EUROPEAN
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REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

The European Aviation Safety Programme

1. THE COMMISSION 2011 COMMUNICATION

The Commission Communication on "*Setting up a Safety Management System for Europe*"[1] published in 2011 described the safety challenges faced by the Union and its Member States and concluded on the necessity to develop a more proactive and evidence-based approach. It detailed a number of practical actions to meet these challenges.

A number of those actions have been implemented over the recent years, notably with the adoption of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation[2]. The Commission proposal for a Regulation of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and repealing Regulation (EC) No 216/2008 of the European Parliament and of the Council (COM (2015) 613) further contributes to implement the actions identified by the 2011 Commission Communication with a view to establish and maintain a high uniform level of civil aviation safety and environmental protection in Europe.

The Commission Communication on "*Setting up an Aviation Safety Management System for Europe*" was accompanied by a document describing the European Aviation Safety Programme[3].

2. THE 1ST EDITION OF THE EUROPEAN AVIATION SAFETY PROGRAMME DOCUMENT

The European Aviation Safety Programme[4] is composed of an integrated set of regulations at Union level, together with the activities and processes used to jointly manage the safety of civil aviation at European level. It is not a plan of activities but rather functionally corresponds at EU level to the State Safety Programme as described in Annex 19 to the Chicago Convention.

The European Aviation Safety Programme document explains how safety is managed in the EU and its Member States, including through Union legislation as well as other policies, practices and actions.

While it might include some prospective elements (as some of the activities or rules might be in place but not fully implemented) its main purpose is not to set a roadmap for the future. The European Aviation Safety Programme document presents a 'snapshot' of all the rules and processes which are contributing, in an integrated manner, to the prevention of accidents and to the safety of aviation activities in the Union.

The European Aviation Safety Programme document is not intended to replace Member States' Safety Programme documents but rather to complement them. Since many rules and

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1 Communication from the Commission to the Council and the European Parliament, Setting up an Aviation Safety Management System for Europe, COM/2011/0670 final.

2 Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (Text with EEA relevance); OJ L 122, 24.4.2014, p. 18.

3 The European Aviation Safety Programme, SEC/2011/1261 final.

4 As defined in Article 2(17) of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation.

activities related to aviation safety are adopted and coordinated at EU level, the European Aviation Safety Programme document should be referred to by the Member States within their own States State Safety Programme document to explain fully how aviation safety is managed within their national territories as required from them under the Chicago Convention. Indeed, as the EU has legislated in many areas of aviation safety it is not possible for the Member States to describe how they manage safety without including the EU dimension.

Furthermore, in certain areas, States' responsibilities under the Chicago Convention have been transferred to Union level. The European Aviation Safety Programme document explains how the EU addresses the international obligations that result from this transfer of responsibilities.

By describing the processes used to jointly manage safety at European level and, in particular, how the European Commission, the Member States and EASA cooperate to detect unsafe conditions and take actions to mitigate safety risks, the European Aviation Safety Programme document helps bring clarity on where the various responsibilities for safety lie within the EU and makes clear how the EU as a whole can achieve and maintain a satisfactory safety performance. It also provides transparency to all stakeholders with an interest in safety.

The European Aviation Safety Programme document is aligned with the format and structure of the description of a State Safety Programme as detailed in Annex 19 to the Chicago Convention:

- The first part of the document is dedicated to European safety policies and objectives. It notably encompasses the description of the European aviation legislative framework and explains the distribution of competencies between the Member States and the various actors at EU level. Finally, it details the mechanisms in place to enforce EU legislation.
- The second part focuses on European safety risk management. It describes the existing safety management requirements applicable to the industry and the Member States, and explains how safety risks are collectively assessed and mitigated within the EU.
- The third part addresses the European dimension of safety assurance and mainly details how safety oversight is performed within the EU and its Member States.
- Finally, the fourth part details the European activities in the area of safety promotion including training and international cooperation.

3. AN EVOLVING EUROPEAN AVIATION SAFETY PROGRAMME

In order to ensure it remains efficient in the prevention of accidents and the mitigation of risks, safety management needs to continuously adapt to changes in the aviation market, technological evolution and the emergence of new safety hazards. The European Aviation Safety Programme document therefore requires regular updates to reflect those changes. This necessity for the Commission to update it on a regular basis was recognised in the 2011 Commission Communication (Action 8 of the Communication).

Since the publication of the 1st version of the European Aviation Safety Programme document in 2011 several legislative changes have occurred in the EU. The new rules on Flight Time Limitations, on Third-Country Operators, for Flight operations, in the area of ATM/ANS, for aerodromes, on the reporting, analysis and follow-up of occurrences are some illustrations of the European legislative changes since 2011.

On top of the changed legal framework, the management of safety has evolved in other areas; one example is the evolution of the activities performed by EASA in the context of standardisation inspections. In addition, the European Safety Promotion dimension has been strengthened, notably after the reorganisation that took place at EASA in 2014.

The European Aviation Safety Programme is complemented by the European Plan for Aviation Safety that identifies the specific risks currently affecting the Union aviation safety system and proposes mitigating actions to address these risks. While so far the process for the development of the European Plan for Aviation Safety has been largely internal to EASA, the time is now right to give it a truly European dimension and ownership notably through stronger involvement of Member States and of industry. To this end, the process for the development and adoption of the European Plan for Aviation Safety has been revised to incorporate the lessons learned after the first implementation cycles. As it constitutes a vital element of safety management system at EU level the Commission has considered that the European Plan for Aviation Safety development, adoption and update process should be described in more detail in the European Aviation Safety Programme document.

The rules, activities and processes that are part of the European Aviation Safety Programme should be monitored in particular to assess their relevance and effectiveness. This monitoring of safety performance should rely on indicators that might include compliance with the rules, rate of certain type of safety events, number of accidents or fatalities and maturity of safety management systems.

These indicators are used by States to determine the national Acceptable Level of Safety Performance, which is required by ICAO and which indicates the minimum level of safety performance of civil aviation that should be achieved at national level. It is determined in the context of each State Safety Programme.

An Acceptable Level of Safety Performance to be achieved in the Union could equally be defined in the European Plan for Aviation Safety in order to better monitor safety performance of the EU aviation system and determine the changes that should be made at the various levels to achieve further safety improvements.

The 2nd edition of the European Aviation Safety Programme document, which reflects the above mentioned changes and describes the way aviation safety is currently managed in the European Union and its Member States, is adopted as an Annex to this Report.

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ANNEX 1

ANNEX

The European Aviation Safety Programme Document
2nd edition

to the

REPORT TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

The European Aviation Safety Programme

Table of Contents

1. EUROPEAN SAFETY POLICIES AND OBJECTIVES 5
1.1. The European Aviation Safety Policy 5
1.2. The European safety legislative framework 5
1.2.1. Structure of the European safety legislative framework 5
1.2.2. Regulation (EC) No 216/2008 and associated rules 7
1.2.3. Investigation of accidents and incidents in civil aviation 9
1.2.4. Reporting, analysis and follow-up of occurrences in civil aviation 9
1.2.5. European Union list of air carriers subject to an operating ban within the EU 10
1.3. Safety responsibilities and accountabilities in the European Union 10
1.3.1. Decision making process within the European Union 10
1.3.2. Aviation safety competences and responsibilities within the European safety system 11
1.4. Accident and incident investigation 16
1.4.1. The applicable rules 16
1.4.2. Safety recommendations 17
1.4.3. Cooperation with other entities 17
1.5. Enforcement 18
1.5.1. Enforcement towards the Member States 18
1.5.2. Enforcement towards regulated industry organisations 18
2. EUROPEAN SAFETY RISK MANAGEMENT 20
2.1. Safety Requirements for Organisations and Authorities 20
2.2. Safety Risk Management at EU level: the process to develop and update the European Plan for Aviation Safety 20
2.2.1 Identification of Safety Issues 21
2.2.2 Assessment of Safety Issues 22
2.2.3 Definition and Programming of Safety Actions 23
2.2.4 Implementation and Follow-up 23
2.2.5 Safety Performance 24
2.3. Agreement on safety performance 24
2.3.1 Agreement on safety performance of organisations 24
2.3.2 Agreement on Member States' safety performance at EU level 25
3. EUROPEAN SAFETY ASSURANCE 26
3.1 Safety Oversight 26
3.1.1 Monitoring the application of the rules in the Member States 26
3.1.2 Oversight on certified organisations 26

3.2 Safety Data collection, Analysis and Exchange 26
3.3 Safety-data-driven targeting of oversight of areas of greater concern or need 27
3.3.1 Safety-data-driven targeting of monitoring of the Member States 27
3.3.2 Safety-data-driven targeting of oversight of the industry 28
4. EUROPEAN SAFETY PROMOTION 29
4.1 Activities at EU Level 29
4.1.1 Safety communication 29
4.1.2 European Strategic Safety Initiative (ESSI) 30
4.2 International cooperation at EU level 31
4.3 Training at EU level 31
4.3.1 Common Training Initiative Group (CTIG) 32
4.3.2 Training concept 32
List of abbreviations 33

INTRODUCTION

This document describes the European Aviation Safety Programme by detailing the integrated set of regulations at Union level, together with the activities and processes used to jointly manage the safety of civil aviation at European level.

The European Aviation Safety Programme functionally corresponds, at EU level, to the State Safety Programme as described in Annex 19 to the Chicago Convention.

The European Aviation Safety Programme document is not intended to replace Member States' Safety Programme documents but rather to complement them.

The European Aviation Safety Programme document explains how aviation safety is managed from a European perspective. Many rules and activities related to aviation safety being today adopted and coordinated at EU level, the European Aviation Safety Programme document should be referred to by the Member States within their own State Safety Programme document to explain fully how aviation safety is managed within their national territory. Indeed, the EU has legislated in certain areas of aviation safety, and it is not possible for the Member States to describe how safety is managed within their State without including the EU dimension. Furthermore, in certain areas, States' responsibilities under the Chicago Convention have been transferred to Union level. The European Aviation Safety Programme document explains how the EU addresses the international obligations that result from this delegation of responsibilities.

The European Aviation Safety Programme document is aligned with the format and structure of the description of a State Safety Programme as detailed in Annex 19 to the Chicago Convention.

The objective of the European Aviation Safety Programme is to ensure that the system for the management of aviation safety in the European Union delivers the highest level of safety performance, uniformly enjoyed across the whole Union, and continuing to improve over time, while taking into account other relevant objectives such as environmental protection.

By describing the processes used to jointly manage safety at European level and, in particular, how the European Commission, the Member States and the European Aviation Safety Agency cooperate to detect unsafe conditions and take actions as appropriate in order to minimise safety risks, the European Aviation Safety Programme document contributes to the achievement of the high level EU-wide safety objectives defined at Union level. It therefore ensures that all those involved are aware of their responsibilities and all rules and processes are in place to enhance aviation safety and thus contribute to prevent accidents in the European region and beyond.

1. EUROPEAN SAFETY POLICIES AND OBJECTIVES

1.1. The European Aviation Safety Policy

The European Aviation Safety Policy is the set of legal rules and processes that are in place in the European Union to ensure a high level of safety. It promotes rules that are harmonised and facilitate the free movement of products, services and persons involved in civil aviation.

The objective of the European Aviation Safety Policy is to ensure that the rules and processes contributing to the management of aviation safety in the European Union deliver the highest level of safety performance, uniformly enjoyed across the whole Union, and continuing to improve over time, while taking into account other relevant objectives such as environmental protection. In delivering such high level of safety performance, the European Union is supported by the Member States whose national aviation safety policies contribute to achieve the overall objective of the European Aviation Safety Policy.

The aviation safety system is based on a close collaboration between the European Commission, the European Aviation Safety Agency (hereinafter 'EASA' or 'the Agency'), the Member States, as well as the industry participating in the European aviation market.

The high and uniform level of protection of the European citizens and of travelling public mainly relies on the adoption of common safety rules and on measures that ensure that products, persons and organisations[1] within the EU comply with such rules.

This system is complemented by sound accident and incident investigations that enable safety gaps to be identified and action taken to close the gaps. The European Aviation Safety Policy also includes the use of more proactive and evidence-based elements that aim at identifying risks posing the greatest threat to safety and in taking actions to mitigate those risks.

1.2. The European safety legislative framework

1.2.1. Structure of the European safety legislative framework

Article 4(2) (g) of the Treaty on the Functioning of the European Union establishes that transport is a shared competence between the European Union and its Member States. Furthermore, Article 100 (2) of the same Treaty allows the European Parliament and the Council to lay down appropriate provisions for air transport, following a proposal by the Commission.

Therefore the legal requirements in the area of aviation safety can be defined at European level, through the adoption of European legislation.

The European civil aviation safety legislative framework is composed of Regulations of the European Parliament and of the Council, compounded, where relevant, by Commission implementing regulations. Mechanisms for evaluating the implementation and effectiveness of the legislation, potentially leading to its revision, are included in the relevant legal acts.

The diagram below summarises the applicable aviation safety legislation adopted at European Union level.

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[1] For the purpose of this document, organisations are understood as industry organisation providing aviation products or services.

Diagram 1. Applicable European Union aviation safety legislation

The detail of applicable European aviation safety legislation can be found on the EUR-Lex website, in the section Directory of European Union legislation, Chapter 07.40.30[2].

1.2.2. Regulation (EC) No 216/2008 and associated rules

1.2.2.1. The legal requirements

Regulation (EC) No 216/2008[3] (hereinafter 'Regulation No 216/2008') is the centrepiece of the EU aviation safety system. It aims at establishing and maintaining a high uniform level of civil aviation safety in Europe by establishing common rules in the field of civil aviation. It also enables the mutual recognition of certificates, introduces a standardisation inspections process to monitor rules' application by the Member States and creates the European Aviation Safety Agency.

Regulation No 216/2008 defines 'essential requirements' that set high level objectives and obligations on authorities, persons and organisations in order to achieve the objective of Regulation No 216/2008. The essential requirements implement the standards and recommended practices set by the Annexes to the Chicago Convention. They concern aeronautical products, parts and appliances, operators involved in air transport, as well as pilots and persons, products and organisations involved in their training and medical examination, aerodromes and air traffic management and air navigation services (ATM/ANS) provided in the airspace of the territory to which the EU Treaty applies.

In application of Regulation No 216/2008, the European Commission has adopted implementing Regulations, including those detailed in the diagram included in section 1.2.1.

All these rules are directly applicable in the Member States and do not require national transposing measures.

In the European Union, application of European law is primarily the responsibility of the Member States. Most certification and oversight tasks required by Regulation No 216/2008 and its implementing rules are therefore executed at national level by the national competent authorities. However, in certain clearly defined cases, EASA is the competent authority and is empowered to issue certificates and to take the related enforcement measures.

1.2.2.2. Agency measures

The implementation of Regulation No 216/2008 and of its implementing Regulations is supported, where relevant, by Certification Specifications (CS), Acceptable Means of Compliance (AMC) and Guidance Material (GM).

CS are non-binding technical standards adopted by the Agency which indicate the means to show compliance with Regulation No 216/2008 and its implementing rules and which can be used by organisations for the purpose of certification.

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[2] http://eur-lex.europa.eu/browse/directories/legislation.html; Transport policy; Air Transport; Air safety

[3] Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (Text with EEA relevance); OJ L 79, 19.3.2008, p. 1.

AMCs are non-binding standards adopted by the Agency which may be used by persons and organisations to establish compliance with Regulation No 216/2008 and its implementing rules or with CS; when AMCs are complied with, the related requirements of the implementing rules or the certification specifications are considered to be met.

GM is non-binding material developed by the Agency which helps to illustrate the meaning of a requirement or specification and is used to support the practical implementation of Regulation No 216/2008, its implementing rules, Certification Specifications and Acceptable Means of Compliance.

1.2.2.3. Flexibility Arrangements

Since aviation is a complex activity, rules are not able to cater for all situations and a certain amount of flexibility is required to enable activities to take place whilst maintaining an adequate level of safety.

To this end flexibility provisions are contained in Regulation No 216/2008, enabling the Member States:

- to take immediate measures to address a safety problem;
- to grant exemptions in the event of unforeseen urgent operational circumstances or an operational need of limited duration;
- to grant derogations from the provisions laid down in the implementing rules to Regulation No 216/2008 where an equivalent level of safety can be achieved.

Depending on the type of measures taken, these shall be notified to EASA, the European Commission and the other Member States. In most cases EASA is responsible to assess the notifications and provide the consequent Recommendation to the European Commission, which adopts the final Decision to ensure a high and uniform level of safety and the correct functioning of the Internal Market.

The flexibility measures taken or proposed by the Member States on the basis of the flexibility provisions are evaluated not only in terms of the equivalency of their safety value, or of the safety value of the conditions attached to them, but also in terms of the reasons given to justify the need to derogate.

1.2.2.4. Nature of Regulation No 216/2008 and related rules

Most legal requirements included in Regulation No 216/2008 and its implementing Regulations are in the format of prescriptive rules that is to say rules focusing certain means to reach a given objective. This prescriptive approach, which has been an international standard so far, allowed the EU to achieve the present good safety records. Furthermore, prescriptive rules allow legal certainty and straightforward compliance checking.

However, experience has shown that simple compliance with prescriptive regulations does not alone always guarantee safety and might not sufficiently address cross-aviation domain risks. In addition, prescriptive detailed rules may not appropriately fit the needs of certain sectors such as Small and Medium sized Enterprises (SMEs) and General Aviation as they might be considered as disproportionate and overly complex. For some parts of the aviation industry, prescriptive rules may slow down the technological enhancement of safety and introduction of efficiency improvements, due to their focus on mandating specific methods and solutions rather than outcomes and not leaving much flexibility.

The European Union has therefore started, in certain specific cases, to adopt legal requirements that are focusing on a required outcome, leaving flexibility for the means to achieve this outcome. Such 'performance based rules' have notably been adopted in the areas of Fatigue Risk Management and of Airworthiness Design Standards.

Furthermore, authorities and organisations have the possibility to propose Alternative Means of Compliance, i.e. means alternative to those set out in Regulation No 216/2008 and its implementing rules. These are means that propose an alternative to an existing AMC or those that propose new means to establish compliance when no associated AMC have been adopted by the Agency. They leave flexibility to the regulated entities to find other means to achieve the objective of the regulation. This must be demonstrated and approved.

The European Union is expected to make greater use of performance-based legal requirements in the future, where appropriate, either when adopting new legislation or modifying existing ones.

1.2.3. Investigation of accidents and incidents in civil aviation

The rules applicable to the investigation of accidents and incidents are defined at European level, within Regulation (EU) No 996/2010[4] (hereinafter 'Regulation No 996/2010'). It ensures a high level of efficiency, expediency, and quality of European civil aviation safety investigations; the sole objective being the prevention of future accidents and incidents without apportioning blame or liability. It further reinforces cooperation among safety investigation authorities by establishing the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) and introduces provisions for storing safety recommendations and their associated responses in an EU database.

More information about the accident and incident investigation processes in the European Union is enclosed under section 1.4.

1.2.4. Reporting, analysis and follow-up of occurrences in civil aviation

Regulation (EU) No 376/2014[5] (hereinafter 'Regulation No 376/2014') includes rules related to the reporting, analysis and follow-up of occurrences. This legislation establishes requirements aiming at encouraging a strong reporting culture. It also sets up obligations for the industry, for the Member States and for EASA to collect and analyse occurrences, with the view to support their safety management processes. Finally it ensures that information is appropriately protected and is shared among the Member States and with EASA.

More information about these rules is enclosed under section 3.2.

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[4] 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 and repealing Directive 94/56/EC (Text with EEA relevance); OJ L 295, 12.11.2010, p. 35..

[5] Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (Text with EEA relevance); OJ L 122, 24.04.2014, p. 18.

1.2.5. European Union list of air carriers subject to an operating ban within the EU

Regulation (EC) No 2111/2005[6] (hereinafter 'Regulation No 2111/2005') establishes rules on the establishment and publication of a EU list, based on common criteria, of air carriers which, for safety reasons, are subject to an operating ban in the Union. The list of banned air carriers[7] adopted on the basis of this Regulation is itself a Regulation and has therefore legal value in the EU Member States. The list of banned air carriers is established by Commission Regulation (EC) No 474/2006[8]. It is regularly updated.

For the purpose of updating the list, the Commission is assisted by the "Air Safety Committee" composed of technical air safety experts from all the EU Member States (plus Iceland, Norway and Switzerland) and chaired by the Commission. Acting on a proposal by the Commission, the "Air Safety Committee" adopts its opinion by qualified majority[9].

The decision to include or remove a carrier (or a group of carriers certified in the same State) is taken on the basis of the common safety criteria contained in Regulation No 2111/2005. These criteria take into consideration, for instance, the existence of safety deficiencies on the part of an air carrier, the lack of ability or willingness by an air carrier or authorities responsible for its oversight to address safety deficiencies, operating bans imposed by third countries, audit reports drawn up by third countries or international organisations (ICAO) and substantiated accident related information. All criteria are based on international aviation safety standards.

1.3. Safety responsibilities and accountabilities in the European Union

1.3.1. Decision making process within the European Union

Article 100(2) of the Treaty on the Functioning of the European Union allows, among many others, adoption of measures to improve air transport safety which shall be adopted by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions.

Such legislation is proposed by the European Commission, which has the right of initiative, and presented to the European Parliament and the Council, often referred to as "co-legislators". The European Parliament, elected by the European citizens, and the Council, composed of Member States representatives, may amend the text proposed by the

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6 Regulation (EC) No 2111/2005 of the European Parliament and of the Council of 14 December 2005 on the establishment of a Community list of air carriers subject to an operating ban within the Community and on informing air transport passengers of the identity of the operating air carrier, and repealing Article 9 of Directive 2004/36/EC, (Text with EEA relevance); OJ L 344 of 27.12.2005, p.15.

7 More information is available on http://ec.europa.eu/transport/modes/air/safety/air-ban/index_en.htm

8 Commission Regulation (EC) No 474/2006 of 22 March 2006 establishing the Community list of air carriers which are subject to an operating ban within the Community referred to in Chapter II of Regulation (EC) No 2111/2005 of the European Parliament and of the Council, (Text with EEA relevance); OJ L 84, 23.3.2006, p. 14.

9 Procedural details are set out in Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers; OJ L 55, 28.2.2011, p. 13.

Commission, subject to the requirements of the Treaties. Adoption by the co-legislators supposes their agreement, ultimately, on a corresponding text.

Once both European Parliament and Council have approved the final text, it is jointly signed by the Presidents and Secretaries General of both institutions. After signature, the texts are published in the Official Journal.

Regulations are directly binding throughout the EU as of the date set down in the version published in the Official Journal.

Acts adopted in accordance with the above procedure may include delegated and implementing powers for the Commission. The Commission only holds such powers if the basic legal act so provides.

Implementing powers are most often provided subject to the condition that the Commission must submit the draft rule to a committee composed of representatives of the Member States. The committee provides an opinion on the Commission's proposed measures. The effects of these opinions vary, depending on the particular procedure specified in the legal act in question. In addition to the control exercised by Member States through the committees, the Commission's implementing powers may also be subject to supplementary checks by the European Parliament and the Council.

In the area of civil aviation safety, three committees may be involved:

- the "EASA Committee" that is competent to provide opinions on draft implementing regulations to Regulations No 216/2008 and No 376/2014,
- the "Air Safety Committee" that is involved in the update of the list of air carriers subject to an operating ban under Regulation No 2111/2005,
- the "Single Sky Committee" competent for the rules in the area of ATM and ANS.

The Treaty on the Functioning of the European Union also provides for the possibility of delegating certain powers to the Commission (Article 290). Delegations of the kind are contained in certain more recent Regulations. However they have, so far, not been exercised by the Commission.

1.3.2. Aviation safety competences and responsibilities within the European safety system

1.3.2.1. Summary of the competences and responsibilities in the European safety system

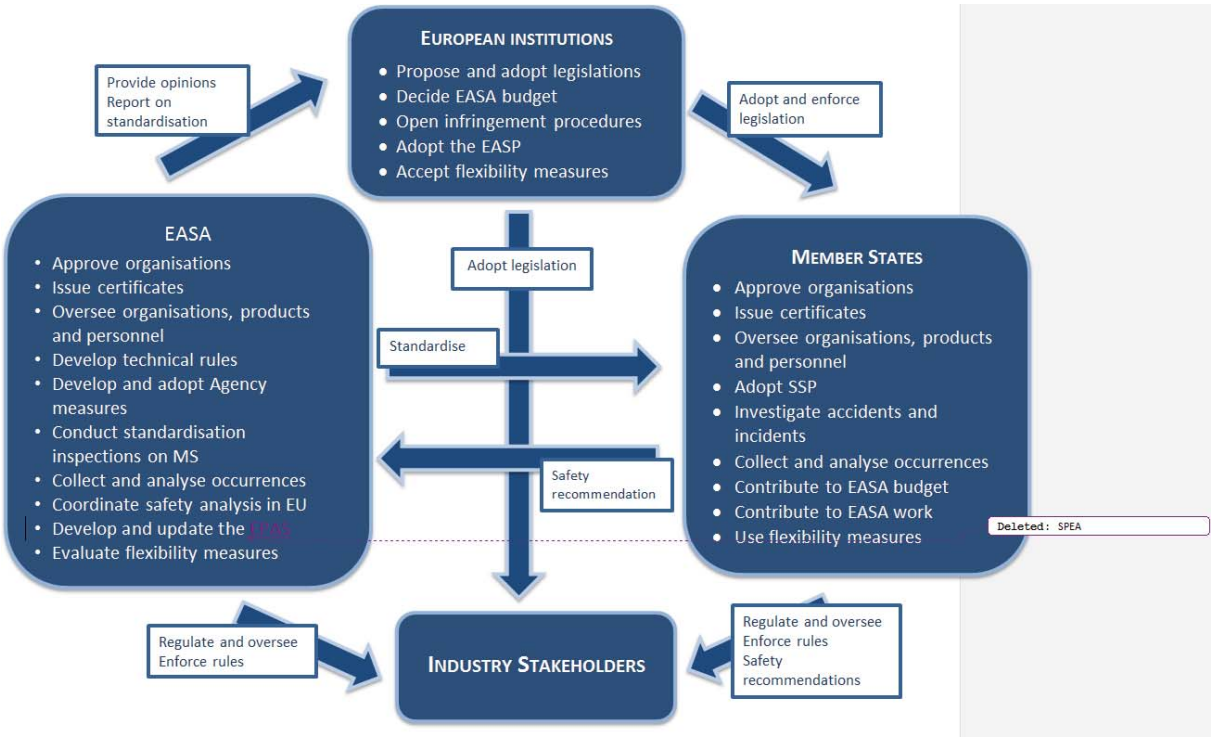
Diagram 2. Competent Authorities under EU rules

AREA OF COMPETENCE	MEMBER STATES	EASA
Airworthiness and environmental	Airworthiness certification of (individual) aircraft	Type certification of aircraft, engine and propellers
	Noise certification of aircraft	Certification of parts and appliances
		Approval of design organisations
	Approval of production organisations	Approval of 3rd country production organisations Approval of production organisations located within Member State on Member State

		request
	Approval of maintenance organisations	Approval of 3rd country maintenance organisations
	Approval of continuing airworthiness management organisations	Approval of 3rd country continuing airworthiness management organisations
	Licensing of certifying staff	
	Approval of training organisations for certifying staff	Approval of 3rd country training organisations for certifying staff
Air Operations	Certification of commercial air operators	Authorisations of 3rd country operators
Air Crew and Medical	Licencing and medical certification of pilots	
	Attestation of cabin crew	
	Approval of pilot training organisations	Approval of 3rd country pilot training organisations
	Approval of aeromedical centres	Approval of 3rd country aeromedical centres
	Certification of FSTD's	Certification of FSTD's: - used by training organisations certified by EASA - located in a 3rd country - located in a Member State on Member State request
	Certification of instructors and examiners and of aero-medical examiners	
ATM/ANS	Certification of ATM/ANS providers	Certification of 3rd country ATM/ANS providers
		Certification of Pan European ATM/ANS providers
	Licensing and medical certification of air traffic controller	
	Certification of air traffic controller training organisations	Certification of 3rd country air traffic controller training organisations and their personnel
	Certification of aero medical examiners and medical centres	

	Certification of instructors	
Aerodromes	Certification of aerodromes, its operation and its safety related equipment	
	Certification of aerodrome operators	

Diagram 3. Interrelationship between the stakeholders in the European safety system



1.3.2.2. The Member States

Member States are not, as such, involved in the adoption of EU legislation. However, under the ordinary legislative procedure, the Council composed of Member States representatives is co-legislator next to the European Parliament (see section 1.3.1). Member States (but not the Council as such) are also part of the decision making process on the case of implementing acts (see section 1.3.1).

As Union law stands, the Member States remain responsible for the regulation of:

(a) The airworthiness of aircraft listed under Annex II of Regulation No 216/2008 (e.g. certain historic aircraft, experimental aircraft, light aircraft, etc);

(b) Operations of aircraft while carrying out military, customs, police, search and rescue, firefighting, coastguard or similar activities or services;

(c) ATM/ANS, including systems and constituents, that are provided or made available by the military;

(d) Aerodromes that are controlled and operated by the military;

(e) Aerodromes that do not meet at least one of the following criteria:

(i) are open to public use;

(ii) serve Commercial Air Transport

(iii) operations using instrument approach or departure procedures are provided and

a. have a paved runway of 800 meters or above; or

b. exclusively serve helicopters;

(f) Upon Member State decision, aerodromes that meet all the criteria detailed in (e) but are below a certain size.

While the largest part of aviation safety legislation is adopted at European level, the Member States remain responsible for ensuring aviation safety in their territory and airspace. Most of the certification tasks required by Regulation No 216/2008 and its implementing rules are executed at national level, such as approvals of national organisations and licensing of personnel. The Member States oversee these personnel and organisations, conduct audits, assessments and inspections, and take measures to prevent non-compliance.

However, in certain areas certificates are issued at the European level. Indeed, in those areas, the Member States have transposed responsibilities incumbent upon under the Chicago Convention to the EU (see diagram 2 above for the detail).

The Member States are also responsible, in accordance with ICAO Standards, for developing a State Safety Programme, which is aligned with the European Aviation Safety Programme and which supports the achievement of the European Aviation Safety Policy.

1.3.2.3. The European Aviation Safety Agency (EASA)

The European Aviation Safety Agency was established in 2002 in order to provide for better arrangements in all the fields covered by Regulation No 216/2008 so that certain tasks performed at EU level are carried out by a single specialised expert body. EASA staff is composed of more than 700 aviation experts and administrators from all EU Member States. The headquarters are in Cologne (Germany) with an office in Brussels and 3 other offices, in Washington (USA), Montreal (Canada) and Beijing (China).

EASA is independent in relation to technical matters and has legal, administrative and financial autonomy. It has legal personality and exercises the tasks and responsibilities conferred on it by Regulation No 216/2008.

The EASA Management Board, that brings together representatives of the Member States and the European Commission, defines EASA's work programme, establishes its budget and monitors the Agency's operation.

EASA acts as the competent authority in the aviation areas detailed under diagram 2 above. In this context, since 2003, EASA is responsible for the type certification of aircraft in the EU. The certificate issued by EASA testifies that the type of aircraft meets the safety requirements set by European legislation. EASA monitors the performance of aircraft types in operation during the entire life cycle of aircraft produced on the basis of the type design. In this context, it may mandate actions where it has identified an unsafe condition. To that end it issues "airworthiness directives" which are addressed to the holder of the type certificate and which have to be followed by operators in the context of maintenance of their individual aircraft.

EASA also undertakes the various tasks and responsibilities described in diagram 3 above. This includes notably the preparation and adoption of opinions supporting the Commission in the preparation of the technical parts of implementing Regulations.

The drafting of such EASA opinions is assisted by consultative bodies that provide advice on the content, priorities and execution of the rulemaking programme of EASA. The Agency also prepares and adopts the measures (CS, AMC and GM) supporting the implementation of these common technical rules.

In addition, EASA conducts standardisation inspections of the Member States in order to monitor the application by the Member States of the provisions of Regulation No 216/2008 as well as its implementing rules (see also section 3.1.1). It reports to the Commission.

It also ensures, on behalf of the Commission, the oversight of the Network Manager for the ATM network functions of the Single European Sky (SES). In addition, it may investigate organisations.

EASA is also empowered to authorise third country commercial air carriers flying into within or out of the 28 EU Member States and EFTA States (Iceland, Norway, Liechtenstein and Switzerland). EASA only takes over the safety-related part of foreign operator assessment. Operating permits continue to be issued by the national authorities. Furthermore, EASA coordinates the European ramp check programme SAFA (Safety Assessment of Foreign Aircraft) regarding the safety of foreign aircraft using Union airports.

More generally, EASA provides technical advice to the European Commission and to the Member States, when appropriate.

It also undertakes tasks in the area of data collection, analysis and research to improve aviation safety. In this context, it is supported by the Network of aviation safety analysts (NoA), the European Commercial Aviation Safety Team (ECAST), the European Helicopter Safety Team (EHEST), and the European General Aviation Safety Team (EGAST).

EASA is also a member of the European Aviation Crisis Coordination Cell responsible to coordinate the management of response to network crisis in the aviation area.

Finally, EASA is responsible for the preparation and adoption of the European Plan for Aviation Safety (EPAS)[10] (see section 2.2 for detailed information on the EPAS and its adoption process).

1.3.2.4. The European Commission

The European Commission is responsible for the preparation of European legislative proposals under the ordinary legislative procedure (see also section 1.3.1) and for the preparation and adoption of implementing and delegated acts when foreseen under the basic legal act.

Once EU legislation has been adopted, the Member States have the primary responsibility for its correct and timely application. The Commission monitors the proper application by the Member States (see also section 3.1.1).

In this context, the Commission may take action if a Member State is suspected of breaching Union law. If no solution can be found at an early stage, the Commission can open a formal infringement proceeding and eventually refer the Member State to the European Court of Justice.

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[10] The European Plan for Aviation Safety was previously called the European Aviation Safety Plan. Its name has been changed to prevent confusion between the European Aviation Safety Programme (EASP) and the European Aviation Safety Plan (EASp).

The European Parliament and the Council decide on the annual EU budget and the Commission is responsible for its implementation. In this context, the Commission ensures the allocation of adequate funds for those activities conducted by EASA which are dependent upon EU funding.

Finally, the European Commission is responsible for the preparation, update and adoption of the European Aviation Safety Programme document. To develop the European Aviation Safety Programme document, the Commission is supported by a working group composed of representatives from the Member States and EASA. When relevant the Commission, assisted by this working group, prepares an update of the European Aviation Safety Programme document to reflect the changes introduced in the European Aviation Safety Programme. It also consults the Member States and the EASA Management Board. The first edition of the European Aviation Safety Programme document was published in 2011. The second one is the present. A third edition may be expected around 2019 to reflect the changes that would have been introduced to the structure of the State Safety Programme framework in the context of ICAO Annex 19 revision, as well as those coming from the revision of Regulation No 216/2008 that is proposed by the Commission in 2015.

1.3.2.5. Eurocontrol

Eurocontrol is not an EU body, but based on a multilateral agreement to which also a number of third countries are Parties. It provides technical expertise to EASA and the Member States in achieving safe air traffic operations in the European region. Eurocontrol works together with aviation partners to support the implementation of the Single European Sky (SES).

The Union has signed and concluded a Protocol providing for its accession to Eurocontrol, but that Protocol has not yet entered into force. In December 2012, the EU and Eurocontrol concluded an agreement providing a general framework for enhanced cooperation. The parties agree to strengthen and consolidate cooperation between the EU and Eurocontrol in order to enable Eurocontrol to support the EU in the implementation of SES and related EU policies within the EU, and beyond the EU in those States that agree to be bound thereby.

1.4. Accident and incident investigation

1.4.1. The applicable rules

The responsibility to investigate accidents and incidents, in order to improve aviation safety by determining their causes and make safety recommendations intended to prevent recurrence, remains with the Member States.

Regulation No 996/2010 provides the legal basis at EU level for the investigation and prevention of accidents and incidents. It ensures a high level of efficiency, expeditiousness, and quality of European civil aviation safety investigations, the sole objective being the prevention of future accidents and incidents without apportioning blame or liability. These rules notably ensure that the authority in charge of investigating accidents and incidents (Safety Investigation Authority - SIA) is independent from other State aviation organisations and from any other party or entity whose activities could come into conflict with the task entrusted to the safety investigation authority, or influence its objectivity. The rules foresee that SIA's activities may be extended to the gathering and analysis of aviation safety related information, in particular for accident prevention purposes. These activities, studies or analysis of a series of investigations can also lead to safety recommendations that are to be considered by the relevant addressee and, as appropriate, acted upon to ensure adequate prevention of accidents and incidents in civil aviation.

1.4.2. Safety recommendations

Regulation No 996/2010 requires the addressee of a safety recommendation to inform the SIA which issued the recommendation within 90 days of the receipt of that letter, of the actions taken or under consideration, and where appropriate, of the time necessary for their completion and, where no action is taken, the reasons therefore. Within 60 days of the receipt of the reply, the SIA informs the addressee whether or not it considers the reply adequate and gives justification when it disagrees with the decision to take no action.

SIAs have implemented procedures to record the responses to the safety recommendations it issued and entities receiving a safety recommendation have implemented procedures to monitor the progress of the action taken in response to the safety recommendations received. In particular, EASA has developed a procedure for the processing of safety recommendations addressed to the Agency and provide progress reports and statistics on the safety recommendations processing.

The legislation also introduces requirements to record safety recommendations as well as the associated responses in a European database (Safety Recommendations Information System - SRIS). Safety investigation authorities equally record all safety recommendations received from third countries in the common European database.

1.4.3. Cooperation with other entities

Regulation No 996/2010 further reinforces cooperation among SIAs by establishing the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA), 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. ENCASIA seeks to further improve the quality of investigations conducted by safety investigation authorities and to strengthen their independence by encouraging high standards in investigation methods and investigator training. ENCASIA notably advises EU institutions on all aspects relating to safety investigations, promotes the sharing of information useful for the improvement of aviation safety, coordinates and organises ‘peer reviews’ and training activities and promotes best safety investigation practices. Finally ENCASIA is tasked with the analysis of the safety recommendations issued or received by the EU Member States with a view to identifying important safety recommendations of Union-wide relevance.

Regulation No 996/2010 places on safety investigation authorities in the EU the obligation, in accordance with Annex 13 to the Chicago Convention, to invite EASA, and the national civil aviation authorities of the Member State(s) concerned, to participate in safety investigations. EASA's role is to act as advisor so that it can support the Investigator in Charge or the Accredited Representative of the safety investigation authority conducting or participating in the investigation but without affecting the independent status of the investigation. Likewise, national civil aviation authorities of the EU Member States can also participate in the safety investigations as advisors. EASA and the national civil aviation authorities also support the investigation in which they participate by supplying the requested information, advisors and equipment to the SIA in charge.

The Regulation also aims at enhancing the coordination of investigations between the SIAs, and other authorities likely to be involved in the activities related to the safety investigation, such as the judicial, civil aviation and search and rescue authorities.

1.5. Enforcement

1.5.1. Enforcement towards the Member States

Potential infringements can be identified in a variety of ways, including through the results of the standardisation inspections conducted by EASA that assists the Commission in monitoring aviation safety law implementation. For each standardisation inspection EASA establishes an inspection report where it addresses findings identified during the inspection and which will be sent to the Member State concerned and to the Commission. In cases the identified non-compliance findings are not properly addressed, the matter is reported to the Commission that may initiate an infringement procedure.

When a possible infringement of EU law by a Member comes to the Commission's attention, the Commission attempts to resolve the underlying problem expeditiously with the Member State concerned by means of a structured dialogue (EU Pilot). Member States can provide further factual or legal information on a potential case of violation of Union law – the goal being to find a solution in compliance with EU law and thus to avoid the need for a formal infringement procedure.

If the Commission considers that a problem of compliance with EU law persists, it may launch a formal infringement procedure under Article 258 of the Treaty on the Functioning of the European Union.

1.5.2. Enforcement towards regulated industry organisations

1.5.2.1. Penalties

The applicable aviation safety regulations require the Member States to lay down penalties for infringement of these Regulations and their implementing rules, if any. Those penalties are to be effective, proportionate and dissuasive.

Furthermore, in cases of infringements to Regulation No 216/2008 and its implementing rules and where the Agency is the competent authority and oversees an organisation, the Commission may, at EASA's request, impose fines or periodic penalty payments on the persons and the undertakings to which EASA has issued a certificate. It is required that these fines and periodic penalty payments are dissuasive and proportionate to both the gravity of the case and the economic capacity of the certificate holder concerned, taking into particular account the extent to which safety has been compromised.

1.5.2.2. Actions on certificates and other measures

Regulation No 216/2008 requires the Member States, the Commission and EASA to cooperate with a view to ensuring compliance with the Regulation and its implementing rules. Member States are required, in addition to the oversight of certificates that they have issued, to conduct investigations, including ramp inspections, and take any measure deemed necessary, including the grounding of aircraft. Where a non-compliance of certificate holders has been identified by the competent authority (national authority or EASA), or where the competent authority was informed about it, it may or has to amend (limit), suspend or revoke the certificate in accordance with the applicable provision in Regulation No 216/2008 and its implementing rules.

Additionally, the Commission, on its own initiative or at the request of a Member State or EASA, may initiate a procedure to decide whether a certificate issued in accordance with Regulation No 216/2008 and its implementing Regulations effectively complies with them. In

case of non-compliance, the Commission shall require the competent authority to take appropriate corrective action, such as limitation or suspension of that certificate. Moreover, once the Commission issues such a decision, the obligation of mutual recognition of certificates ceases to apply to the other Member States. Once the Commission has sufficient evidence that appropriate corrective action has been taken, it will decide that mutual recognition shall be restored.

In addition to these measures, the Member States have put in place national enforcement policies to ensure the proper application of legislation at national level.

2. EUROPEAN SAFETY RISK MANAGEMENT

The European Union is shifting towards a more proactive and data driven safety system. This cannot work effectively in isolation at EU level but must apply throughout the system at all levels. ICAO Standards, in Chapter 4 of Annex 19, lay down the requirement for Safety Management Systems for service providers and requires that all Safety Management Systems should be acceptable to the State responsible for the relevant certification. Furthermore, ICAO Annex 19 requires States to develop a programme to manage safety, the State Safety Programme (SSP), which requires clear policies and objectives, a means to manage safety risks and to assure safety, and finally safety promotion activities.

At this stage, the EU does not mandate the Member States to adopt, as such, a State Safety Programme. It has, however, reflected the spirit of the relevant ICAO Standards in several European Regulations, in particular in the implementing rules to Regulation No 216/2008.

2.1. Safety Requirements for Organisations and Authorities

The development of the implementing rules to Regulation No 216/2008 has resulted in the adoption of two distinct sets of requirements for authorities and organisations respectively:

a. Authority Requirements that take due account of the eight critical elements of a safety oversight system as defined by ICAO, thus supporting the implementation of SSPs, while also serving the standardisation objective set out in Regulation No 216/2008. They further include elements that are essential for establishing a comprehensive aviation safety management system at EU level, encompassing EU and Member State responsibilities for safety management.

b. Organisation Requirements, in most aviation areas, that include consolidated general requirements for (safety) management systems. The adoption of rules requiring management systems in the area of initial and continuous airworthiness is on-going. The organisation requirements are designed to embed the ICAO Standards in a way that will ensure compatibility with existing management systems and to encourage integrated management. The management system requirements are adapted to the size, nature or complexity of activities of aviation organisations and fit whatever business model they follow, thus catering for proportionate application.

For the different technical areas these general Authority and Organisation Requirements are further complemented with more specific requirements (for example: flight data monitoring requirements for air operators).

The Authority and Organisation Requirements have been set so as to reflect similar safety levels for all domains in the scope of Regulation No 216/2008. In particular, the common management system requirements constitute a single safety management framework for all approved organisations within the scope of Regulation No 216/2008.

In addition to these requirements, Regulation No 376/2014 ensures that organisations and competent authorities identify hazards and manage safety risks through the collection, analysis and follow-up of occurrences in civil aviation.

2.2. Safety Risk Management at EU level: the process to develop and update the European Plan for Aviation Safety

The European Plan for Aviation Safety is the core element of Safety Risk Management process at European level and involves the Member States, the industry and EASA.

This process consists of the following tasks described in the diagram below.

Diagram 4. Safety Risk Management process at EU level

1. **Identification of safety issues (or hazards)** that affect the European aviation system;
2. **Assessment of safety issues (or hazards)**, which aims at assessing the risks associated with the consequences of the safety issues (or hazards) identified in the previous phase;
3. **Definition and programming of safety actions** seeking to identify strategies (or mitigation actions) to address those issues (or hazards) whose level of risk cannot be tolerated after the assessment;
4. **Implementation and follow-up** aimed at tracking the status of and report on the agreed strategies; and
5. **Safety Performance** aimed at reviewing identified risk areas to assess if the risks previously identified have been mitigated and compare them with safety performance indicators.

2.2.1 Identification of Safety Issues

During the identification of safety issues the European aviation system is continuously and proactively scanned in search of safety issues with a view to identify the problems that require mitigation action at EU and/or Member States' level.

The identification of safety issues may come from information that the Agency has access to, but also from the management systems that Member States authorities or industry organisations have in place. This process can be initiated bottom-up (from the identification of specific safety issues by the stakeholders directly exposed to them) or top-down (from the analysis of the main risk areas of the aviation system).

One way to identify safety issues is through the systematic analysis of occurrence data, in particular by accident categories (e.g. Loss of control in-flight, Mid-Air Collision, etc) or by aviation domain (Commercial Air Transport, Business Aviation, General Aviation, etc).

However the analysis of occurrence data can only detect safety issues which are visible in investigated occurrences. Therefore, with a view to identifying such issues on a broader scale, other sources of information have to be taken into account, such as safety recommendations, existing safety studies, information collected through established fora (Network of aviation safety analysts (NoA), European Strategic Safety Initiative (ESSI) teams and associated Collaboration and Analysis Groups (CAGs), Human Factors Network, ENCASIA, etc), expert advice, information resulting from oversight and monitoring activities or foresight techniques.

For identification of safety issues and their assessment the interface with the Member States takes place through the NoA. The NoA is a key resource within the risk assessment process, through the analysis of occurrences contained in the European Central Repository (ECR) (see also section 3.2) as well as the provision of data from the Member States. This notably allows, where necessary, to validate results and support the link between efforts at European and at national level.

The ESSI teams (see also section 4.1.2) support the risk assessment process by providing operational input where necessary. Finally the CAGs support the validation of data and risk assessments in their relevant domains as well as the development of potential mitigation measures.

To facilitate the reporting of safety issues to the Agency from any person, organisation or authority a safety issue identification form is available.

2.2.2 Assessment of Safety Issues

EASA, supported by relevant stakeholders' groups, performs an assessment of the level of risk associated with the consequences of each of the reported safety issues.

EASA manages a Safety Risk Portfolio (SRP). The portfolio contains records on the safety issues identified by the Agency and external stakeholders, an assessment of the level of risks, a record of actions taken as well as an assessment of the residual level of risk after actions have been implemented.

The risk assessment is an analysis expressed in terms of predicted frequency and severity, of the consequence(s) of a safety issue, taking as reference all the possible scenarios, combined with the determination whether the risk is acceptable, tolerable or unacceptable.

The SRP is a living document reviewed at regular intervals as new information becomes available. In order to develop the SRP, the Agency:

- Reviews recent new available safety data or other information to determine if new safety issues are to be identified and assessed, or if the assessment of existing safety issues is questioned;
- Reviews and validates the assessment of safety issues;
- Proposes a determination of acceptability of the risk level associated to a safety issue;
- Proposes safety actions;
- Monitors the progress of ongoing safety actions;
- Proposes safety performance indicators;
- Monitors safety performance; and
- Validates the content of safety analysis outputs / EASA safety promotion material.

Once the SRP is updated it is circulated to the advisory bodies for consultation. At this stage of the process the advisory bodies advise on which safety risks can be tolerated and which ones need to be acted upon.

2.2.3 Definition and Programming of Safety Actions

Those risks that have been determined to be non-tolerable during the previous phase need to be acted upon. The Agency makes the first recommendation on the actions that need to be taken to mitigate a certain risk. The recommendation seeks to identify options that bring the highest safety benefit with the lowest possible cost, based on a preliminary impact assessment.

A preliminary impact assessment is performed at the time mitigation strategies are being considered. It balances the possible impact of an action against its benefits considering mitigation opportunities, taking into account regulation, oversight and safety promotion as possible solutions.

Before implementing any strategy it is crucial to clearly identify upfront the output that is sought and how its effectiveness will be assessed. This allows evaluating to what extent the planned strategies are being effective in a future phase.

When the best possible alternatives have been found, the Agency identifies those stakeholders that are best suited to lead the initiatives and enter into a consultation phase aimed at facilitating support from the affected stakeholders.

Proposals to mitigate a risk may include regulatory action, focused safety oversight activities or safety promotion projects (such as developing leaflets, videos, research projects, training, or international cooperation campaigns).

Actions required are determined by EASA and by the respective advisory bodies (for Member States and Industry).

The consultation phase ends with the agreement on a number of projects to tackle the identified risks, which are duly recorded in the SRP and formally incorporated in the European Plan for Aviation Safety. They are then integrated in the various EASA programmes when EASA is to take the lead or in Member States relevant programmes and plans when they are competent.

There is an expectation that States include these measures at national level and that implementation is reviewed during Standardisation inspections to monitor implementation or to justify that the measure is not safety efficient within their specific environment.

The European Plan for Aviation Safety may include, taking into account the objective of the European Aviation Safety Policy, an acceptable level of safety performance to be achieved in the Union.

The final endorsement of the European Plan for Aviation Safety occurs in the EASA Management Board.

2.2.4 Implementation and Follow-up

Once the mitigation actions are duly recorded, agreed and integrated into the appropriate programmes and plans, the implementation and follow-up phase starts.

This phase is targeted at tracking the status of implementation of those strategies that have been laid down in via the European Plan for Aviation Safety. It starts with the identification of project leaders for each of the actions of the European Plan for Aviation Safety. Project

leaders include not only EASA staff but also those within States and industry that have committed to action through the European Plan for Aviation Safety.

For those actions that have been integrated within the Agency's programmes and plans the overall follow-up mechanism established by the Strategy and Programmes department of EASA is used.

When actions are under leadership of the Member States, reporting is done through the network of nominated focal points. In this case, a specific reporting template is distributed to the network in the first quarter of a given year and collected during the third quarter, when all the inputs are summarised to prepare the final report.

Implementation issues related to the European Plan for Aviation Safety are discussed in the SSP Forum, where issues related to State Safety Programmes are also addressed.

After all stakeholders have been consulted, a final report summarising the status of all committed actions is submitted to the EASA Management Board for endorsement. The report identifies the main challenges encountered in a given year as well as those areas in which significant progress toward the objectives has been made.

2.2.5 Safety Performance

This phase assesses if previously identified risks which are recorded in the SRP have indeed been mitigated following the implementation of the agreed measures. The residual risk that remains after implementing the mitigation strategies is assessed by reviewing the SRP at predefined intervals.

The risk portfolio also sets the basis for establishing a set of risk areas to be monitored on a regular basis via Safety Performance Indicators (SPIs). The monitoring of risk areas through SPIs relies on the availability of data and the support provided by the NoA.

When the assessments determine that risks have not been properly mitigated, the mitigation strategies might need to be reconsidered or further assessment might be necessary.

2.3. Agreement on safety performance

2.3.1 Agreement on safety performance of organisations

EASA is addressing organisations' performance in the context of the European Plan for Aviation Safety. However, it has not yet agreed safety performance targets with the organisations it is responsible for.

At the level of the Member States, discussions have started to agree on safety performance with their organisations. However, at this stage, agreement on safety performance targets in most Member States has only been achieved in the ATM/ANS area.

A performance scheme[11] in the ATM/ANS area has been established at EU level with the view to contribute to the sustainable development of the air transport system by improving

[11] Article 11 of Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation); OJ L 96, 31.3.2004, p. 1, and Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions (Text with EEA relevance); OJ L 128, 9.5.2013, p. 1.

overall efficiency of the air navigation services across the four key performance areas of safety, environment, capacity (delay) and cost-efficiency.

The performance scheme was first introduced in 2009 in the context of the Single European Sky. It foresees the setting of Union-wide performance targets for fixed reference periods of 3-5 years in the four key performance areas. Members States at the level of functional airspace blocks (FABs) have to develop performance plans including binding targets at national or FAB level that are consistent with the Union-wide performance targets.

Union-wide targets for the second reference period (RP2, from 2015-2019) were set in 2014. In respect to safety, Union-wide targets were set on the level of effectiveness of safety management (EoSM) and the application of the severity classification based on the risk analysis tool (RAT) methodology.

For the implementation of the Single European Sky performance schemes, the Commission is assisted by the independent Performance Review Body as designated by Commission Implementing Decision 2014/672/EU[12].

2.3.2 Agreement on Member States' safety performance at EU level

Up to date, there are no specific safety performance targets imposed on the Member States by the EU outside those described above in the context of the Single European Sky.

However, work is on-going in the context of the European Plan for Aviation Safety to develop appropriate performance metrics. And, as underlined in section 2.2.3, the Plan may include an acceptable level of safety performance to be achieved in the Union.

In addition, certain Member States have adopted self-imposed national performance targets.

[12] Commission Implementing Decision 2014/672/EU of 24 September 2014 on the extension of the designation of the Performance Review Body of the single European sky; OJ L 281, 25.9.2014, p. 5.

3. EUROPEAN SAFETY ASSURANCE

3.1 Safety Oversight[13]

Safety oversight in the European Union includes oversight and surveillance activities on those organisations that have been approved by EASA as well as on those approved by the Member States. It also includes monitoring of the Member States to ensure the proper implementation of European aviation safety legislation.

3.1.1 Monitoring the application of the rules in the Member States

Commission Implementing Regulation (EC) No 628/2013[14] (hereinafter 'Regulation No 628/2013') lays down the working methods for conducting standardisation inspections and for monitoring the application of the relevant safety legislation by the competent authorities of the Member States. These standardisation inspections together with their follow-up are carried out by EASA (see also sections 3.3.1 and 1.5.1).

3.1.2 Oversight on certified organisations

Safety oversight forms the part of the safety regulatory process that is dedicated to ensuring an effective compliance with the safety requirements and associated procedures contained in the European legislation.

Safety oversight ensures that the European aviation industry provides a level of safety in line with that defined by the European rules. The responsibility of the individual Member States and of EASA for safety oversight is therefore the foundation upon which safe aircraft operations are built and upon which the mutual recognition of licenses and certificates is based within the European Union.

With the introduction of Authority Requirements, this oversight includes a continuous monitoring of the safety performance of organisations that considers specific risks resulting from their activities (see also section 3.3.2).

3.2 Safety Data collection, Analysis and Exchange

Safety information is an important resource for the detection of potential safety hazards. A number of EU Regulations ensure that relevant data and information are collected, analysed and exchanged where appropriate. This includes in particular information on civil aviation occurrences (in 2015 the European Central Repository contains over 1.000.000 occurrences), on foreign air carriers in the context of the SAFA system (in 2015 the SAFA database

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13 For the purpose of this document "oversight" refers both to the oversight performed on certified organisations by their competent authority and to the monitoring of rules application in the EU Member States as performed by EASA in the context of standardisation inspections.

Safety oversight in the EU is mainly governed by Regulation No 216/2008 and its implementing rules (see Diagram 1 for more information on applicable legislation).

14 Commission Implementing Regulation (EU) No 628/2013 of 28 June 2013 on working methods of the European Aviation Safety Agency for conducting standardisation inspections and for monitoring the application of the rules of Regulation (EC) No 216/2008 of the European Parliament and of the Council and repealing Commission Regulation (EC) No 736/2006 (Text with EEA relevance); OJ L 179, 29.6.2013, p. 46.

contains over 130,000 reports), on safety recommendations under the safety recommendation information system (in 2015 the SRIS database contains over 1,200 safety recommendations) and information collected, analysed and exchanged in the context of TCO authorisations and of the European safety list of banned aircraft.

In the EU the collection, analysis and exchange of occurrences governed by Regulation No 376/2014. This legislation requires each organisation, each Member State and EASA to establish a system allowing the collection and storage of relevant occurrences. Occurrences that are collected are analysed and mitigation actions are implemented where relevant. All collected occurrences, as well as relevant information on their analysis and follow-up, are transferred to the European Central Repository.

Information on occurrences submitted to the European Central Repository is made available to the Member States (national aviation authority and safety investigation authority), EASA and the Commission. The Network of aviation safety analysts (NoA) established under Regulation No 376/2014 is required to analyse the European Central Repository in support of the European Plan for Aviation Safety.

An essential part of the system established under Regulation No 376/2014 is the definition of a 'Just Culture', the objective of which is to ensure the continued availability of safety information by creating a trustful environment in which people feel confident to report occurrences. This 'Just Culture' environment is set up through key principles defined in the Regulation, including the protection from blame and punishment (except in cases of wilful misconduct or unacceptable behaviour).

3.3 Safety-data-driven targeting of oversight of areas of greater concern or need

3.3.1 Safety-data-driven targeting of monitoring of the Member States

In the EU, standardisation inspections of the Member States by the Agency are following a risk-based approach. Indeed the inspections' interval, the scope and depth of investigations, as well as team size and composition, are tailored to the specific situation of each State and sector.

This monitoring is carried out on a continuous basis, addresses the whole aviation system and is risk-based, taking into account all information available to EASA. To that end EASA assesses the competent authorities' ability to discharge their safety oversight responsibilities. This entails data collection and analysis, conducting inspections as necessary and following-up on the findings in order to ensure that appropriate corrections and corrective actions are implemented in a timely manner.

Standardisation is part of the safety data collection at EU level needed to identify hazards and allows for safety-data-driven targeting of oversight of areas of greater concern or need.

The standardisation strategy is focused on the following key areas:

- **Implementation of a Continuous Monitoring Approach**: Regulation No 628/2013 introduces a system for monitoring the uniform application of European Aviation Safety Rules that should be extended to all aviation domains.
- **Risk based planning of standardisation inspections**: in the continuous monitoring approach, the inspections' interval, scope and depth of investigation, as well as team size and composition, are tailored to the specific situation of each State and sector. This results in a more flexible and more efficient use of resources and in a reduced burden for those States which perform well and therefore can be inspected less often. Regulatory compliance verification is gradually blended in with the system/process

performance monitoring, looking at the systemic effectiveness of Competent Authorities' Management Systems and States' Safety Programmes.

- **Integration of EASA standardisation activities and ICAO USOAP programme**: the existing working arrangement fosters increased cooperation and integration of activities between EASA and ICAO. Constant dialogue, exchange of information and data, participation in each other's inspections and audits are the tools identified for this purpose with the objective that both EU and ICAO requirements and standards can be satisfied to the extent possible by only one integrated process.
- **Involvement of Competent Authorities' staff in standardisation activities**: to achieve proactive standardisation and to promote an adequate level of staff qualification across Europe. In addition standardisation meetings provide the fora for agreeing on common understanding of the requirements, providing interpretations and for sharing best practices, thus supporting the uniform implementation of the rules.
- **Reinforced regulatory feedback mechanism**: the existing feedback mechanism is being streamlined and enhanced to systematically evaluate the effectiveness of the rules and feed the outcome of standardisation activities into safety management, rulemaking and safety promotion activities.

3.3.2 Safety-data-driven targeting of oversight of the industry

In order to support the continuous monitoring of organisations' safety performance that is required under Authority requirements contained in EU law, material has been developed, including definitions and concepts for the conduct of risk-based and performance-based oversight. It focuses on the identification of aviation risks and on the effectiveness of their mitigation, rather than solely on checking compliance with the applicable requirements.

Such data-driven targeting of oversight also alleviates issues associated with the increasing number, size and complexity of regulated entities, and limited available resources in the Member States and EASA.

Such an oversight system that encourages safety management thinking and behaviour empowers organisations to manage risks that are not addressed by regulations and creates incentives for safety management implementation through a possible reduction in the oversight burden. It also supports effective implementation of the management system provisions in the implementing rules for organisations.

4. EUROPEAN SAFETY PROMOTION

Safety promotion is a key part of a safety programme and effective safety management. Safety risks can be mitigated by increasing awareness of safety lessons learned, conveying best practices and by explaining safety procedures and regulations. In the European aviation system this is part of the maintenance of a good safety culture.

Safety promotion involves general or targeted work that communicates and disseminates safety information to aviation stakeholders. The activity is driven by Safety Intelligence processes that analyse data and generate safety risk mitigation actions, as described under section 3.2.

A number of safety promotion activities are conducted by the Member States at national level and are detailed in the Member States' Safety Programmes.

At European level, most safety promotion activities are coordinated by EASA. In this context, EASA is building an integrated programming activity that ensures that safety promotion and regulatory activities address safety risks in the most efficient manner, complementing each other in certain areas. In this context, EASA is creating distinctive European safety promotion packages to increase the outreach of safety promotion products. In parallel, safety partnership activities are reinforced.

4.1 Activities at EU Level

4.1.1 Safety communication

Conveying safety information helps build a robust safety culture. Safety Communication products in the European Union include safety analysis reports; bulletins, leaflets and posters; audio-visual material; toolkits, manuals and guides; plans and programmes; workshops and other safety events.

4.1.1.1 Mandatory safety communication

Regulation No 216/2008 requires EASA to publish an Annual Safety Review[15] to inform the public of the general safety level in the field of civil aviation. The Annual Safety Review presents information on European and worldwide civil aviation safety.

Regulation No 996/2010 requires the setting up of a database of safety recommendations. This database is publicly available on line[16].

4.1.1.2 Non – Mandatory safety communication

EASA publishes Safety Information Bulletins (SIB)[17] to inform stakeholders. The SIBs are publicly available and regularly reviewed and refreshed. The Agency also publishes a review of progress on the follow-up of Safety Recommendations[18].

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15 http://easa.europa.eu/newsroom-and-events/general-publications

16 http://eccairs-dds.jrc.ec.europa.eu/pubsris/default.asp

17 http://ad.easa.europa.eu/sib-docs/page-1

18 http://easa.europa.eu/easa-and-you/safety-management/accident-and-incident-investigation-support/safety-recommendations

4.1.1.3 Safety workshops and conferences

EASA runs safety campaigns to address specific safety issues coming from occurrences, identified safety risks, emerging issues or safety audits.

EASA also regularly conducts workshops and conferences which are used to disseminate safety information to the European stakeholders and to provide an opportunity for discussions on safety related topics, including the results of inspections. Furthermore, a Safety Conference is organised on a yearly basis by the Agency.

The European Commission regularly organises conferences and seminars on issues related to aviation safety. In addition, it conducts workshops and activities to support the proper dissemination and understanding of certain safety rules, such as Regulations No 376/2014 and No 996/2010.

4.1.1.4 On-line information

A broad range of information and documentation is publicly available on the EASA website[19] and on the European Commission website dedicated to the European Aviation Safety Policy[20].

In addition, restricted access networks are frequently used to exchange safety related information between EASA, the Commission and the Member States, as well as with the industry.

4.1.2 European Strategic Safety Initiative (ESSI)

The European Strategic Safety Initiative (ESSI) is an aviation safety group gathering representatives from public authorities, as well as from industry. Its main objective is to improve aviation safety by voluntary work committing to cost-effective safety enhancements. ESSI has three teams: European Commercial Aviation Safety Team (ECAST), European Helicopter Safety Team (EHEST), and European General Aviation Safety Team (EGAST). The Safety Teams plenary meetings are held to set direction, to allocate work to groups for development and to review safety deliverables. The Safety Teams are co-chaired by one member from the aviation community and one from EASA.

4.1.2.1 Commercial aviation

ECAST addresses large fixed wing aircraft operations, and aims to further enhance commercial aviation safety in Europe, and for European citizen worldwide. ECAST is a partnership between EASA, other European authorities and the aviation industry. ECAST cooperates with US CAST and with other major safety initiatives worldwide, in particular the ICAO Regional Aviation Safety Groups (RASG).

4.1.2.2 Helicopters

EHEST brings together helicopter manufacturers, operators, research organisations, authorities and accident investigators from across Europe. EHEST works closely with the International Helicopter Safety Team (IHST).

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19 http://easa.europa.eu/

20 http://ec.europa.eu/transport/modes/air/safety/index_en.htm

4.1.2.3 General Aviation

EGAST gathers representatives from the General Aviation community, associations and clubs, industry, EASA and other authorities from across Europe. It is a forum for sharing best practices, gathering data and promoting safety. Building on work undertaken by its members it magnifies their efforts. EGAST works with the General Aviation Joint Steering Committee (GA JSC), co-chaired by the FAA and by the Aircraft Owners and Pilots Association's (AOPA) Air Safety Foundation.

4.2 International cooperation at EU level

Aviation safety is increasingly a cooperative, global effort. In this context, the EU's aviation safety policy has an ever stronger international dimension.

The Commission, EASA and the Member States coordinate closely on a number of international activities in aviation safety. The aim is to enhance worldwide safety and environmental protection, support the free movement of products and services, and promote European and global safety standards.

To achieve these objectives, the EU works with partner countries and regional organisations at regulatory as well as operational level. This is done through the implementation of international agreements and working arrangements, as well as through technical assistance and cooperation activities. Technical assistance aims at the improvement of aviation safety in developing countries or regions; technical cooperation and partnerships are developed with emerging and advanced countries

4.3 Training at EU level

In the EU, training activities include the aviation organisations that are involved in the implementation of the European Aviation Safety Programme: Member States CAAs, SIAs and industry.

Under Regulation No 376/2014, the Commission and the Agency are required to support the Member States with appropriate training. This training is notably performed in the context of the NoA and of the ECCAIRS Steering Committee.

Under Regulation No 216/2008, organisations and competent authorities are responsible for maintaining the level of training of their personnel so that their level of competency ensures a proper performance of their tasks. Furthermore, the competent authorities are required to facilitate the discharge by organisations of their obligations to implement a management system with relevant education or training where feasible or appropriate.

In addition, new training capabilities are being developed to ensure that all those involved have the relevant skills to ensure the successful implementation of the performance-based approach.

In a similar manner, EASA strives to maintain high levels of knowledge and competency while remaining current on the latest developments in aviation within the areas of its activities by developing and providing training courses to its employees, but also to stakeholders, including those from the Member States and the industry.

The Agency has also developed and maintains an e-examination system through its website, based on a question database. This is offered on a voluntary basis to students of training organisations or self-trained students through a system of established examination centres, providing the opportunity to receive a certificate.

Furthermore, EASA also provides assistance to partner authorities in complying with their international obligations (e.g. ICAO, EU regulations) and implements EU Civil Aviation Cooperation projects in several regions of the world, including neighbouring countries, the Asia-Pacific Region and Africa.

4.3.1 Common Training Initiative Group (CTIG)

The Common Training Initiative Group (CTIG) is a horizontal group that brings together Authorities representatives for sharing and coordinating training initiatives aimed at the qualification of regulators personnel. The proceedings of the group are considered as guidance material only, advising on agreed best practices.

The scope of CTIG's activities focuses on the following:

- Establish a common understanding of the role of authority inspectors, engineers and other experts, and their background in terms of qualification(s) and experience;
- Identify common best practice and new trends in training, knowledge assessment, competence assessment and qualification of Authority personnel;
- Identify, develop, implement and coordinate common training activities, such as the identification of needs, courses and programmes;
- Share information on courses of common interest to EASA, National Aviation Authorities and other stakeholders.

4.3.2 Training concept

EASA has launched the EASA Virtual Academy in order to ensure that harmonised and high-quality training is available especially to National Aviation Authorities staff. For this flexible training offer combined with a far reaching presence (geographically and in terms of languages) the Agency relies on qualified external training providers carefully selected through an adequate approval procedure. The scope of this training focuses on supporting and improving the qualification of the Member States personnel involved in approval and oversight activities.

LIST OF ABBREVIATIONS

AMC	Acceptable Means of Compliance
ANS	Air Navigation Services
ATM	Air Traffic Management
CAA	Civil Aviation Authority
CAGs	Collaboration and analysis groups
CS	Certification Specification
CTIG	Common Training Initiative Group
EASA	European Aviation Safety Agency
ECAST	European Commercial Aviation Safety Team
ECCAIRS	European Co-ordination Centre for Accident and Incident Reporting Systems
ECR	European Central Repository
EFTA	European Free Trade Association
EGAST	European General Aviation Safety Team
EHEST	European Helicopter Safety Team
ENCASIA	European Network of Civil Aviation Safety Investigation Authorities
EPAS	European Plan for Aviation Safety
ESSI	European Strategic Safety Initiative
EU	European Union
FABs	Functional Airspace Blocks
GM	Guidance Material
ICAO	International Civil Aviation Organization
NoA	Network of aviation safety analysts
SAFA	Safety Assessment of Foreign Aircraft
SES	Single European Sky

SIA	Safety Investigation Authority
SIB	Safety Information Bulletins
SPI	Safety Performance Indicator
SRP	Safety Risk Portfolio
SSP	State Safety Programme
TCO	Third Country Operator
USOAP	Universal Safety Oversight Audit Programme (ICAO)