to bring together the SIA and the judicial authorities. On a regular basis, updates on advance arrangements have been presented during ENCASIA plenary meetings. Although a lot of progress was noted, this relationship between the judicial and safety investigation will remain challenging for some time to come in Europe, also because of the different legal systems applicable in Member States.

2.5. Information on persons on board and Emergency Plans at national level

Articles 20 and 21 seem to represent the most challenging provisions to be harmoniously implemented across Europe.

Article 20 requires airlines to make available immediately after an accident happens, a list of all the flight passengers and dangerous goods on board. During their national emergency exercises, the Finnish authorities discovered that Article 20 does not require the list of passengers to include information on the nationality of the passengers for flights within the Union. This lack of information could contribute to making the identification of victims difficult in a crisis situation. It was therefore suggested that the Commission should present further guidance. These pieces of information are already partly covered by the draft rules related to Passenger Name Records (PNR) proposed by the Commission\(^4\).

Article 21 requires the establishment of a civil aviation accident emergency plan at national level and was not part of the Commission’s proposal\(^5\). Subsequently there was no impact assessment on this matter. A number of Member States have requested clarification on what should be included in these emergency plans. In its response, the Commission insisted that the plans shall also cover assistance to the victims of civil aviation accidents and their relatives pursuant to Article 21 of the Regulation. In addition,

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\(^4\) COM(2011) 32 final

\(^5\) COM(2009) 611 final
EU air carriers also have the obligation to adopt a plan for the assistance to the victims of civil aviation accidents and their relatives, which must be audited by the Member States. On 31 January 2014, the Commission organised a workshop on "Civil aviation accident emergency plan at national level". The Workshop offered a useful platform to identify difficulties in the establishment of civil aviation accident emergency plans and enabled to share good practices in this field. It also concluded on the need to develop guidance both for the establishment and content of national emergency plan and for air carriers' assistance plans with particular attention to the size of the company. A number of Member States having local or regional plans still have difficulties to implement the legislative provisions imposing the establishment of an over-arching emergency plan at national level. Member States that have faced major civil aviation disasters have, based on their experience, reinforced their procedures in relation to their national emergency plans and notably regarding the assistance to the victims and their relatives.

Many SIAs reported that they do not find Article 20 and 21 appropriate in the Regulation as it could imply that SIAs should produce the list of passengers or develop assistance plans.

On this topic, the Commission has studied possible synergies. One of them was to inform the ad-hoc Committee dealing with civil protection in the Member States about the specific requirements adopted in the Regulation at the level of the Member State. The aim consists of fostering interactions both at EU and national levels through an enhanced mutual understanding. Another synergy could be the development of crisis scenario involving a civil aircraft accident and the service dealing with civil protection and the assistance to victims of collective accidents and their relatives.

3. ENCASIA

3.1. Setting up and supporting ENCASIA

The Regulation established the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) and has put strong emphasis on the coordination role of Safety Investigation Authorities 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. 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.

On 19 January 2011, the Rules of Procedure were formally approved to formalise the election process. As a result of that process, Mr Ulf Kramer, head of the German Safety Investigation Authority and Mr Keith Conradi, his counterpart from the United Kingdom, were respectively elected Chairman and Deputy Chairman. On 21 January 2014, they were re-elected for a second three-year mandate.

The European Commission has been closely associated to ENCASIA work and has cooperated with ENCASIA on all aspects related to the development of the EU civil aviation accident investigation and prevention policy and regulation. Since its establishment, the Commission has supported ENCASIA and its activities with grants on
the basis of the annually agreed work programmes. ENCASIA has reached a number of important milestones. It has worked on all the objectives set out in Article 7(3) of the Regulation that covers the coordination and organisation of Peer Reviews, relevant training activities and skills development programmes for investigators.

The Commission has also financially supported the development of the ENCASIA website, which is hosted on the DG MOVE website.

### 3.2. Training activities

Since its establishment, ENCASIA has prepared a training manual and consequently organised a number of training courses for EU safety investigators. These courses took place:

- **On 15-17 May 2013** in the premises of the Air Accidents Investigation Branch (AAIB) in Farnborough, UK. The training programme covered the management of site hazards and personnel safety required during investigation activities and the recovery of flight data for investigators.

- **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.

- **On 15-17 September 2014** in the premises of the Air Accidents Investigation Branch (AAIB) in Farnborough, UK. The peer review training covered the guidance material in

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6 Decision C(2012)1216 adopting the 2012 work programme in the field of mobility and transport, amended by COM Decision C(2012)4531; Decision C(2013)222 adopting the 2013 work programme in the field of mobility and transport; Decision C(2014)1166 adopting the annual work programme for 2014 in the field of mobility and transport; Decision C(2014)8434 adopting the annual work programme for 2015 in the field of mobility and transport.

7 In order to achieve the objectives set out in paragraph 2, the Network shall be responsible, in particular, for:
   a) preparing suggestions to and advising Union institutions on all aspects of development and implementation of Union policies and rules relating to safety investigations and the prevention of accidents and incidents;
   b) promoting the sharing of information useful for the improvement of aviation safety and actively promoting structured cooperation between safety investigation authorities, the Commission, EASA and national civil aviation authorities;
   c) coordinating and organising, where appropriate, ‘peer reviews’, relevant training activities and skills development programmes for investigators;
   d) promoting best safety investigation practices with a view to developing a common Union safety investigation methodology and drawing up an inventory of such practices;
   e) strengthening the investigating capacities of the safety investigation authorities, in particular by developing and managing a framework for sharing resources;
   f) providing, at the request of the safety investigation authorities for the purpose of the application of Article 6, appropriate assistance, including, but not limited to, a list of investigators, equipment and capabilities available in other Member States for potential use by the authority conducting an investigation;
   g) having access to information contained in the database referred to in Article 18, and analyse the safety recommendations therein with a view to identifying important safety recommendations of Union-wide relevance.

8 [http://ec.europa.eu/transport/modes/air/encasia/index_en.htm](http://ec.europa.eu/transport/modes/air/encasia/index_en.htm)
the questionnaire and provided a general overview of all the aspects necessary to comply with Regulation (EU) No 996/2010.

- On 1-3 December 2014 in the premises of the German safety investigation authority (BFU) in Braunschweig, Germany. The main training objectives were to: Prepare SIAs to respond to a major accident, wherever it occurs in the Union; Provide guidance in how to deal with the immediate environment of SIAs, in particular the aspects on media, politics and families; Test and further develop ENCASIA procedures on mutual assistance.

- On 21-24 September 2015 in Lisbon, Portugal with the support of the Portuguese SIA (GPIAA). The training covered all aspects of an investigation, the structure of safety investigation authorities as well as a number of provisions of Regulation (EU) no 996/2010. It was completed by a workshop on mutual assistance between SIAs.

In total more than 100 safety investigators were trained. At least as important, these training sessions have greatly contributed to reinforce formal and informal cooperation as well as exchanges of information between them.

### 3.3. Peer reviews

The concept of Peer Reviews of Safety Investigation Authorities represents a positive way to monitor and help ensuring a proper application of the legislation, in particular, that the obligations on Safety Investigation Authorities and the means provided to them as specified in Article 4, will be met. It should enable States to improve the situation of their national organisations. Peer Reviews are an essential tool to help achieve the legislative goal of all 28 Safety Investigation Authorities being able to perform independent investigations to high standards.

ENCASIA developed a detailed methodology on Peer reviews. In 2014, it organized a training to prepare the Panels to conduct Peer Reviews in the following Member States: Croatia, France, Slovenia and the United Kingdom. The on-site visits took place in these four Member States on 6-10 October 2014. Another group of six States, Denmark, Germany, Iceland, Norway, Portugal and Romania have been peer-reviewed on a voluntary basis in 2015. Ten SIAs have already been involved in these two first rounds of annual peer reviews and ENCASIA agreed on a programme to further develop this activity and ultimately visit all SIAs by 2018.

### 3.4. Regional interest

ENCASIA activities have attracted interest from outside the European Union. In particular, Israel and Ukraine have asked to join ENCASIA in order to benefit from the synergies, training actions, common procedures, etc. Also peer reviews based on the methodology prepared by ENCASIA have been held in third countries (Singapore in 2015 and Israel in 2016).

Next to ENCASIA, there are other groups dedicated to accident investigation matters, but within a broader geographical scope. In particular the European Civil Aviation Conference (ECAC) has established the group of experts in accident/incident investigation (ACC) for many years.

ENCASIA has competencies that are defined within Regulation (EU) No 996/2010 and operates within this specific legislative framework notably through its working groups, while the ACC group primarily focuses on the organization of technical workshops and
exchange of best practices with an international outreach. ENCASIA and ACC complement each other’s actions through appropriate coordination. Given the limited amount of resources, it is crucial to work on synergies and to avoid overlaps or any kind of duplication of efforts.

4. CHALLENGES IDENTIFIED

4.1. Safety versus judicial investigation

After an aircraft accident, as well as the technical safety investigation conducted by the safety investigation authority, a judicial investigation is generally also instituted. Usually such a judicial investigation is carried on by a civil court in common law countries, whereas it can take place both before civil as well as criminal jurisdictions in civil law countries.

In order to guarantee the public interest of proper administration of justice, courts have the obligation to determine the causes of an accident in order to define responsibilities and to compensate the victims. On the other hand, in accordance with ICAO Annex 13 and Regulation (EU) No 996/2010, the sole objective of a safety investigation is the prevention of future accidents and incidents without apportioning blame or liability. This is an essential principle for each safety investigation authority.

As mentioned in the Commission's impact assessment which preceded the Regulation, there had been tensions between the two investigations regarding access to the accident site and to evidence. The Regulation has clearly been very helpful in granting more rights for safety investigators. In those Member States where the judicial authority is entitled to seize evidence in relation to an accident, safety investigators now have immediate and unlimited access to and use of such evidence.

Despite these improvements, it was reported by some Member States (in particular the United Kingdom) that some articles in the Regulation can be interpreted in different ways, which have sometimes created difficulties for a number of SIAs. This is notably the case of Article 14 on the protection of sensitive safety information, where SIAs have sometimes been questioned or even challenged by other entities, such as the national police forces, prosecutors, insurance companies, service providers, etc. Regarding the issue on differing interpretations of the Regulation, more guidance from the Commission has been requested.

4.2. Use of Final Reports in front of courts

A question that was notably raised by one Member State is related to the legality for a national court of using a final investigation report as evidence in civil or criminal proceedings.

The explicit purpose of a Final Report is to prevent future accidents and not to apportion blame or liability, as this would make it impossible to collect the information necessary to arrive at recommendations preventing future accidents. These reports, which are made publicly available, are normally written in a non-accusatory way. Nevertheless, some national courts have reportedly used Final Reports from SIAs to seek to establish responsibilities, which is not the objective of a safety investigation.

The Regulation does not contain any express provisions that prevent such a Final Report from being used in front of a court. However, at the same time, the Regulation does stress the importance of adequate protection of information gathered during the safety
investigation, and in particular of information voluntarily submitted by aviation professionals. In addition, it ensures that safety and judicial investigations cooperate with each other through advance arrangements and that such arrangements take into account the impact of disclosing information on the future availability of safety information, i.e. the development of a "just culture".

In conclusion, on the one hand a Final Report cannot nor should not apportion blame or liability in its content. On the other hand the Regulation does not expressly prevent Final Reports from being used in front of a national court in the context of a judicial proceeding, subject however to certain safeguards as set out in the Regulation, notably as regards the protection of certain information, that must in any case be respected.

4.3. Dealing with Cockpit Voice Recorders

This question was flagged by the ENCASIA working group which was tasked to draw up an inventory of good/best practices. It had noted different practices when returning Cockpit Voice Recorders (CVRs) to its owner after an investigation. In some MS, the situation is to erase the CVR content before returning it to its owner in order to provide the best level of protection (while keeping a copy only for the purposes of the safety investigation). In other MS, the CVRs are not erased as it would be considered as tampering with evidence. In the national law of some MS, this could be considered as a possible obstruction of justice. Therefore CVR recordings must be safeguarded as they are considered as evidence that can inculminate or exonerate.

While these different situations among Member States (depending on their national laws) have so far not created difficulties at Union level, they do need to be further studied.

4.4. Cultural and political aspects in relation to crises

It is important to highlight that accident investigations are linked to crisis situations. Increasingly, accidents have an important international dimension. As a consequence, the importance of the global framework for accident investigation as provided for by ICAO is increasing. In addition, a number of national cultural/political factors have to be taken into consideration, which makes it difficult to have a common framework that would anticipate each situation. This is further complicated by the 28 different legal jurisdictions, having in mind the close link between judicial procedures and safety investigations.

There has also been seen an increased interest of political leaders in major aircraft accident investigation, in particular with regard to assistance to families.

The way forward may be to reinforce the safety-related objectives of the safety investigation, to establish clear roles, to have well-trained safety investigators and credible processes, while at the same time leaving flexibility regarding the organisation of such investigations. A clear delineation of responsibilities could thus be seen as crucial to prevent risks of leadership confusion during a crisis.

4.5. Scope of the Regulation

When asked about the scope of the Regulation, some Member States and stakeholders are in favour of extending it by including investigations related to aircraft engaged in e.g. military, customs, police or similar services (traditionally referred to as "State Aircraft"), but most consider it adequate. For the time being, Article 5 mandates the investigation of every accident or serious incident involving aircraft other than specified in Annex II to

It was highlighted that the scopes of Regulation (EU) No 996/2010 and Regulation (EC) No 216/2008 should remain aligned, especially if the latter is revised in the coming years, pursuant to the proposal to this effect that is currently pending before the Union legislator\(^10\). It is worth noting, for instance, that Annex II at present refers to 'unmanned aircraft with an operating mass of no more than 150 kg'. Consequently, such light drones are currently not subject to mandatory investigations if they are involved in an accident or a serious incident, even of a lethal nature. However, this provision, as well as certain other provisions of this Annex II, may well be amended in the context of the said revision of Regulation (EC) No 216/2008.

5. CONCLUSIONS

Since the early days of commercial aviation, the investigation of accidents and serious incidents has played a key role in improving aviation safety records. Many countries recognised the importance of having a strong and independent accident investigation capability. This has been acknowledged by the signatories of the Chicago Convention in 1944 which prescribes an inquiry into the circumstances of the accident. Since, detailed requirements have been outlined in ICAO Annex 13 on accident investigation, which have been considered as fundamental for the aviation safety system and have paved the way for complementary means, such as generalising the use of safety management systems. With the adoption of Regulation (EU) No 996/2010 the Union reinforced the role and conditions for the Safety Investigation Authorities and established a Network of national investigation authorities.

The relative scarcity of major air accidents have made them more challenging to investigate, not only from a technical point of view but even more so in terms of communication. Safety investigations require a high level of expertise in various domains. Despite the progress achieved in many areas since the entry into force of the Regulation, it remains uncertain whether a major accident would be treated with the same level of efficiency and effectiveness wherever it occurs in the Union. It cannot be excluded that certain Member States which until today have not faced a major accident on their territory may not be sufficiently prepared to face the challenges raised by such a disaster. Therefore, the Commission intends to continue supporting preparatory activities and peer review exercises. It also intends to further assess the effectiveness/efficiency of the current system of strengthening national accident investigation capability through cooperation to ensure a consistent response to accidents.

In the meantime the exchange of information and cooperation between SIAs, in particular within the peer review exercise carried out since 2014, has contributed to better assess the structure and expertise available in each Member State. It has also allowed some gaps and remedial actions to fill them to be identified. It can thus be expected that in a longer term perspective there will be a high investigation capacity available throughout the Union.


\(^10\) COM (2015) 613 final
It does appear advisable however to find ways to accelerate this process of ensuring that the highest level of investigation capacity is available in each Member State if and when a MS would be confronted with a major accident, and to evaluate possible alternatives such as reinforced cooperation among SIAs or even further (partial) integration. As a first step to increase the investigation capacity at national level, service level agreements between national SIAs could be foreseen as an option to face the challenge of an increasingly complex aviation environment. Unlike the "European Civil Aviation Safety Board" the reinforced solidarity among Member States would maintain a certain investigation capacity at national or regional level, which will in all likelihood always be required to investigate smaller general aviation accidents and liaise with other local authorities such as civil protection and firefighting services.

The undertaking of thematic safety studies and the issuance of common safety recommendations are the functions most Member States and stakeholders would like to see dealt with in a more centralised way at Union level. A more centralised way of organising such aspects beyond the mere coordination activities performed today by ENCASIA would also meet ICAO's recommendations with regard to making better use of Regional Organisations\textsuperscript{11} (such as the Union) to achieve global aviation objectives.

These next steps towards an even more efficient and effective accident investigation performance at Union level could possibly be taken to a certain extent within the existing legal framework and established procedures. This might involve, for example, voluntary agreements of the ENCASIA members that go beyond what is legally required and go into what is practically desirable. It has been suggested that one example of such an agreement could cover the commitment to minimum benchmarks which could be evaluated with the Peer Review exercise. Signing cooperation agreements for assistance in case of a major accident, which include making available human and material resources, might also help in particular smaller Member States having only limited national investigation resources. In addition and in parallel to these considerations, the Commission intends to evaluate during 2016/2017 whether or not there is a need for the revision of the existing regulatory framework or for any other additional action.

\textsuperscript{11} ICAO Manual on Regional Accident and Incident Investigation Organization (Doc 9946) provides guidance to States on how to establish and manage a regional investigation system.