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ANNEX

ANNEX

to the

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

The European Aviation Safety Programme

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Introduction

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

The European Aviation Safety Programme functionally corresponds, at the EU level, to the State Safety Programme as described in Annex 19 to the Chicago Convention. Regulation (EU) 2018/1139 introduced a mandatory new Chapter on Aviation Safety Management in the EU aviation legal framework. It lays out, among other aspects, that the Commission shall adopt, publish and update a document (the 'European Aviation Safety Programme') describing the functioning of the European aviation safety system, containing the rules, activities and processes which are used to manage the safety of civil aviation in the Union in accordance with its legal framework.

The Programme explains how aviation safety is managed from a European perspective. Since many rules and activities related to aviation safety being today adopted and coordinated at the EU level, Member States shall refer to the European Aviation Safety Programme in their own State Safety Programmes. This is the reason why the European Aviation Safety Programme shall include at least the elements related to State safety management responsibilities described in the international standards and recommended practices. 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 most of the areas covered by the Chicago Convention, States have transferred their competence to the Union. The European Aviation Safety Programme also explains how the EU addresses the international obligations that result from this delegation of responsibilities.

The European Aviation Safety Programme 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 European Aviation Safety Programme also describes the process for the development, adoption, update and implementation of the European Plan for Aviation Safety.

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 (hereby 'the Commission'), the Member States and the European Union Aviation Safety Agency cooperate to identify hazards and take actions as appropriate in order to mitigate safety risks, the European Aviation Safety Programme 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.

TERMINOLOGY

Throughout this document:

- where reference is made to 'Member States' this shall mean the 27 EU Member States;
- where reference is made to 'EASA Member States' this shall mean the 27 EU Member States, plus Iceland, Liechtenstein, Norway and Switzerland;
- where reference is made to 'ICAO EUR States' this shall mean the 55 States of the ICAO Region EUROPE, which includes all EU Member States;
- any reference to 'Basic Regulation' or 'BR' shall mean Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency¹; and
- any reference to the 'Network of Analysts' or 'NoAs' shall mean the Network of Aviation Safety Analysts' as referred to in Regulation (EU) No 376/2014 of the European Parliament and of the Council on the reporting, analysis and follow-up of occurrences in civil aviation².

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¹ Regulation (EU) 2018/1139 of the European parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (Text with EEA relevance); OJ L 212, 22.08.2018, p. 1.

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, 24.04.2014, p. 18.

1. EUROPEAN SAFETY POLICIES, OBJECTIVES AND RESOURCES

1.1. The European Aviation Safety System

The European Aviation Safety System contains rules and processes which are used to manage the safety of civil aviation in the Union in accordance with the Regulation (EU) 2018/1139. Those rules and processes ensure a high level of safety in civil aviation, are harmonising safety aspects and are facilitating the free movement of products, services, persons and capital involved in civil aviation.

At the same time, the system:

- improves the competitiveness of the Union's aviation industry,
- promotes cost-efficiency, by, *inter alia*, avoiding duplication, and promoting effectiveness in regulatory, certification and oversight processes as well as an efficient use of related resources at Union and national level,
- assists Member States in exercising their rights and fulfilling their obligations under the Chicago Convention, by ensuring a common interpretation and a uniform and timely implementation of its provisions,
- promotes worldwide the views of the Union regarding civil aviation standards and civil aviation rules, by establishing appropriate cooperation with third countries and international organisations, and
- promotes technical and operational interoperability and the sharing of administrative best practices.

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

The high and uniform level of protection of the European citizens and of passengers mainly relies on the adoption of common safety rules, on measures that ensure that products, persons and organisations³ within the EU comply with such rules, as well as on efficient Safety Risk Management processes at regional, State and industry levels. Article 85 of Regulation (EU) 2018/1139 provides for an enforcement system, where the Agency assists the Commission in monitoring the application by the Member States of this Regulation and its delegated and implementing acts.

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 Programme 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. The system in particular takes advantage of the data-driven risk identifications and evaluations performed by the Data4Safety (big data) programme supported by the Commission and coordinated by EASA, with the participation of relevant partners from the European aviation community.

³ For the purpose of this document, organisations are understood as industry organisation providing aviation products or services.

1.2. The European Aviation Safety System and ICAO

The European Aviation Safety System is closely coordinated with the development and implementation of the International Aviation Civil Organization (ICAO) Standards and Recommended Practices (SARPs).

The Commission and EASA follow their development process and schedule related rulemaking actions as soon as it can be confirmed that a change of the European regulatory framework is needed. This includes the assessment of ICAO's Annexes Amendment proposals (ICAO State Letter type I) as well as the identification of differences between the EU regulatory framework and ICAO Annexes (ICAO State Letter type II and Compliance Checklists). In the assessment of differences, EASA and the Commission support Member States which have to notify differences to ICAO. Following EASA's assessment the Commission proposes a decision to the EU Council on the notification of differences.

In addition, the Commission and EASA work in partnership with the ICAO Regional Office for the Europe/North Atlantic (EUR/NAT) region to promote a regional approach to managing aviation safety, encourage collaborative risk management and create synergies within the various EU safety enhancement initiatives. The EUR Regional Aviation Safety Plan (EUR RASP) is instrumental in this context: since 2017 the ICAO Regional Office, the Commission and EASA have been working together to develop such a RASP which draws upon the actions defined in the European Plan for Aviation Safety (EPAS), thus allowing all ICAO EUR States to benefit from the established safety planning process and its various outputs, be it in terms of regulatory material, safety promotion deliverables, guidelines, tools and best practices. The first EUR RASP was issued in January 2019.

The Commission and EASA are also represented in the European Aviation System Planning Group (EASPG) and its related Programme Coordination Group (PCG). The main objectives of the EASPG are to ensure that air navigation system development plans and aviation safety plans within the EUR Region remain coherent and compatible with those of the adjacent regions as well as with the ICAO global plans, and to manage and coordinate their implementation. Moreover, the EASPG plays an important role in promoting and facilitating harmonisation and coordination of the air navigation and safety related EUR sub-regional and national programmes.

Finally, the Commission and EASA are represented in the Global Aviation Safety Plan (GASP) Study Group, thereby contributing to the maintenance of the GASP, related guidance material and tools. The main purpose of the GASP is to continually reduce fatalities and the risk of fatalities by guiding the development of a harmonised aviation safety strategy on the basis of six GASP goals with associated targets, and the development and implementation of regional and national aviation safety plans.

In addition, EASA promotes the State Safety Programme (SSP) and safety management implementation globally through EU technical assistance projects and by working with ICAO Regional Offices to support States and Regional Safety Oversight Organisations (RSOOs). The main objectives of these projects are to raise the safety level globally by assisting States in setting up their SSP, assisting States and RSOOs in establishing regional cooperation mechanisms, thus ensuring compliance with ICAO SARPs. Throughout these activities the European safety policies and objectives can be effectively promoted at regional and global level.

1.3. The Union aviation safety and environmental protection legislative framework

1.3.1. Structure of the Union safety legislative framework

Article 4(2)(g) of the Treaty on the Functioning of the European Union (TFEU) establishes that transport is a shared competence between the European Union and its Member States. Furthermore, Article 100(2) of the TFEU allows the European Parliament and the Council to lay down appropriate provisions for air transport, following a proposal by the Commission. Article 2(2) of the TFEU lays out that when the Treaties confer on the Union a competence shared with the Member States in a specific area, the Union and the Member States may legislate and adopt legally binding acts in that area, and that Member States shall exercise their competence to the extent that the Union has not exercised its competence.

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

The Union civil aviation safety legislative framework is composed of Regulations of the European Parliament and of the Council, complemented, where relevant, by Commission delegated and implementing regulations. Mechanisms for evaluating the implementation and effectiveness of the legislation, potentially leading to its revision, are included in the relevant legal acts and assessed as well through the so-called standardisation inspections of Member States performed by EASA.

The table below summarises the applicable aviation safety legislation adopted at EU level.

Table 1. Applicable European Union aviation safety and environmental protection legislation

EASA Basic Regulation and related Implementing and Delegated Regulations			
Basic Regulation	(EU) 2018/1139	Annex I: Aircraft referred to in point (d) of Article 2(3) Annex II: Essential Requirements for Airworthiness Annex III: Essential Requirements for Environmental Compatibility related to Products Annex IV: Essential Requirements for Aircrew Annex V: Essential Requirements for Air Operations Annex VI: Essential Requirements for Qualified Entities Annex VII: Essential Requirements for Aerodromes Annex VIII: Essential Requirements for ATM/ANS and Air Traffic Controllers Annex IX: Essential Requirements for Unmanned Aircraft Annex X: Correlation Table	
Initial Airworthiness	IR: (EU) No 748/2012	Annex II: Part 21 Annex II: Repealed Regulation – list of amendments Annex III: Correlation Table	
Additional airworthiness specifications for operations	IR: (EU) 2015/640	Annex I: Part-26	
Continuing airworthiness	IR: (EU) No 1321/2014	Annex I: Part-M Annex II: Part-145 Annex III: Part-66 Annex IV: Part-147 Annex Va: Part-T Annex Vb: Part-ML Annex Vc: Part-CAMO Annex Vd: Part-CAO	
Aircrew	IR: (EU) No 1178/2011	Annex I: Part-FCL Annex II: Conversion of non-EU licences Annex III: Licences of non-EU States Annex IV: Part-MED Annex V: Part-CC Annex VI: Part-ARA Annex VII: Part-ORA Annex VIII: Part-DTO	
Air operations	IR: (EU) No 965/2012	Annex I: Definitions Annex II: Part-ARO Annex III: Part-ORO Annex IV: Part-CAT Annex V: Part-SPA Annex VI: Part-NCC Annex VII: Part-NCO Annex VIII: Part-SPO	
Balloons – Air Operations	IR: (EU) 2018/395	Annex I: Part-DEF Annex II: Part-BOP Annex III: Part-BFCL	

Sailplanes – Air Operations	IR: (EU) 2018/1976	Annex I: Part-DEF
		Annex II: Part-SAO
		Annex III: Part-SFCL

EASA Basic Regulation and related Implementing and Delegated Regulations (continued)			
Third country operators	IR: (EU) No 452/2014	Annex I: Part-TCO Annex II: Part-ART	
ATM/ANS provision of services – Air Traffic Management/Air Navigation Services	IR: (EU) 2017/373	Annex I: Definitions Annex II: Part-ATM/ANS.AR Annex III: Part-ATM/ANS.OR Annex IV: Part-ATS Annex V: Part-MET Annex VI: Part-AIS Annex VII: Part-DAT Annex VIII: Part-CNS Annex IX: Part-ATFM Annex X: Part-ASM Annex XI: Part-FPD Annex XII: Part-NM Annex XII: Part-NM Annex XII: Part-PERS	
Interoperability of the European ATM Network	IR: (EU) No 1079/2012 IR: (EU) No 1207/2011 IR: (EU) No 1206/2011 IR: (EU) No 29/2009 IR: (EC) No 262/2009 IR: (EC) No 633/2007 IR: (EC) No 1033/2006 IR: (EC) No 1032/2006		
Air Traffic Controllers	IR: (EU) 2015/340	Annex I: Part ATCO Annex II: Part ATCO.AR Annex III: Part ATCO.OR Annex IV: Part ATCO.MED	
Airspace usage requirements (ACAS II)	IR: (EU) No 1332/2011	Annex: ACAS	
Airspace usage requirements (PBN)	IR: (EU) 2018/1048	Annex: Subpart PBN	
SERA	IR: (EU) No 923/2012	Annex: Standardised European rules of the air	
<u>Aerodromes</u>	IR: (EU) No 139/2014	Annex I: Definitions Annex II: Part-ADR.AR Annex III: Part-ADR.OR Annex IV: Part-ADR.OPS	
Unmanned Aircraft Systems (UAS) (Rules and procedures for the operation of unmanned aircraft)	IR: (EU) 2019/947	Annex: UAS ops in the 'Open' and 'Specific' categories	

UAS and third-country operators of unmanned aircraft systems)	DR: (EU) 2019/945	Annex
Regulatory framework for the U-space	IR: (EU) 2021/664	Annex I: Criteria for the definition of capabilities, performance requirements, operational conditions and airspace constraints referred to in Article 3(4) Annex II: Publication of the common information referred to in Article 5(4)(a) Annex III: Data quality, data latency and data protection requirements referred to in Article 5(4)(b) and Article 7(5)(c) Annex IV: UAS flight authorisation request referred to in Article 6(4) Annex V: Exchange of relevant operational data and information between U-space service providers and air traffic service providers in accordance with Article 7(3) Annex VI: Certificate for U-space service provider referred to in Article 14(3) Annex VII: Certificate for single common information service provider referred to in Article 14(3)

Other Regulations on the functioning of the European Union Aviation Safety Agency			
Fees and Charges	IR: (EU) 2019/2153	Annex	
Fines and Penalties	IR: (EU) No 646/2012		
Standardisation Inspections	IR: (EU) No 628/2013		

Regulations in the area of aviation safety not stemming from the EASA Basic Regulation			
Occurrence Reporting	IR: (EU) No 376/2014	Annex I: List of requirements applicable to the mandatory and voluntary occurrence reporting schemes Annex II: Interested Parties Annex III: Request for Information from the European Central Repository	
Common European risk classification scheme	DR: (EU) 2020/2034 Supplementing (EU) No 376/2014	Annex: The common European risk classification scheme	
List classifying occurrences in civil aviation to be mandatorily reported according to Regulation (EU) No 376/2014	IR: (EU) 2015/1018	Annex I: Occurrences related to the operation of the aircraft Annex II: Occurrences related to technical conditions, maintenance and repair of the aircraft Annex III: Occurrences related to air navigation services and facilities Annex IV: Occurrences related to aerodromes and ground services Annex V: Occurrences related to aircraft other than complex motor-powered aircraft, including sailplanes and lighter-than-air vehicles	
Investigation and prevention of accidents and incidents in civil aviation	(EU) No 996/2010	Annex: List of examples of serious incidents	
Harmonisation of technical requirements and administrative procedures in the field of civil aviation	Council Regulation (EEC) No 3922/91		
Establishment of a Community list of air carriers subject to an operating ban within the Community	(EC) No 2111/2005	Annex: Common criteria for consideration of an operating ban for safety reasons at Community level	
Implementing rules for the Community list of air carriers which are subject to an operating ban within the Community	(EC) No 473/2006	Annex A: Information to be provided by a Member State making a request under Article 4(2) of the Basic Regulation Annex B: Communication by a Member State of exceptional measures taken under Article 6(1) of the Basic Regulation to impose an operating ban in its territory Annex C: Communication by a Member State of exceptional measures taken as permitted by Article 6(2) of the Basic Regulation to maintain or impose an operating ban in its territory when the Commission has decided not to include similar measures in the Community list	
Community list of air carriers which are subject to an operating ban within the Community	(EU) No 474/2006	Annex A: List of air carriers of which all operations are subject to a ban within the Community	

		Annex B: List of air carriers of which operations are subject to operational restrictions within the Community
Single European Sky Framework	(EC) No 549/2004	
Single European Sky ANS Service Provision	(EC) No 550/2004	Annex I: Requirements for Recognised Organisations Annex II: Conditions to be attached to certificates
Single European Sky – organisation and use of the airspace	(EC) No 551/2004	
Single European Sky – Common Projects	IR: (EU) No 409/2013	
Performance & Charging Scheme in the Single European Sky – Safety Key Performance Indicators	IR: (EU) 2019/317	Annex I: Key Performance Indicators (KPI) for Target Setting and Indicators for Monitoring Annex II: Template for Performance Plans at National or Functional Airspace Block Level referred to in Article 10(1) Annex III: Template for the Network Performance Plan referred to in Article 10(5) Annex IV: Criteria for the assessment of Performance Plans and Targets at National or Functional Airspace Block Level Annex V: Criteria for the Assessment of the draft Network Performance Plan Annex VI: List of Performance-related data to be provided to the Commission for monitoring of performance in accordance with Article 36(1) and Article 37 Annex VII: Determined and Actual Costs Annex VIII: Requirements for the Calculation of En Route and Terminal Service Units referred to in Article 25 Annex IX: Unit Rates Annex X: Criteria for the Assessment of whether the provision of the services referred to in Article 35(1) is subject to Market Conditions Annex XI: Reporting tables to support the Cost Base and Unit Rates to be provided to the Commission in accordance with Article 35(6) Annex XII: Essential elements for the consultations referred to in Article 24(3) and Article 30(1) Annex XIII: Specific requirements on incentive schemes referred to in Article 11(3)

Other Regulations in the area of civil aviation relating to environmental protection			
Noise-related operating restrictions at Union airports	IR: (EU) No 598/2014 ⁴	Annex I: Assessment of the Noise Situation at an airport Annex II: Assessment of the cost-effectiveness of noise-related operating restrictions	

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^{4 &}lt;u>EUR-Lex - 32014R0598 - EN - EUR-Lex (europa.eu)</u>

Applicable Union aviation safety legislation can be found on the EUR-Lex website, in the section Directory of European Union legislation, Chapter $07.40.30^5$. The Agency also publishes an overview of the regulatory framework⁶.

To support the implementation of EU aviation safety law and promote it globally, EASA makes available consolidated versions of the aviation rules through its eRules project, aiming at the digitalisation of aviation rules. The **Easy Access Rules** present the aviation law in a consolidated, user-friendly manner (implementing rules with all their amendments are displayed next to the related acceptable means of compliance, guidance material, certification specifications and detailed specifications).

Easy Access Rules are available for all the aviation domains and are shared in pdf format and as an online dynamic publication. They can be found at the following link: https://www.easa.europa.eu/document-library/easy-access-rules

1.3.2. Regulation (EU) 2018/1139 and associated rules

1.3.2.1. The legal requirements

Regulation (EU) 2018/1139⁷ 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 establishes the European Union Aviation Safety Agency.

Regulation (EU) 2018/1139 defines 'essential requirements' that set high level objectives and obligations on authorities, persons and organisations in order to achieve the objective of the Regulation. 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, air traffic management and air navigation services (ATM/ANS) provided in the airspace of the territory to which the EU Treaty applies, air traffic controllers, and unmanned aircraft.

In application of Regulation (EU) 2018/1139, the Commission adopted delegated and implementing Regulations, including those detailed in the table included in section 1.3.1.

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

In the European Union, application of EU law is primarily the responsibility of the Member States. Most certification and oversight tasks required by Regulation (EU) 2018/1139 and its implementing rules are therefore executed at national level by the national competent authorities. However, in certain clearly defined cases, such as for example design organisation

⁵ http://eur-lex.europa.eu/browse/directories/legislation.html

⁶ https://www.easa.europa.eu/regulations

⁷ Regulation (EU) 2018/1139 of the European parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (Text with EEA relevance); OJ L 212, 22.08.2018, p. 1.

approvals, EASA is the competent authority and is empowered to issue certificates and to take the related enforcement measures.

The aviation safety domains where EU competence is currently exercised are:

1) Airworthiness and environmental certification

The EU rules apply to aircraft referred to in points (a) and (b) of Article 2(1) of Regulation (EU) 2018/1139, other than unmanned aircraft, and their engines, propellers, parts and non-installed equipment, which shall comply with the essential requirements for airworthiness set out in Annex II to that Regulation.

As regards noise and emissions, those aircraft and their engines, propellers, parts and non-installed equipment shall comply with the environmental protection requirements contained in the latest amendments to Annex 16 to the Chicago Convention, which is regularly adapted. The essential requirements for environmental compatibility set out in Annex III to Regulation (EU) 2018/1139 shall apply to products, parts and non-installed equipment to the extent that the provisions of the Chicago Convention referred to in the first subparagraph of Article 9(2) Regulation (EU) 2018/1139 do not contain environmental protection requirements.

A set of rules related to initial and continuous airworthiness is applicable to the design of products, to the design of parts, to the design of non-installed equipment, to individual aircraft, to organisations responsible for the design, production, continuing airworthiness management and maintenance as applicable, of products, parts and non-installed equipment, and to personnel responsible involved in these activities.

2) Environmental protection

EASA applies measures as regards emissions and noise, for the purpose of the certification of the design of products in accordance with Article 11 of Regulation (EU) 2018/1139, with the aim to prevent significant harmful effects on climate, environment and human health caused by the civil aviation products concerned. In taking those measures, EASA gives due consideration to the international standards and recommended practices, environmental benefits, technological feasibility and economic impact. The measures include ensuring the availability of environmental standards which is achieved through the EU's effective involvement upstream in the ICAO Committee on Aviation Environmental Protection (CAEP) process. Moreover, Regulation (EU) 2018/1139 empowers the EU to create environmental standards in those areas where no ICAO standards are available, included but not limited to hybrid, electric and hydrogen-powered aircraft.

Generally, the Commission and EASA define and coordinate civil aviation environmental protection policies and actions at the EU level. In that context, the Commission, EASA, other EU institutions, bodies, offices and agencies as well as Member States are called to cooperate on environmental matters. The cooperation includes activities related to the EU Emissions Trading System (ETS), the Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (REACH)⁸. In the same context, EASA is also contributing to the implementation of the EU's environmental strategy actions, such as the development of an environmental labelling programme for aviation as part of the Smart and Sustainable Mobility

⁸ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Strategy⁹ as well as the support provided as regards the development of the 'Fit for 55 package', which includes the Commission's proposal for the RefuelEU Aviation legislative framework¹⁰ with a monitoring and reporting task on uptake of Sustainable Aviation Fuels for EASA.

Also, an environmental review jointly developed by the European Environment Agency (EEA) and EASA, with the support of the Single European Sky (SES) Network Manager, provides an objective account of the state of environmental protection relating to civil aviation in the Union. This review, published every three years in the European Aviation Environmental Report, contains recommendations on how to improve the level of environmental protection in the area of civil aviation in the Union. The last report was published in September 2022¹¹.

In addition, EASA also has a mandate to collect and verify aircraft noise and performance information for noise modelling around airports, as per Regulation (EU) 598/2014¹².

3) Aircrew

Pilots and cabin crew involved in the operation of aircraft referred to in point (b) of Article 2(1) of Regulation (EU) 2018//1139, other than unmanned aircraft, as well as flight simulation training devices, persons and organisations involved in the training, testing, checking or medical assessment of those pilots and cabin crew, shall comply with the essential requirements set out in Annex IV to that Regulation. Pilots are required to hold a pilot licence and a pilot medical certificate appropriate to the operation to be performed, cabin crew involved in commercial air transport operations is required to hold an attestation, and approvals are required in respect of aero-medical centres, pilot training organisations and cabin crew training organisations.

Certificates are required in respect of each flight simulation training device used for the training of pilots. Persons responsible for providing flight training, flight simulation training, or for assessing pilots' skills, as well as aero-medical examiners, are also required to hold a certificate.

4) Air operations

The operation of aircraft falling within the scope of Regulation (EU) 2018/1139, other than unmanned aircraft, shall comply with the essential requirements set out in Annex V and, if applicable, Annexes VII and VIII of the Regulation. Aircraft operators will either declare their capability, and the availability to them of the means, to discharge the responsibilities associated with the operation of aircraft in compliance with the applicable EU implementing rules, or hold a certificate. The certificate shall specify the privileges granted to the aircraft operator and may be amended to add or remove privileges. Similarly, the certificate may be limited, suspended or revoked, when the holder no longer complies with the applicable EU rules and procedures for issuing and maintaining such certificate.

5) Aerodromes and groundhandling

Aerodromes, safety-related aerodrome equipment, the operation of aerodromes and the provision of groundhandling services and apron management services (AMS) at aerodromes shall comply with the essential requirements set out in Annex VII and, if applicable, Annex

9 https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_2330

10 COM(2021) 561 final.

¹¹ https://www.easa.europa.eu/eco/sites/default/files/2022-09/220723 EASA%20EAER%202022.pdf

¹² Regulation (EU) No 598/2014 of the European Parliament and of the Council of 16 April 2014 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Union airports within a Balanced Approach and repealing Directive 2002/30/EC. OJ L 173, 12.6.2014, p. 65-78.

VIII to Regulation (EU) 2018/1139. The EU rules apply to aerodromes, located in the territory to which the Treaties apply, and which meet all of the following criteria:

- open to public use,
- serving commercial air transport; and
- having a paved instrument runway of 800 metres or more, or
- exclusively serving helicopters using instrument approach or departure procedures.

The EU rules set out common requirements for:

- the design, maintenance and operation of aerodromes,
- including the safety-related equipment used at those,
- the design, production, maintenance and operation of safety-related aerodrome equipment used or intended for use at the aerodromes that are within the scope of EU rules, as well as the provision of groundhandling services and Apron Management Services at those aerodromes; and
- the safeguarding of surroundings of the aerodromes referred, this without prejudice to Union and national law on environment and land-use planning.

6) ATM/ANS, including implementation of SES

The provision of ATM/ANS shall comply with the essential requirements set out in Annex VIII and, if applicable, Annex VII. Aircraft operating in the Single European Sky (SES) airspace, except those engaged in activities referred to in point (a) of Article 2(3) of Regulation (EU) 2018/1139, shall comply with the essential requirements set out in point 1 of Annex VIII. Providers of ATM/ANS are required to hold a certificate specifying the privileges granted, once they have demonstrated compliance with the applicable EU rules. As well, organisations involved in the design, production or maintenance of ATM/ANS systems and ATM/ANS constituents may be required to hold a certificate.

EASA is the competent authority responsible for the certification, oversight and enforcement in respect of certain ATM/ANS service providers and ATCO training organisations, including pan-European providers, as well as of the organisations involved in the design, production or maintenance of ATM/ANS systems and ATM/ANS constituents.

EASA, upon request, provides technical assistance to the Commission in the implementation of SES as defined in Article 93 of Regulation (EU) 2018/1139.

7) Air traffic controllers

Air traffic controllers involved in the provision of ATM/ANS, as well as persons, organisations and synthetic training devices involved in the training, testing, checking or medical assessment of those air traffic controllers, shall comply with the essential requirements set out in Annex VIII of Regulation (EU) 2018/1139. Air traffic controllers shall be required to hold an air traffic controller licence and an air traffic controller medical certificate specifying the privileges granted and they may be amended to add or remove privileges, as well as limited, suspended or revoked when the holder no longer complies with the EU applicable rules and procedures for issuing and maintaining a licence or a medical certificate. Air traffic controller training organisations and aero-medical centres are required to hold a certificate. Persons responsible for providing practical training, for assessing the practical skills of air traffic controllers, as well as aero-medical examiners, shall also be required to meet certain competence requirements.

8) Unmanned aircraft

The design, production, maintenance and operation of unmanned aircraft and their engines, propellers, parts, non-installed equipment and equipment to control them remotely, as well as the personnel, including remote pilots, and organisations involved in those activities, shall comply with the essential requirements set out in Annex IX, and where applicable with the essential requirements set out in Annexes II, IV and V to Regulation (EU) 2018/1139. Taking into account the nature and risk of the activity concerned, the operational characteristics of the unmanned aircraft concerned and the characteristics of area of operation, a certificate may be required for the design, production, maintenance and operation of unmanned aircraft and their engines, propellers, parts, non-installed equipment and equipment to control them remotely, as well as for the personnel, including remote pilots, and organisations involved in those activities. The certificate shall specify the safety-related limitations, operating conditions and privileges, and may be amended to add or remove limitations, conditions and privileges, as well as limited, suspended or revoked when the holder no longer complies with the conditions, rules and procedures for issuing or maintaining such certificate.

9) Third Country Operations

Aircraft referred to in Article 2(1)(c) of Regulation (EU) 2018/1139, as well as their aircrew and their operations, shall comply with the applicable ICAO standards. To the extent that there are no such standards, those aircraft, their aircrew and their operations shall comply, as regard aircraft other than unmanned aircraft, with the essential requirements set out in Annexes II, IV and V to Regulation (EU) 2018/1139. As regards unmanned aircraft, they shall comply with the essential requirements set out in Annexes II, IV and V of the said Regulation.

10) Research and innovation (R&I)

Regulation (EU) 2018/1139 introduced a number of key new competences for EASA. In the field of R&I, the Agency assists the Commission and the Member States in identifying key research themes in the field of civil aviation to contribute to ensuring consistency and coordination between publicly funded research and development and policies falling within the scope of the Regulation. EASA supports the Commission in the definition and accomplishment of the relevant Union framework programmes for research and innovation activities and of the annual and multi-annual work programmes, including in the conduct of evaluation procedures, in the review of funded projects and in the exploitation of the results of research and innovation projects. The Agency also implements civil aviation related parts of the EU Framework Programme for Research and Innovation, and it engages in ad hoc research activities that are compatible with the Agency's tasks and the objectives of Regulation (EU) 2018/1139.

The European aviation industry has gone through a successful development in the past decades placing Europe at a leading position in the global competitive market. Significant elements are the European aviation R&I programmes of the EU as well as the Member States' and industry's research activities. These initiatives are directly relevant to the objective of both the EASP and the EPAS of ensuring the highest level of safety, security and environmental protection in Europe.

New technologies and concepts emerge at an unprecedented pace. The European and national R&I programmes, including Clean Sky/Clean Aviation and SESAR are developing new aviation concepts and solutions, which will need to be certified or approved prior to entering operation in Europe as well as in third countries. Furthermore, new entrants, in particular in the drone sector, bring new requirements to the European aeronautics arena and necessitate new European regulatory responses.

The European aviation safety system supports the deployment of these new solutions, and more generally the safe integration of new technologies and concepts.

As concerns the EPAS, research projects that become part of the Plan derive from the list of prioritised research agenda topics, for which a funding source is secured or where it is likely that the project will be funded by the start of the reference period of the given EPAS¹³.

The Data4Safety programme provides a valuable source for the identification of relevant data (flight data, traffic data, weather, safety reports, etc) that is available in an aggregated manner to support the research-projects, in line with Article 72 of Regulation (EU) 2018/1139 that calls for EASA to gather and analyse safety data to identify risks and measure the safety performance of the European aviation safety system.

11) Interdependencies between civil aviation safety and security, including cybersecurity

Regulation (EU) 2018/1139 lays down that the Commission, the Agency and the Member States shall cooperate on security matters related to civil aviation, including cyber security, where interdependencies between civil aviation safety and security exist. EASA may also provide technical assistance to the Commission, where the Agency has the relevant safety expertise, in the implementation of Regulation (EC) No 300/2008 of the European Parliament and of the Council⁴¹ and other relevant provisions of Union legislation. To contribute to protecting civil aviation against acts of unlawful interference, the Agency shall, where necessary, react without undue delay to an urgent problem by taking measures related to airworthiness and environmental certification to address vulnerabilities in aircraft design, and recommending corrective actions to be taken by the national competent authorities or natural and legal persons subject to Regulation (EU) 2018/1139 and/or disseminating relevant information to those authorities and persons, in the case that the problem affects aircraft operation, including the risks to civil aviation arising from conflict zones.

12) International cooperation

By virtue of international agreements in the aviation sector, the EU extends its regulatory framework to third countries and regions worldwide. These agreements seek either full regulatory convergence with the applicable EU rules with a view to enlarge the EU aviation single market with these third countries and regions, or establish rules and procedures for the mutual recognition of certificates. In this respect, it is important to note the intense activity performed by the Commission and EASA to provide technical assistance to third countries and regions to support them in the implementation of the applicable EU aviation law. Such assistance contributes to the harmonisation of rules, the mutual recognition of certificates, in the interest of European industry, and the promotion of European aviation safety standards. The Agency cooperates with the competent authorities of third countries and with international organisations and establishes working arrangements with those authorities and international organisations.

In the context of ICAO, EASA assists Member States in exercising their rights and fulfilling their obligations under international agreements relating to matters covered by this Regulation, in particular their rights and obligations under the Chicago Convention.

¹³ Further information on the Agency's research activities can be found on the EASA website: https://www.easa.europa.eu/easa-and-you/safety-management/research.

The Agency acts as a Regional Safety Oversight Organisation in the ICAO framework (see section 1.2 above).

13) Aviation Crisis Management

The Commission, as well as EASA in accordance with Article 91 of Regulation (EU) 2018/1139, took immediate action within its field of competence to contribute to a timely response to and mitigation of the COVID-19 crisis. EASA in coordination with relevant stakeholders issued a number of requirements and recommendations for the Member States and aviation stakeholders, in the form of Safety Directives, Safety Information Bulletins, guidelines and safety promotion materials.

Among these documents, EASA and the European Centre for Disease Prevention and Control (ECDC) issued a joint document defining measures to assure the health safety of air travellers and aviation personnel once airlines resume regular flight schedules following the severe disruption caused by COVID-19¹⁴.

14) Interdependencies between civil aviation safety and socio-economic factors

Article 89 of Regulation (EU) 2018/1139 introduced the requirement that 'the Commission, the Agency, other Union institutions bodies, offices and agencies and the Member States shall cooperate with a view to ensuring that interdependencies between civil aviation safety and related socio-economic factors are taken into account including in regulatory procedures, oversight and implementation of just culture [...] to address socio-economic risks to aviation safety'.

It further requires the Agency to publish every three years a review 'which shall give an objective account of the actions and measures undertaken, in particular those addressing the interdependencies between civil aviation safety and socio-economic factors'.

This is in line with the European Safety Risk Management (SRM) process, which - being a proactive and data driven process - aims at a systematic identification and assessment of safety issues including those arising from socio-economic factors. EASA published the first issue of the Article 89 review in December 2021¹⁵. The review examines in particular the safety implications of socio-economic factors in the areas of Employment and Working Conditions, Health and Lifestyle and Education. It also identifies possible future actions and measures in the EPAS context.

1.3.2.2. Agency measures

The implementation of Regulation (EU) 2018/1139 and of its implementing and delegated acts is supported, where relevant, by Certification Specifications (CSs) and other detailed specifications (DSs), Acceptable Means of Compliance (AMC) and Guidance Material (GM).

CSs provide for technical standards, which indicate the means to demonstrate compliance with Regulation (EU) 2018/1139 and the delegated and implementing acts adopted on the basis thereof. They are used for the purpose of certification of products, persons and organisations.

¹⁴ EASA ECDC COVID-19 Aviation Health Safety Protocol | EASA (europa.eu)

¹⁵ EASA publishes study of socio-economic factors in relation to aviation safety | EASA (europa.eu)

Where Regulation (EU) 2018/1139 so provides, some CSs form the certification basis for the issuance of the certificate by EASA.

DSs are non-binding standards issued by the Agency for the purpose of implementing certain provisions of Regulation (EU) 2018/1139 and the delegated and implementing acts adopted on the basis thereof, where Regulation (EU) 2018/1139 requires the use of detailed specifications for the declaration of compliance by the organisation or person subject to such declaration obligation.

AMC are non-binding standards issued by the Agency which are used by organisations to show compliance with Regulation (EU) 2018/1139 and the delegated and implementing acts adopted on the basis thereof, or with the CSs and DSs.

GM is non-binding material issued by the Agency, which helps to illustrate the meaning of delegated or implementing acts, CSs or DSs, and which is used to support the interpretation of Regulation (EU) 2018/1139, the delegated and implementing acts adopted on the basis thereof, and of CSs and DSs.

1.3.2.3. 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 (EU) 2018/1139, enabling the Member States to grant exemptions to any natural or legal person subject to the Regulation from the requirements applicable, in the event of urgent unforeseeable circumstances affecting those persons or urgent operational needs of those persons, provided that all of the following conditions have been met:

- it is not possible to adequately address those circumstances or needs in compliance with the applicable requirements;
- safety, environmental protection and compliance with the applicable essential requirements are ensured, where necessary through the application of mitigation measures;
- the Member State has mitigated any possible distortion of market conditions as a consequence of the granting of the exemption as far as possible; and
- the exemption is limited in scope and duration to the extent strictly necessary and it is applied in a non-discriminatory manner.

Where the exemption was granted for a duration that exceeds eight consecutive months or where a Member State has granted the same exemption repetitively and its total duration exceeds eight months, the Agency shall assess whether the conditions set out above have been met and shall issue, within three months from the date of the reception of the notification, a recommendation to the Commission as regards the outcome of that assessment. Then the Commission shall, taking account of that recommendation, assess whether those conditions have been met. Where it considers that those conditions have not been met or where it departs from the outcome of the assessment by the Agency, the Commission shall adopt, within three months from the date of the reception of that recommendation, an implementing act containing its decision to that effect. Upon notification of an implementing act confirming that those conditions have not been met, the Member State concerned shall immediately revoke the exemption granted.

Where a Member State considers that the compliance with the applicable essential requirements set out in the Annexes can be demonstrated by other means than those laid down in the delegated and implementing acts adopted on the basis of this Regulation, and that those means present significant advantages in terms of civil aviation safety or of efficiency for the persons subject to this Regulation or for the authorities concerned, it may submit to the Commission and the Agency a reasoned request for amendment of the delegated or implementing act concerned so as to allow for the use of those other means. In that case, the Agency shall, without undue delay, issue a recommendation to the Commission on whether the Member State's request fulfils the conditions set out above. Where necessary, the Commission shall, without delay and taking account of that recommendation, consider amending the delegated or implementing act concerned.

1.3.3. 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 996/2010¹⁶. 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 central database.

More information about the accident and incident investigation processes in the European Union is enclosed under section 1.5.

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

Regulation (EU) No 376/2014¹⁷ includes rules related to the reporting, analysis and follow-up of occurrences complementing the domain specific rules on occurrence reporting included with the domain implementing regulations. 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. In addition, it ensures that information is appropriately protected and is shared among the Member States and with EASA. The regulation further contains provisions to foster Just Culture principles in all Member States.

Finally, the EASP benefits from the work of the Network of Analysts established by this regulation for the purpose of determining what action needs to be implemented at Union level from an evidence-based perspective. This work benefits from the advanced analytics available in the Data4Safety platform as well as the possibility, when relevant, to merge occurrence data

¹⁶ 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.

¹⁷ 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.

with other sources of data hence enhancing the data-driven dimension of this work and enabling a better identification and evaluation of the risks system-wide.

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

Regulation (EC) No 2111/2005¹⁸ (hereinafter 'Regulation No 2111/2005') establishes rules on the establishment and publication of an EU list, based on common criteria, of air carriers which, for safety reasons, are subject to an operating ban in the Union. The <u>list of banned air carriers</u> adopted on the basis of this Regulation is itself a Regulation and is therefore directly applicable in the Member States. The list of banned air carriers is established by Commission Regulation (EC) No 474/2006²⁰. 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 EASA States and chaired by the Commission. Acting on a proposal by the Commission, the 'Air Safety Committee' adopts its opinion by qualified majority.²¹

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 (EC) 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 take into consideration the relevant aviation safety standards, being either ICAO SARPs in the case of third country operators or EU law in the case of European operators.

1.4. Safety responsibilities and accountabilities in the European Union

1.4.1. Decision making process within the European Union

Article 100(2) of the TFEU allows, among many others, the 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 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 Commission, subject to the requirements

¹⁸ 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.

¹⁹ More information is available on http://ec.europa.eu/transport/modes/air/safety/air-ban/index_en.htm

²⁰ 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.

²¹ 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.

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.

For the adoption of delegated acts, a specific expert group has been set up, where the Commission, after thorough discussion of the regulatory proposals with experts representing the Member States, adopts the delegated acts. For the adoption of implementing acts, a specific committee²² has been created to adopt draft implementing acts to Regulations (EU) 2018/1139 and (EU) No 376/2014, where the Commission tables draft Regulations based mostly on proposals made by EASA (the so-called Opinions) which have undergone a broad stakeholder consultation before they are published by the Agency. The draft Regulation is discussed in this regulatory committee composed of representatives of the 27 Member States, that also counts as observers the representatives of Iceland, Liechtenstein, Norway, Switzerland and the EFTA Surveillance Authority, in accordance with the EEA agreement²³ and the Agreement between the European Community and the Swiss Confederation on Air Transport²⁴. If the Committee provides a positive opinion on the Commission's proposed measures, the Implementing Regulation is adopted.

In the area of civil aviation safety, another committee is of relevance: the 'Air Safety Committee' that is involved in the update of the list of air carriers subject to an operating ban under Regulation (EU) 2111/2005. Also, the Single Sky Committee is in charge of adopting the performance scheme rules, that include the safety performance indicators for ATM/ANS.

- 1.4.2. Aviation safety competences and responsibilities within the European safety system
- 1.4.2.1. Summary of the competences and responsibilities in the European safety system

²² Committee for the application of common safety rules in the field of civil aviation -"European Union Aviation Safety Agency Committee: EASA Committee".

²³ Agreement on the European Economic Area, OJ L 1, 3.1.1994, Annex XIII – p. 1-101.

²⁴ Agreement between the European Community and the Swiss Confederation on Air Transport, OJ L 114, 30.4.2002, p. 73–90.

Table 2. Competent Authorities under EU rules

AREA OF COMPETENCE	MEMBER STATES	EASA
Aircraft airworthiness and environmental	Airworthiness certification of (individual) aircraft	Type certification of aircraft, engine and propellers
protection, covering: - aeroplanes,	Noise certification of (individual) aircraft	Certification of parts and appliances
- rotorcraft, - sailplanes, - balloons,	n/a	Certification and oversight of design organisations
- airships, - e-VTOL aircraft	Certification and oversight of production organisations, with the exception of those for which EASA is the competent authority	Certification and oversight of third country production organisations Certification and oversight of EU production organisations whose certificate was transferred in accordance with BR Article 64 or 65 ²⁵
	Certification and oversight of maintenance organisations (Part-145), with the exception of those for which EASA is the competent authority	Certification and oversight of third country maintenance organisations (Part-145) Certification and oversight of EU Part-145 organisations whose certificate was transferred in accordance with BR Article 64 or 65
	Certification and oversight of combined airworthiness organisations (Part-CAO), with the exception of those for which EASA is the competent authority	Certification and oversight of third country combined airworthiness organisations (Part-CAO) Certification and oversight of EU Part-CAO organisations whose certificate was transferred in accordance with BR Article 64 or 65
	Certification and oversight of continuing airworthiness management organisations (Part-CAMO), with the exception of those for which EASA is the competent authority)	Certification and oversight of third country continuing airworthiness management organisations (Part-CAMO) Certification and oversight of EU continuing airworthiness management organisations whose certificate was transferred in accordance with BR Article 64 or 65

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²⁵ Article 64: reallocation of responsibility upon request of Member States – Article 65: re-allocation of responsibility upon request of organisations operating in more than one Member State.

	Licensing of maintenance certifying staff	n/a
	Certification and oversight of aircraft maintenance training organisations (Part-147), with the exception of those for which EASA is the competent authority)	Certification and oversight of third country aircraft maintenance training organisations (Part-147) Approval of EU aircraft maintenance training organisations (Part-147) whose certificate was transferred in accordance with BR Article 64 or 65
	n/a	Authorisation of third country operators (commercial air transport)
Air Operations	Certification and oversight of commercial air transport operators / air operator certificate (AOC) holders, with the exception of those for which EASA is the competent authority	Certification and oversight of commercial air transport operators whose AOC was transferred in accordance with BR Article 64 or 65
	Oversight/authorisation of other operators (non-commercial operations, specialised operations), with the exception of those for which EASA is the competent authority	Oversight/authorisation of other operators where oversight was transferred in accordance with BR Articles 64 or 65
Air Crew and Medical	Licencing and medical certification of pilots	n/a
	Attestation of cabin crew	n/a
	Certification and oversight of pilot training organisations, with the exception of those for which EASA is the competent authority	Certification and oversight of third country pilot training organisations Certification and oversight of EU pilot training organisations whose certificate was transferred in accordance with BR Article 64 or 65
	Certification and oversight of aeromedical centres, with the exception of those for which EASA is the competent authority	Certification and oversight of third country aeromedical centres
	Certification of FSTDs, with the exception of those for which EASA is the competent authority	Certification of FSTDs: - used by training organisations certified by EASA - located in a third country - located in a Member State on Member State request

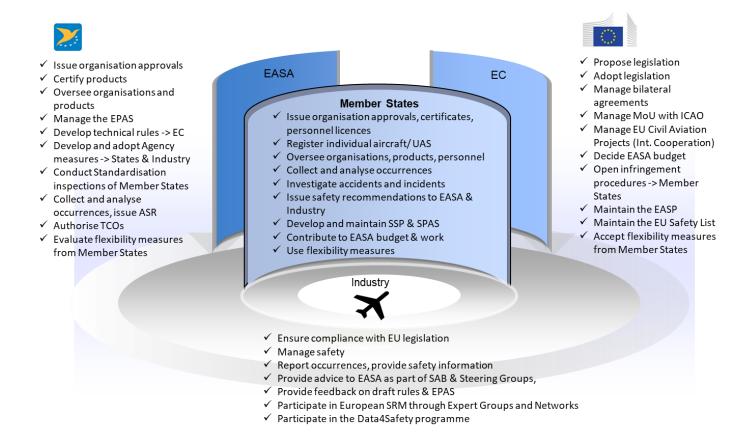
	Certification of instructors and examiners and of aero-medical examiners	n/a
ATM/ANS	Certification and oversight of ATM/ANS providers, with the exception of those for which EASA is the competent authority	Certification and oversight of third country ATM/ANS providers. Certification and oversight of pan- European ATM/ANS providers, including the Network Manager and providers of DAT services
	n/a	Certification and oversight with respect to the certificates for, and the declarations made in respect of certain safety-related ATM/ANS equipment
	Licensing and medical certification of air traffic controllers (including instructors and assessors)	n/a
	Certification of air traffic controller training organisations, with the exception of those for which EASA is the competent authority	Certification of third country air traffic controller training organisations
	Certification of aero medical examiners and medical centres	n/a
Aerodromes (including heliports and vertiports)	Certification of aerodromes and their safety related equipment	Certification and oversight with respect to the certificates for, and the declarations made in respect of certain safety-related aerodrome equipment
	Certification of aerodrome operators and their operations	n/a
UAS (Drones)	Registration of UAS operators and certified UAS	Design verification of UAS operated in the 'specific' category
	Operational authorisations for UAS operated in the 'specific' category	n/a
	Initial issuance and continuing oversight of Light UAS operator certificates (LUC)	n/a
	Licencing and medical certification of remote pilots operating UAS	n/a
U-space	Airspace risk assessment, designation of U-space airspace, dynamic airspace reconfiguration and related responsibilities	n/a

Designation and certification of the single common information service provider	n/a
Certification of other U-space service providers (USSP)	Certification of pan-European USSPs and third-country USSPs

Note:

Approval/certification responsibilities in the various areas of competence also encompass safety management and information security management, where applicable. Compliance with the applicable requirements is verified as part of the initial certification/approval and continuing oversight processes and is not subject to any separate approval/organisation certificate. Accordingly, the allocation of responsibilities for those domains follows that defined in Table 2.

Figure 1. Interrelationship between the stakeholders in the European safety system



1.4.2.2. The Member States

Under the ordinary legislative procedure, the Council composed of Member States representatives is co-legislator next to the European Parliament (see <u>section 1.3.1</u>). Member States (but not the Council as such) are also part of the decision-making process in the case of implementing acts through the established comitology arrangements (see <u>section 1.4.1</u>).

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

- (a) The airworthiness of aircraft listed under Annex I to Regulation (EU) 2018/1139 (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, provided that they have not decided to apply the EU requirements as foreseen in Article 2(6) of Regulation (EU) 2018/1139;
- (c) ATM/ANS, including systems and constituents, that are provided or made available by the military, provided that a Member State has not decided to apply the EU requirements as provided in Article 2(6) of Regulation (EU) 2018/1139;
- (d) Aerodromes that are controlled and operated by the military, provided that a Member State has not decided to apply the EU requirements as provided in Article 2(6) of Regulation (EU) 2018/1139;

Note: Without prejudice to national security and defence requirements, Member States shall ensure that ATM/ANS services referred to in point (c) provided to civil air traffic as well facilities referred to in point (d) open to public use, offer a level of safety and interoperability with civil systems that is as effective as that resulting from the application of the essential requirements of Regulation (EU) 2018/1139.

- (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 points (e) (i) to (iii), but handle no more than 10,000 commercial air transport passengers or have no more than 850 movements related to cargo operations per year.
- (g) Flight time limitation measures for those areas not covered under EU Law (cf. Regulation (EU) No 965/2012 Article 8).

According to Article 2(6) of Regulation (EU) 2018/1139, a Member State may decide to apply any, or any combination, of Section 1, 2, 3, or 7 of Chapter III, to some or all the activities referred to in Article 2(3) (a) of the Regulation and to the personnel and organisations involved in those activities, where it considers that, in light of the characteristics of the activities, personnel and organisations in question and the purpose and content of the provisions concerned, those provisions can be effectively applied. This so-called 'opt-in' possibility provides flexibility to Member States in deciding where the application of Union law may be more efficient in view of achieving safety, interoperability or efficiency gains.

While the largest part of aviation safety legislation is adopted at European Union level, the Member States remain responsible for ensuring aviation safety in their territory and airspace. Most of the certification tasks required by Regulation (EU) 2018/1139 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 Union level. Indeed, in those areas, the Member States have delegated responsibilities incumbent upon them under the Chicago Convention to the EU (see diagram 2 above for the detail).

Pursuant to Article 64(7) of Regulation (EU) 2018/1139, the reallocations of responsibility under this Article shall be without prejudice to the rights and obligations on the Member States under the Chicago Convention. When a Member State reallocates, in accordance with this Article, the responsibility for the tasks which are attributed to it by the Chicago Convention, it shall notify ICAO about the fact that the Agency or another Member State carries out on its behalf the functions and duties ascribed to it under the Chicago Convention.

The Member States are also responsible, in accordance with ICAO Standards and following Chapter II of Regulation (EU) 2018/1139, for developing a State Safety Programme, which has to be aligned with the European Aviation Safety Programme and which supports the achievement of the European Aviation Safety System.

1.4.2.3. The European Union 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 (EU) 2018/1139 so that certain tasks performed at EU level are carried out by a single specialised expert body. EASA staff is composed of more than 800 aviation experts and administrators from all Member States. The headquarters are in Cologne (Germany) with an office in Brussels and five other offices in Washington (USA), Montreal (Canada), Beijing (China), Panama City (Panama) and Singapore.

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 (EU) 2018/1139.

The EASA Management Board, that brings together representatives of the 27 EU Member States, Iceland, Liechtenstein, Norway, Switzerland and the Commission, defines EASA's work programme, establishes its budget and monitors the Agency's operation. The Management Board also invites observers to its deliberations, gathering EU neighbouring States having signed a comprehensive aviation agreement with the EU and the industry represented through the EASA Advisory Board.

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 EU 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. Therefore, 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 delegated and implementing Regulations.

The drafting of such EASA opinions is assisted by consultative bodies that also provide advice on the content, priorities and execution of the rulemaking programme of EASA in the context of the EPAS. The Agency also prepares and adopts the measures (certification specifications and other detailed specifications, acceptable means of compliance and guidance material) 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 (EU) 2018/1139 as well as its implementing rules (see also <u>section 3.1.1</u>). It reports to the Commission that ultimately decides about the launching of enforcement measures for lack of compliance on the basis of technical and legal consultations with the Agency.

In the area of ATM/ANS, EASA provides technical assistance to the Commission in the implementation of SES, by conducting technical inspections, investigations and studies, as well as by contributing to the implementation of the ATM Master Plan (MP), including support to the development and deployment of the SESAR programme. In particular, EASA caters for the regulatory and implementation needs of the SESAR essential operational changes and other technological advancements, such as, but not limited to, U-space technological solutions, virtualisation, cloud-based architecture and remote tower operations, by enabling the use of new working methods, operational improvements and technologies developed by SESAR. EASA also supports the entire SESAR innovation cycle by assessing proposed systems and by overseeing deployed solutions. These form the building blocks of Europe's future airspace architecture in support of safety, efficiency and environmental performance. Furthermore, EASA ensures, on behalf of the Commission, the oversight of the Network Manager for the ATM network functions of SES.

In addition, EASA contributes to the implementation of the performance scheme for air navigation services and network functions, in particular by providing guidance material for the safety related elements of the SES ATM Performance Scheme (refer to 2.3.1).

EASA is also empowered to authorise third country commercial air carriers flying into, within or out of the 31 EASA States. 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 Inspection Programme 'SAFA' (Safety Assessment of Foreign Aircraft) regarding the safety of foreign aircraft using Union airports.

More generally, EASA provides technical advice to the Commission and to the Member States, when appropriate. The Agency is also the implementing body of technical assistance in the aviation safety and ATM areas to third countries and regions with which the EU has signed aviation agreements and to which the EU committed to provide such support. Assistance is also provided to EU Member States aviation authorities on an ad-hoc basis.

Moreover, EASA 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 (NoAs). The Agency coordinates the Data4Safety programme, a core objective of which is to establish robust risk-management capabilities for the European aviation sector to enhance its abilities to make informed and data-driven decisions in the different domains of aviation safety. The objective of the programme is to exploit the unprecedented type and volume of knowledge and data to address most of the important issues and challenges faced and to be faced by the European transport sector.

EASA is a member of the European Aviation Crisis Coordination Cell responsible to coordinate the management of response to network crisis in the aviation area. It shall, within its field of competence, contribute to a timely response to and mitigation of aviation crises, in coordination, with other appropriate stakeholders.

Finally, EASA is responsible for the preparation and adoption of the European Plan for Aviation Safety (EPAS). ²⁶

Application of sound safety management principles is essential for continuous improvement of civil aviation safety in the Union, anticipating emerging safety risks, and making best use of limited technical resources. While the EPAS was already a well-established tool for safety planning at EU level, it was only with Regulation (EU) 2018/1139 that this document was provided with a formal legal recognition. It addresses the safety issues in an exhaustive and complete manner.

Chapter II of Regulation (EU) 2018/1139 dealing with safety management requires the adoption of the European Aviation Safety Programme and of the European Plan for Aviation Safety. Through these provisions, ICAO Annex 19 standards and recommended practices related to State Safety Programmes are also transposed into EU law.

In addition, Regulation (EU) 2018/1139 contains a number of principles which should guide EASA, the Commission and the Member States when regulating civil aviation safety and when taking measures to improve aviation safety. These principles require in particular that safety measures and rules correspond to and are proportionate to the nature and risks associated with the different types of aircraft, operations and activities they address. Such measures should also, in as far as possible, be formulated in a manner which focuses on objectives to be achieved, while allowing different means of achieving those objectives, and should also foster a systemic approach to civil aviation, taking into account interdependencies between safety and other technical domains, including cyber security. This should contribute to a more cost-efficient achievement of required safety levels and to the stimulation of innovation.

1.4.2.4. The European Commission

The Commission is responsible for the preparation of European legislative proposals under the ordinary legislative procedure (see also <u>section 1.3.1</u>) 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 <u>section 3.1.1</u>) with the assistance of the Agency through the standardisation inspections process.

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, typically after consultations with EASA, can open a formal infringement proceeding and eventually refer the Member State to the European Court of Justice (see section 1.6).

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 Commission is responsible for the preparation, update and adoption of the European Aviation Safety Programme. The Commission, in line with Article 5(1) of Regulation (EU)

²⁶ See <u>section 2.2</u> for detailed information on the EPAS, its development and adoption process. 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).

2018/1139, will update as required the European Aviation Safety Programme to reflect the changes introduced in it. It will consult the Agency and the Member States for the purpose.

1.5. Accident and incident investigation

1.5.1. 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 (EU) 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.

1.5.2. Safety recommendations

Regulation (EU) 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 shall implement procedures to record the responses to the safety recommendations it issued, and entities receiving a safety recommendation shall implement procedures to monitor the progress of the action taken in response to the safety recommendations received. EASA processes safety recommendations addressed to the Agency and provides 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 central database called European Central Repository (ECR), managed by the Commission. SIAs shall equally record all safety recommendations received from third countries in the ECR.

There is a legitimate need to give public access to safety recommendations (and their responses) because the overarching purpose of Regulation (EU) No 996/2010 is to reduce the number of accidents and to promote a dissemination of findings of safety related incidents. Since for security reasons there should not be any direct access to the ECR, all safety recommendations and their responses contained in the ECR are made available to the general public through a separate public website. This is contained in the ECCAIRS 2 Central Hub (www.aviationreporting.eu). The mission of the European Co-ordination Center for Accident and Incident Reporting Systems (ECCAIRS) is to provide a digital platform enabling the implementation of the provisions defined in Regulation (EU) No 376/2014. ECCAIRS is

supporting aviation authorities in collecting, sharing and analysing their safety information with as an ultimate goal to improve aviation safety. EASA provides support to the Commission in ECR management.

1.5.3. Cooperation with other entities

Regulation (EU) 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 which is 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 (EU) 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 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.

1.6. Enforcement

1.6.1. Enforcement towards the Member States

Article 17(1) of the Treaty on European Union lays out that the Commission shall ensure the application of the Treaties, and of the measures adopted by the EU institutions pursuant to them, and that it shall oversee the application of Union law under the control of the Court of Justice of the European Union. Article 258 of the TFEU established the EU general enforcement procedure, attributing to the Commission the power to bring infringement proceedings against Member States which it considers to be in breach of their obligations. Potential infringements can be identified in a variety of ways, typically by means of the results of the standardisation inspections conducted by EASA that assists the Commission in monitoring aviation safety law implementation. Other ways include complaints brought to the attention of the Commission gained through a variety of sources, from individual or institutional complainants.

The monitoring of compliance with EU aviation safety law and most of the regulatory framework in the ATM/ANS domain is performed by the Agency that, by virtue of Article 85 of Regulation (EU) 2018/1139, is entrusted to assist the Commission in monitoring the application by the Member States of the Regulation and its delegated and implementing acts.

The Commission also entrusted EASA to do the same for Regulation (EU) No 376/2014 and its implementing Regulation.

Through the provisions and procedures established by the specific implementing Regulation (EU) No 628/2013, EASA monitors the application by competent authorities of the Member States of the aforesaid Regulations, delegated and implementing acts, and conducts standardisation inspections. Besides, from 2022 onwards standardisation inspections are also used to assess Member States' State Safety Programmes (SSP) that shall be consistent with the EPAS and include the elements described in ICAO Annex 19. Such SSPs shall also include, or be accompanied by, State Plans for Aviation Safety (SPAS) identifying the main safety risks and setting out actions to mitigate them, including the risks and actions identified in the EPAS that are relevant for the State concerned.

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 on the basis of Article 258 of the TFUE.

In addition to the standardisation process, certificates issued by the Agency or the national competent authorities, and declarations made by natural and legal persons in accordance with Regulation (EU) 2018/1139 and with the delegated and implementing acts adopted on the basis thereof are subject to monitoring by the Commission and EASA. If the Commission considers that a legal or a natural person to which a certificate has been issued or which has made a declaration no longer complies with the applicable requirements of this Regulation or of the delegated and implementing acts adopted on the basis thereof, the Commission shall, based on a recommendation from the Agency, require the Member State responsible for the oversight of that person to take appropriate corrective action and safeguard measures, including the limitation or suspension of the certificate (see section 1.6.2.2 below).

1.6.2. Enforcement towards regulated industry organisations

1.6.2.1. Fines and penalties

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

Furthermore, in cases of infringements to Regulation (EU) 2018/1139 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. The Commission is preparing a delegated act in this field, in accordance with Article 84(4) of Regulation (EU) 2018/1139, which will lay down detailed criteria and a detailed methodology for establishing the amounts of and the procedures for the collection of the fines and periodic penalty payments, including rules for enquiries, reporting and rights of defence.

1.6.2.2. Actions on certificates and other measures

Regulation (EU) 2018/1139 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 or declarations received, 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 (EU) 2018/1139 and its implementing rules.

Additionally, if the Commission considers that a natural or a legal person to which a certificate has been issued or which has made a declaration no longer complies with the applicable requirements, the Commission shall, based on a recommendation from the Agency, require the Member Stater responsible for the oversight to take appropriate corrective action and safeguard measures, including limitation or suspension of the certificate. Once the Commission adopts the implementing act containing such a decision, it takes effect and the certificate or declaration 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.

EASA has also a mandate to react without undue delay to an urgent safety problem falling within the scope of Regulation (EU) 2018/1139 by determining corrective action to be taken by natural and legal persons in which it acts as the competent authority and by disseminating related information to those persons, including directives (safety directives) or recommendations.

For the tasks for which the Member State is responsible for certification and oversight, in case an urgent safety problem has been identified, EASA shall determine safety objectives to be achieved and recommend corrective action to be taken by national competent authorities. In this case the national competent authorities shall inform EASA without undue delay about the measures taken to achieve the safety objectives determined by EASA.

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. In the specific context of Annex 19 of the Chicago Convention, recommendation 3.2.1.2 explicitly lays out that States should establish an enforcement policy that specifies the conditions and circumstances under which service providers with an SMS are allowed to deal with, and resolve, events involving certain safety issues, internally, within the context of their SMS and to the satisfaction of the appropriate State authority.

2. EUROPEAN SAFETY RISK MANAGEMENT

Regulation (EU) 2018/1139 establishes that the application of sound safety management principles is essential for the continuous improvement of civil aviation safety in the Union, anticipating emerging safety risks, and making best use of limited technical resources. The Regulation concludes that it is therefore necessary to establish a common framework for planning and implementing safety improvement actions. To that end, a European Plan for Aviation Safety and a European Aviation Safety Programme should be drawn up at Union level. Each Member State should also draw up a State Safety Programme in accordance with the requirements contained in Annex 19 to the Chicago Convention. That Programme should be accompanied by a plan describing the actions to be taken by the Member State to mitigate the identified safety risks.

Having this in mind, Regulation (EU) 2018/1139 introduces a new binding regulatory framework with its Chapter II on Aviation Safety Management. Article 5 of the said Regulation lays out that the Commission shall, after consulting the Agency and the Member States, adopt, publish and update as required a document describing the functioning of the European aviation safety system, containing the rules, activities and processes which are used to manage the safety of civil aviation in the Union in accordance with this Regulation (the 'European Aviation Safety Programme'). The Programme shall include at least the elements related to State safety management responsibilities described in the international standards and recommended practices. It shall also describe the process for the development, adoption, update and implementation of the European Plan for Aviation Safety referred to in Article 6 of the Regulation, which shall closely involve the Member States and relevant stakeholders.

Article 6 of Regulation (EU) 2018/1139 established that the Agency, in close collaboration with Member States and relevant stakeholders, shall develop, adopt, publish, and subsequently update at least on a yearly basis a European Plan for Aviation Safety. Based on the assessment of relevant safety information, and on the data-driven outputs of the Data4Safety programme, the European Plan for Aviation Safety shall identify the main safety risks affecting the European aviation safety system and set out the necessary actions to mitigate those risks. This Article also provides that the Agency, again in close collaboration with Member States and relevant stakeholders, shall document in a dedicated safety risk portfolio the safety risks referred to in the Article and monitor the implementation of related mitigation actions by the parties concerned, including, where appropriate, by setting safety performance indicators.

The European Plan for Aviation Safety shall specify, taking into account the objectives set out in Article 1 of Regulation (EU) 2018/1139, the level of safety performance in the Union. In practice, this is achieved through the setting of an aspirational safety goal, combined with outcome (operational) and process-based safety performance indicators (SPIs) and supported by the SES ATM Performance Scheme. The outcome based SPIs are defined in the EASA Annual Safety Review (ASR) and monitored through the European SRM. The process-based indicators are defined in EPAS Chapter 4 and monitored through EASA's standardisation procedures. The Safety Key Performance Area of the SES Performance Scheme aligns with the principles and technical direction of EASA's performance monitoring framework. Performance indicators are designed by an Agency-led working group and supported by associated AMC and GM. These indicators measure the effectiveness of safety management at organisation level and then monitor safety outcomes, using the European Central Repository as data source.

The Commission, the Agency and the Member States shall jointly aim to achieve that level of safety performance.

Article 7 of Regulation (EU) 2018/1139 institutionalises the State Safety Programme (SSP) at Member State level. It lays out that each Member State shall, in consultation with relevant

stakeholders, establish and maintain a State safety programme for the management of civil aviation safety in relation to the aviation activities under its responsibility (the 'State Safety Programme'), which shall be commensurate with the size and the complexity of those activities and shall be consistent with the European Aviation Safety Programme. The SSP shall include at least the elements related to State safety management responsibilities described in the international standards and recommended practices. Also, the SSP shall specify the safety objectives to be achieved at national level in respect of the aviation activities under the responsibility of the Member State concerned.

Finally, Article 8 of Regulation (EU) 2018/1139 lays out that the SSP shall include or be accompanied by a State Plan for Aviation Safety. Based on the assessment of relevant safety information, each Member State, in consultation with relevant stakeholders, shall identify in that plan the main safety risks affecting its national civil aviation safety system and shall set out the necessary actions to mitigate those risks.

Article 8 further specifies that the State Plan for Aviation Safety (SPAS) shall include the risks and actions identified in the EPAS that are relevant for the Member State concerned and that Member States shall inform the Agency of the risks and actions identified in the EPAS that they consider not to be relevant for their national aviation safety system and the reasons thereof. This information is normally included in the SPAS itself. EPAS actions that must be considered by Member States are identified as 'Member State Tasks (MSTs)'. Furthermore, to assist Member States with the identification of EPAS items relevant for their SPAS, a dedicated MST action lists the top key risk areas to be considered by States. In addition to considering those key risk areas, States are encouraged to review the domain safety risk portfolios that provide a comprehensive list of prioritises safety issues for the various domains, as included with EPAS Volume III.

With this new Chapter II, Regulation (EU) 2018/1139implements the international requirements established by Annex 19 to the Chicago Convention, that lays 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 SSP to be more precise, which requires among other elements, to establish primary aviation legislation, clear policies, objectives and resources, State system and functions to manage safety risks and to assure safety, and safety promotion activities.

Hence by virtue of Regulation (EU) 2018/1139 the EU does mandate the Member States to establish and maintain an SSP. In addition, the EU has traditionally reflected the spirit of the relevant ICAO Standards in several European Regulations, in particular in the implementing rules to Regulation (EU) 2018/1139.

2.1. Safety Data collection, Analysis and Exchange

Safety information is an important resource for the detection of safety hazards. Several EU Regulations ensure that relevant data and information are collected, analysed and exchanged, where appropriate. This includes in particular information on civil aviation occurrences (by the end of 2021 the European Central Repository contained over 2.400.000 entries), on EU and third-country air carriers in the context of the EU Ramp Inspection Programme (by the end of 2021 the SAFA database contains over 160.000 reports, counting from when the SAFA system became the EU Ramp Inspection Programme), on safety recommendations under the Safety Recommendations Information System (SRIS - by the end of 2021 the SRIS database contains over 4.100 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 is governed by Regulation (EU) No 376/2014. This legislation requires that organisations, Member States and EASA 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 (ECR).

Information on occurrences submitted to the ECR is made available to the Member States (national aviation authorities and safety investigation authorities), EASA and the Commission. The NoAs established under Regulation (EU) No 376/2014 is required to analyse the ECR in support of European Safety Risk Management and therefore feeding the EPAS.

Regulation (EU) No 376/2014 also imposes on authorities and EASA the use of a common European Risk Classification Scheme (ERCS)²⁷. The ERCS measures the safety risk of reported occurrences using a 2-dimensional matrix:

- Firstly, the matrix's rows address the severity by identifying the worst likely accident outcome that would have resulted if the occurrence being scored had escalated into an accident. This is done by considering both the most likely type of accident and the potential loss of life category based on aircraft size and proximity to populated or high-risk areas.
- Secondly, the columns measure the probability/likelihood, by looking at how close the occurrence was to that accident outcome. The determination of probability/likelihood considers the effectiveness of existing safety barriers.

Through the application of the ERCS, safety management at EU and national level, including the safety-data-driven targeting of oversight (refer to section 3.2.2), will be further enhanced.

An essential part of the system established under Regulation (EU) No 376/2014 is the definition of a 'Just Culture', its objective being 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 Regulation (EU) No 376/2014, including the protection from blame and punishment (except in cases of wilful misconduct or unacceptable behaviour).

This system is completed by the Data4Safety programme that gathers, on a voluntary basis, complementary data such as flight, traffic and weather data. It also provides enhanced analytical capacities. Data4Safety supports the prediction of future risks.

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

Up to its 11th edition (EPAS 2022-2026), the EPAS covered a five-year time frame and was issued as a rolling plan with annual updates. Starting with the 12th edition this time frame is reduced to three years, to align with the reference period of the Global Aviation Safety Plan. Strategic priorities in Volume I will be set for the three-year reference period, with a mid-term review to ensure they remain relevant. In line with Article 6(1) of Regulation (EU) 2018/1139, EPAS Volume II describing the EPAS actions as well as Volume III with the domain safety risk portfolios will continue to be reviewed and updated on a yearly basis.

²⁷ The ERCS forms part of the legal framework of Regulation (EU) No 376/2014, in the first instance via Commission Delegated Regulation (EU) 2020/2034 published on 06 October 2020, as well as Commission Implementing Regulation (EU) 2021/2082 of 26 November 2021, which will enter into force on 1st January 2023.

The development of the Plan, both in terms of strategic priorities and actions, relies on dedicated stakeholder groups, in particular:

- the Member States Advisory Body (MAB) and the Stakeholders Advisory Body (SAB) provide advice on strategic priorities;
- the Technical/Sectorial Bodies (TeB, TeC, Sectorial Committees representing Member States and industry respectively) provide technical and operational advice as well as feedback on implementation; and
- the collaborative work performed by EASA with its safety partners (in particular via the Data4Safety programme) that supports the development of the Safety Risk Portfolios.

The standard EPAS programming cycle foresees two distinct phases, each with a dedicated stakeholder consultation.

Phase I:

- During the first phase, the strategic priorities derived from the EU Aviation Strategy and safety priorities determined through the European SRM process are discussed and confirmed with the EASA Advisory Bodies (ABs). MAB and SAB take the lead in consolidating inputs from their domain sub-committees and provide EASA with the Member State/industry views on the priorities. This Phase is initiated once every three years at the beginning of the year preceding the first year of the new reference period).

Phase II:

- Based on the agreed safety priorities the planning milestones for individual EPAS actions are defined or updated in line with the EASA Single Programming process. A draft EPAS is then developed and provided to all ABs for detailed comments. Following the AB consultation and analysis of comments, the final draft EPAS is consolidated and Volume III integrated. This Volume, providing the full set of domain safety risk portfolios, including a description of each safety issue identified and prioritised, is developed through the European Safety Risk Management process.

The final draft EPAS composed of all three Volumes is then presented for approval to the EASA Management Board (MB). Following its formal approval by the MB it is published on the EASA website.

More information on the EPAS development, including the application of the Commission's Better Regulation principles and information on the various groups having a role in the EPAS development, can be found here:

- How EPAS is developed
- Working groups and Bodies having a role in EPAS

The safety priorities and related actions in the EPAS are determined through the European Safety Risk Management process, which involves the Member States, the industry, the Commission and EASA.

The European Safety Risk Management (SRM) process

The main safety risks and corresponding mitigating actions feeding the EPAS are developed through the European SRM process. This comprises a set of processes that aim at identifying the safety issues and their mitigations, as well as monitoring implementation. It involves analysis of data from different sources and collaboration with safety partners from national aviation authorities and the industry (through the Data4Safety programme) and the NoAs.



Figure 2. The European SRM process

Identification of safety issues: This is the first step in the SRM process, and it is performed through the analysis of occurrence data and other safety-related information and supporting information by the collaborative work with the safety partners in particular via the Data4Safety programme. These candidate safety issues are formally captured by the Agency and are then subject to a preliminary safety assessment. This assessment then informs the decision on whether a candidate safety issue should be formally included within the relevant safety risk portfolio or be subject to other actions. Advice is taken from Data4Safety and the NoAs s. The output of this step in the process are the domain safety risk portfolios. Within the portfolios, both the key risk areas and safety issues are prioritised. The domain safety risk portfolios are published with EPAS Volume III.

Assessment of safety issues: Once a safety issue is identified and captured within the safety risk portfolio, it is subject to a technical safety assessment. These assessments are prioritised within the portfolio. The assessment process is coordinated by EASA and is supported by Data4Safety and the NoAs. In addition, group members are encouraged to participate in the assessment itself. This collaborative approach with the Agency's safety partners is critical to achieving the best possible results. Together, this forms the Safety Issue Assessment, which provides potential mitigating actions for the EPAS.

Definition and programming of safety actions: This includes an impact assessment that will be captured in a best intervention strategy (BIS) document, defining possible mitigation actions, assessing the implications and benefits of each possible action, and making recommendations on the best mitigation action(s) to be implemented in the EPAS. Using the combined Safety Issue Assessment/BIS, formal EPAS action proposals are then submitted to the ABs as part of the BIS and/or EPAS consultation.

There are different types of EPAS action, such as Rulemaking tasks (RMTs), Safety promotion tasks (SPTs) or Member State tasks (MSTs). A detailed description of the types of EPAS actions and related templates is available on the EPAS page of the EASA website:

• EPAS action types and templates

Once discussed and agreed upon, the actions are then included in the next edition of the EPAS. Actions that are of low cost or require more rapid intervention are often fast-tracked and appear in the next available update of the EPAS, without need for a BIS. In some cases, more immediate safety actions are needed that may be completed before the next EPAS would be published. Naturally, these are not included within the EPAS. Such actions could include the publication of a safety information bulletin (SIB) or take the form of immediate safety promotion activities.

Implementation and follow-up: The next step in the process involves the implementation and follow-up of the actions that have been included within the EPAS.

EASA monitors the timely implementation of actions on the basis of the KPIs defined in the context of the Single Programming process. Feedback on progress is regularly provided during AB meetings.

Article 8 of Regulation (EU) 2018/1139 requires Member States to consider relevant EPAS actions and risks within their own State Plan for Aviation Safety (SPAS) and to provide justifications when such actions are not considered relevant to them. Accordingly, the SPAS remains an important tool for Member States to report on action implementation. States are expected to review their SPAS at least annually and where their SPAS is not updated annually, to maintain records on the implementation of relevant EPAS actions, including justification where such actions are not considered relevant.

EASA regularly assesses SSP implementation at the level of individual States as part of the EASA SYS standardisation activities. The assessment is intended to identify strengths and areas for improvement, contributing to the further maturation of SSP implementation in Europe, to meet the GASP and EPAS goals for effective SSP implementation by 2025. This entails an assessment of the processes and outcomes of safety action planning at State level. Moreover, those EPAS actions also included in the EUR RASP will be subject to annual implementation surveys managed by the ICAO EUR Regional Office. Results of such monitoring will be discussed at AB meetings and the EUR Regional Expert Safety Group (RESG) respectively.

Safety performance measurement: The final stage in the SRM process is the measurement of safety performance. This serves to monitor:

- (1) specific changes that have resulted from the implementation of safety actions; and
- (2) the systemic changes that may have occurred in the aviation system and may require additional actions.

The measurement of the performance is done via a safety performance framework that monitors:

- (1) transversally the various domains while looking at the key risk areas at domain level; and
- (2) the specific safety issues.

The EASA Annual Safety Review (ASR) is the annual review of the safety performance framework. It identifies safety trends, highlights priority domains, key risk areas and safety issues. From this step, the SRM process begins again. Concerning the ASR, see § 2.3.3 for further details on the EASA ASR.

2.2.1 The European Plan for Aviation Safety: international dimension

The EPAS supports the objectives and priorities of the GASP. The purpose of the GASP is to continually reduce fatalities and the risk of fatalities by guiding the development of a harmonised aviation safety strategy and the development and implementation of regional and national aviation safety plans. A safe aviation system contributes to the economic development

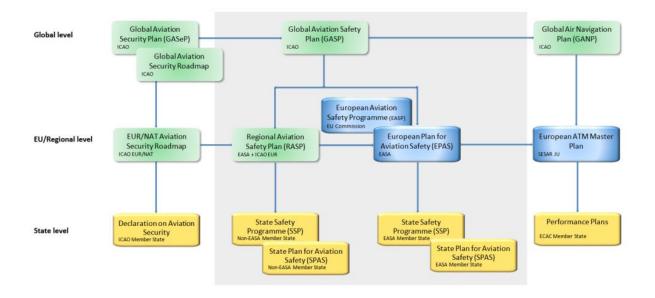
of States and their industries. The GASP promotes the implementation of a State's safety oversight system by promoting a risk-based approach to managing safety as well as a coordinated approach to collaboration between States, regions and industry. In addition to addressing systemic safety, the GASP addresses global high-risk categories of occurrences (G-HRCs), which are deemed global safety priorities. These categories were determined based on actual fatalities from past accidents, high fatality risk per accident or the number of accidents and incidents. The key risk areas identified through the European Safety Risk Management process include the five G-HRCs, which are

- controlled flight into terrain;
- loss of control in-flight;
- mid-air collision;
- runway excursion; and
- runway incursion.

Additional key risk areas are identified within the scope of the EPAS (refer to EPAS Volume III Chapter 17), such as fire, smoke and pressurisation, ground damage, obstacle collision in flight, other injuries, and security.

Since 2017 the ICAO Regional Office for the EUR/NAT region and EASA have been working together to develop a Regional Aviation Safety Plan (RASP) based on the EPAS. The first EUR RASP was issued in January 2019. The EUR Regional Experts Safety Group (EUR RESG) is responsible for maintaining and monitoring the EUR RASP. EUR RESG is co-chaired by EASA and industry stakeholders (currently IATA). The EUR RESG reports to the European Aviation System Planning Group (EASPG). Whereas EPAS safety performance indicators are determined as part of European Safety Risk Management, the EUR RASP provides a set of EUR Safety Performance Indicators and targets derived from the GASP goals and targets, for which data is collected by ICAO.

Figure 3. Relationship between the EASP, EPAS and other programmes and plans



2.3. Safety performance monitoring

Safety performance is considered to be the Region's, State's or organisation's safety achievement assessed through quantitative and/or qualitative means.

The level of safety performance to be achieved should not have a binding character but should rather express the ambition of the Union and of its Member States regarding civil aviation safety, as expressed in Article 6 of Regulation (EU) 2018/1139.

Note:

The concept of Acceptable Level of Safety Performance (ALoSP) as defined in ICAO Annex 19 second edition Standard 3.4.2.1 is proposed to be removed for the next edition, in line with recommendations from States and industry stakeholders. Instead, the need for active monitoring and management of safety performance based on indicators reflecting the safety objectives will be highlighted.

Further guidance on safety performance management, provided by EASA, is available here:

• Guidance on the Acceptable Level of Safety Performance (ALoSP), Safety Performance Management and Safety Assurance.

2.3.1 Agreement on safety performance of organisations

The EU Member States are responsible to periodically assess the management system of the organisations, which includes the monitoring of the safety performance by the organisations under their jurisdiction, where such management system is required. The level of safety performance to achieve should be assessed against the safety objectives and consider the effectiveness of risk mitigation actions and monitoring should consider a combination of process-based and outcome-based indicators, which are derived from the safety objectives.

Coherence in safety objectives must be ensured between the State (i.e. SSP/SPAS according to Articles 7 and 8 of Regulation (EU) 2018/1139) and the regulated entities as well as concerning the monitoring of these objectives. Monitoring is made through the Safety performance management processes of State and organisations as well as through risk-based/performance-based oversight. This methodology facilitates continuous improvement of the level of safety performance achieved. When the safety performance is not met, both the State and the organisation should collaboratively take actions to improve the situation.

Maturity in safety performance monitoring will increase over time insofar as implementation matures and a regular exchange of meaningful information takes place between the State and organisations overseen.

Within the EU safety management framework there is currently one domain for which explicit safety performance targets are defined: the SES ATM performance scheme²⁸ has been established at EU level to contribute to the sustainable development of the air transport system by improving overall efficiency of the air navigation services across the four key performance areas of safety, environment, capacity (delay) and cost-efficiency. The scheme foresees the setting of Union-wide performance targets for fixed reference periods of 3-5 years in the four key performance areas. Members States are required to develop performance plans including

²⁸ 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 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky; OJ L 56, 25.2.2019, p. 1.

binding targets at national or Functional Airspace Block (FAB) level that are consistent with the Union-wide performance targets.

For the implementation of the Single European Sky ATM performance schemes, the Commission is assisted by an independent Performance Review Body as designated by Commission Implementing Decision 2014/672/EU²⁹.

2.3.2 *Member States' safety performance*

The same principles as those described in 2.3.1 apply to the EU Member States: the level of safety performance to be achieved should be assessed against the safety objectives and consider the effectiveness of mitigation actions resulting from State safety risk management within the SSP and defined in the SPAS (i.e. Articles 7 and 8 of Regulation (EU) 2018/1139), taking due account of the risks and actions defined in the EPAS as relevant to the State (see Articles 6 and 8.2 of Regulation (EU) 2018/1139).

There is no agreement on the Member State's safety performance at EU level and currently there are no specific safety performance targets imposed on Member States by EU law.

2.3.3 The EASA Annual Safety Review

Article 72(7) of Regulation (EU) 2018/1139 indicates that in order to inform the general public of the overall level of civil aviation safety in the Union, the Agency shall annually, and when special circumstances apply, publish a safety review. That review shall contain an analysis of the general safety situation in wording that is simple and easy to understand, and it shall indicate whether there are increased safety risks.

In addition, Article 14(4) of Regulation (EU) No 376/2014 indicates that the Agency shall include information about the result of information analysis referred to in paragraph 1 of that Article in the annual safety review referred to in Article 72(7) of Regulation (EU) 2018/1139 as follows: "The Commission, the Agency and the competent authorities of the Member States shall, in collaboration, participate regularly in the exchange and analysis of information contained in the European Central Repository."

In compliance with these requirements, EASA has been publishing an Annual Safety Review (ASR) since 2005. The analysis presented in this review provides the data-driven input that supports the decision-making required for the EPAS. The ASR provides both a statistical summary of aviation safety in the EASA Member States and identifies the most important safety challenges faced by European aviation today.

Data portfolios are provided for each of the aviation domains and build upon the work of previous years. They show the causal and contributing factors that have been identified in occurrence data, cross referenced with the key risk areas (or main accident outcomes) to which they contribute.

The ASR analysis focuses on aviation safety risks based on occurrence data. This work is a part of the ongoing European SRM Process. It supports the development of domain safety risk portfolios and provides a list of key risk areas based on which to prioritise actions for the EPAS.

²⁹ 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.

Similar to EASA's obligation, Member States are also required to publish an annual safety review. Indeed, Regulation (EU) No 376/2014 Article 13 on Occurrence Analysis and Follow-Up at National Level indicates that in order to inform the public of the level of safety in civil aviation, each Member State shall publish a safety review at least once a year. The safety review shall:

- (a) contain aggregated and anonymised information on the type of occurrences and safety-related information reported through its national mandatory and voluntary reporting systems;
- (b) identify trends;
- (c) identify the action it has taken.

2.4. Safety Management Requirements for Authorities and Organisations

The development of the implementing rules to Regulation (EU) 2018/1139 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 appendix 1 to Annex 19 to the Chicago Convention, thus supporting the implementation of SSPs, while also serving the standardisation objective set out in Regulation (EU) 2018/1139. 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. With the adoption in 2021/2022 of rules requiring management systems in the area of initial and continuing airworthiness³⁰ the EU regulatory framework complies with chapter 4 of Annex 19 to the Chicago Convention defining the SMS requirements. These organisation requirements are designed to embed the ICAO Annex 19 SARPs in a way that will ensure compatibility with existing management systems and to encourage integrated management. The management system requirements allow flexibility to adapt the system to the size, nature or complexity of activities of aviation organisations and fit whatever business model they follow, thus catering for proportionate application.

The general management system requirements aim at promoting a single safety management framework for all approved organisations within the scope of Regulation (EU) 2018/1139. 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).

Furthermore, these Authority and Organisation Requirements are being amended with specific provisions on information security management.

Complementing these requirements, Regulation (EU) 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. As of January 2023, this Regulation imposes on authorities and EASA the use of the ERCS (see section 2.1).

In 2019, an evaluation of Regulation (EU) No 376/2014 took place. It concluded that the Regulation continues to be relevant even in the light of the recent developments in the aviation

³⁰ Initial airworthiness: Delegated Regulation (EU) No 2022/201 of 10/12/2021 and Implementing Regulation (EU) No 2022/203 of 14/02/2022, Continuing Airworthiness: Implementing Regulation (EU) 2021/1963 of 08/11/2021

sector, such as the rapid increase in unmanned aircraft operations, as well as the increasing threats related to cybersecurity. Whereas the evaluation has determined that the Regulation offers enough flexibility to address such developments in an efficient manner, it is equally acknowledged that consideration should be given to updating Commission Implementing Regulation (EU) 2015/1018 by updating the list of mandatorily reported occurrences and the mandatory data fields to better enable the gathering of safety data stemming from those new aviation domains.

3. EUROPEAN SAFETY ASSURANCE

3.1 Safety Oversight³¹

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 628/2013³² 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 3.2.1 and 1.6.1).

3.1.2 Oversight on certified organisations

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

Safety oversight ensures that the European aviation industry provides a level of safety in line with that defined by the Union rules. The responsibilities of the individual Member States and of EASA for safety oversight is therefore the foundation upon which aviation safety is built and for mutual recognition of licenses and certificates 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 <u>section 3.2.2</u>).

³¹ 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 EASA Member States as performed by EASA in the context of standardisation inspections.

Safety oversight in the EU is mainly governed by Regulation (EU) 2018/1139 and its implementing rules (see Diagram 1 for more information on applicable legislation).

³² 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.

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

3.2.1 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 where 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 (EU) 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.
- Integration of State Safety Programme implementation assessments within the scope of EASA standardisation: since 2022, standardisation inspections are also used to assess the effective implementation of Member States' State Safety Programmes and related State Plans for Aviation Safety. In line with the performance-based approach adopted by ICAO, which fosters and supports the gradual implementation of SSP, EASA assesses the level of SSP implementation using the five maturity levels defined in the ICAO State Safety Programme Implementation Assessment (SSPIA) methodology.
- 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.

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

The authority requirements contained in the EU law mandate the development of an oversight programme taking into account the specific nature of the organisation, the complexity of its activities, the results of past certification and/or oversight activities, based on the assessment of associated risks. As of 2023, the application of the ERCS by the competent authority to occurrences reported by organisations will support the assessment of associated risks.

The authority shall reduce the oversight planning cycle if there is evidence that safety performance and regulatory compliance of the organisation has decreased. Where the organisation demonstrates a high level of safety performance and regulatory compliance the authority my extend the oversight planning cycle. Such risk and performance-based targeting of oversight ensures that the available oversight resources both in Member States and EASA are used in the most efficient way.

Moreover, risk and performance-based oversight encourages safety management thinking, aims at empowering organisations to manage risks that are not addressed by regulations and creates incentives for effective safety management implementation through a possible reduction in the oversight burden. It therefore supports effective implementation of the management system provisions in the implementing rules for organisations.

EASA supports the safety-data-driven targeting of oversight of the industry by listing and describing the key risks and safety issues applicable in each domain, as part of the EPAS. Practices for risk-based oversight were also made available to Member States and are regularly discussed with the Safety Management TeB³³.

³³ EASA Report Template (europa.eu)

4. EUROPEAN SAFETY PROMOTION³⁴

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.

When possible, safety promotion is used as a light and effective alternative to rulemaking and oversight. It supports a better understanding of EU civil aviation regulations and provides more information on safety intelligence and analysis results. The strategy provides continual information on a wide range of safety topics at domain level, with technical content adjusted to its target audience (from advanced for specialised professionals to basic for the general public). A wide range of communication tools are used to spread safety messages, including social media.

Safety promotion involves general or targeted work that communicates and disseminates safety information to aviation stakeholders. The activity is driven by the European Safety Risk Management process that analyses data and generates safety risk mitigation actions, as described in chapter 2.

A number of safety promotion activities are conducted by the Member States at national level and are detailed in the Member States State Safety Programmes. This is coordinated by EASA through the Safety Promotion Network, established as a voluntary partnership between EASA, Member States and other aviation organisations. The objective of the Safety Promotion Network is to enhance aviation safety in Europe by providing a framework for the collaboration of safety promotion activity throughout the Member States.

For mutual benefit and a common purpose, the members of the Safety Promotion Network exchange information, coordinate activities, cooperate and share joint activities and collaborate to increase the capacity for activities, including for the design, development, publication, translation and dissemination of safety information. The Safety Promotion Network also explores common tools and develops means to measure the effectiveness of safety promotion products that have been disseminated.

At European level, most safety promotion activities are led and coordinated by EASA. In this context, EASA has built 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 creates distinctive European safety promotion packages depending on the operational domain and the safety topics being promoted with the goal of increasing the outreach of safety promotion products. This is done using the brands of "Together4Safety" for professional, commercial aviation activities and "The Aviator's Club" for general aviation with private pilots. In parallel, safety partnership activities are reinforced with the full range of operational stakeholders at domain level covering Commercial Air Operations (including aerodromes and ATM), rotorcraft, General Aviation and drones. Understanding that different aviation stakeholders have very different needs in terms of information and communication channels, the domain-based approach ensures that safety promotion can meet the specific needs of each part of the aviation community. Each domain has a dedicated area on the EASA website and for the first three their own community sites to strengthen the coordination with stakeholders.

³⁴ https://www.easa.europa.eu/domains/safety-management/safety-promotion

Early 2019, EASA launched a new Safety Promotion Strategy that takes an increasingly proactive approach to the way EASA communicates with the European aviation community. Through the EASA Together4Safety and Aviator's Club (for General Aviation) EASA strives to be a safety promotion leader in Europe and worldwide having a recognised brand that creates interest, engagement and helps to improve safety.

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. A funnel of safety promotion content is developed for each task that combines the most effective packages of deliverables for the safety topic under consideration. Deliverables are promoted through social media as well as EASA's collaborative partners to maximise the reach of safety messages.

4.1.1.1 Mandatory safety communication

Regulation (EU) 2018/1139 requires EASA to publish an <u>Annual Safety Review³⁵</u> 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 (refer to section 2.3.3).

Regulation (EU) No 996/2010 requires the setting up of a database of safety recommendations. This database is publicly available online³⁶.

4.1.1.2 Non-mandatory safety communication

EASA publishes <u>Safety Information Bulletins (SIBs)</u>³⁷ 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 <u>Safety Recommendations</u>³⁸.

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 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

³⁵ http://easa.europa.eu/newsroom-and-events/general-publications

³⁶ http://eccairs-dds.jrc.ec.europa.eu/pubsris/default.asp

³⁷ http://ad.easa.europa.eu/sib-docs/page-1

 $^{38 \}underline{\text{http://easa.europa.eu/easa-and-you/safety-management/accident-and-incident-investigation-support/safety-recommendations}$

understanding of certain safety rules, such as Regulations (EU) No 376/2014 and (EU) No 996/2010.

4.1.1.4 On-line information

A broad range of information and documentation is publicly available on the <u>EASA website</u>³⁹ and on the Commission website dedicated to the <u>European Aviation Safety Policy</u>⁴⁰.

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.

4.2 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 National Competent Authorities, Safety Investigation Authorities and industry.

Under Regulation (EU) No 376/2014, the Commission and the Agency are required to support the Member States with appropriate training.

Under Regulation (EU) 2018/1139, 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.

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. EASA develops and provides training courses to its employees and Member States' competent authority staff.

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 EU neighbouring countries, the Asia-Pacific Region, Africa and Latin America.

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³⁹ http://easa.europa.eu/

⁴⁰ http://ec.europa.eu/transport/modes/air/safety/index en.htm

LIST OF ACRONYMS

ABs	advisory bodies
ACAS	airborne collision avoidance system
ALoSP	Acceptable Level of Safety Performance
AMC	acceptable means of compliance
AMS	apron management services
ANS	air navigation services
AOC	air operator certificate
ASR	Annual Safety Review
ATM	air traffic management
BIS	best intervention strategy
BR	Basic Regulation
CAEP	Committee on Aviation Environment Protection (ICAO)
CAMO	continuing airworthiness management organisation — Annex Vc (Part-CAMO) to Commission Regulation (EU) No 1321/2014
CAO	combined airworthiness organisation — Annex Vd (Part-CAO) to Commission Regulation (EU) No 1321/2014
CC	cabin crew — Annex V (Part-CC) to Commission Regulation (EU) No 1178/2011
CS	certification specification
DAT	data providers - Annex VII to Regulation (EU) 2017/373
DR	delegated regulation
DS	detailed specification
DTO	declared training organisation
EASA	European Union Aviation Safety Agency
EASP	European Aviation Safety Programme
EASPG	European Region Aviation System Planning Group (ICAO)

ECCAIRS	European Co-ordination Centre for Accident and Incident Reporting Systems
ECDC	European Centre for Disease Prevention and Control
ЕСНА	European Chemicals Agency
ECR	European Central Repository
EEA	European Environment Agency
EFTA	European Free Trade Association
ENCASIA	European Network of Civil Aviation Safety Investigation Authorities
EPAS	European Plan for Aviation Safety
ETS	Emissions Trading System (EU)
EU	European Union
EUR RASP	European Regional Aviation Safety Plan (ICAO)
EUR RESG	EUR Regional Expert Safety Group (ICAO)
EUR/NAT	European/North Atlantic (ICAO Regional Office)
EVT	evaluation task (EPAS)
FAB	functional airspace block
FSTD	flight simulation training device
GANP	Global Air Navigation Plan
GASeP	Global Aviation Security Plan
GASP	Global Aviation Safety Plan (ICAO)
G-HRCs	global high-risk categories of occurrences
GM	guidance material
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IR	implementing regulation
LUC	light UAS operator certificate
MAB	Member States Advisory Body

MB	Management Board
MST	Member State task (EPAS)
NASP	national aviation safety plan
NCA	national competent authority
NCC	Non-commercial air operations with complex motor-powered aircraft — Annex VI (Part-NCC) to Commission Regulation (EU) No 965/2012
NoAs	network of aviation safety analysts
Part 21	Annex I to Regulation (EU) No 748/2012 — certification of aircraft and related products, parts and appliances, and of design and production organisations
Part-145	Annex II to Regulation (EU) No 1321/2014 — maintenance organisation approvals
Part-147	Annex IV to Regulation (EU) No 1321/2014 — requirements for maintenance training organisations
Part-26	Annex I to Regulation (EU) 2015/640 — additional airworthiness specifications for operations
Part-66	Annex III to Regulation (EU) No 1321/2014 – maintenance certifying staff
Part-AIS	Annex VI to Regulation (EU) 2017/373 — specific requirements for providers of aeronautical information services
Part-ARA	Annex VI to Regulation (EU) No 1178/2011 — authority requirements for aircrew
Part-ARO	Annex II to Regulation (EU) No 965/2012 — authority requirements for air operations
Part-ART	Annex 2 to Regulation (EU) No 452/2014 — authority requirements regarding the authorisation of third country operators
Part-ASM	Annex X to Regulation (EU) 2017/373 — specific requirements for providers of airspace management
Part-ATFM	Annex IX to Regulation (EU) 2017/373 — specific requirements for providers of air traffic flow management
Part- ATM/ANS.AR	Annex II to Regulation (EU) 2017/373 — requirements for competent authorities — oversight of services and other ATM network functions

Part- ATM/ANS.OR	Annex III to Regulation (EU) 2017/373 — common requirements for service providers
Part-ATS	Annex IV to Regulation (EU) 2017/373 — specific requirements for providers of air traffic services
Part-BFCL	Annex III to Regulation (EU) 2018/395 — requirements for balloon flight crew licensing
Part-BOP	Annex II to Regulation (EU) 2018/395 — balloon air operations
Part-CAMO	Annex Vc to Regulation (EU) No 1321/2014 - continuing airworthiness management organisations
Part-CNS	Annex VIII to Regulation (EU) 2017/373 — specific requirements for providers of communication, navigation, or surveillance services
Part-DAT	Annex VII to Regulation (EU) 2017/373 — specific requirements for providers of data services
Part-DEF	Annex I to Regulation (EU) 2018/395 — definitions (balloons)
	Annex I to Regulation (EU) 2018/1976 — definitions (sailplanes)
Part-FCL	Annex I to Regulation (EU) No 1178/2011 — flight crew licensing
Part-FPD	Annex XI to Regulation (EU) 2017/373 — specific requirements for providers of procedure design
Part-M	Annex I to Regulation (EU) No 1321/2014 — continuing airworthiness requirements
Part-MED	Annex IV to Regulation (EU) No 1178/2011 — requirements for the medical certification of pilots, the medical fitness of cabin crew, certification of aero-medical examiners, and the qualification of general medical practitioners and occupational health medical practitioners
Part-MET	Annex V to Regulation (EU) 2017/373 — specific requirements for providers of meteorological services
Part-ML	Annex Vb to Regulation (EU) No 1321/2014 — 'light' continuing airworthiness requirements
Part-NCC	Annex VI to Regulation (EU) No 965/2012 — non-commercial operations with complex motor-powered aircraft
Part-NCO	Annex VII to Regulation (EU) No 965/2012 — non-commercial operations with other-than complex motor-powered aircraft
Part-NM	Annex XII to (EU) Regulation 2017/373 — specific requirements for the Network Manager

Part-ORA	Annex VII to Regulation (EU) No 1178/2011 — organisation requirements for aircrew
Part-ORO	Annex III to Regulation (EU) No 965/2012 — organisation requirements for air operations
Part-PERS	Annex XIII to Regulation (EU) 2017/373 — requirements for service providers concerning personnel training and competence assessment
Part-SAO	Annex II to Regulation (EU) 2018/1976 — sailplanes air operations
Part-SFCL	Annex III to Regulation (EU) 2018/1976 — requirements for sailplane flight crew licensing
Part-SPA	Annex V to Regulation (EU) No 965/2012 — specific approvals
Part-SPO	Annex VIII to Regulation (EU) No 965/2012 — specialised operations
Part-T	Annex Va to Regulation (EU) No 1321/2014 — continuing airworthiness of aircraft registered in a third country that are operated by EU operators or by operators residing in the EU
Part-TCO	Annex 1 to Regulation (EU) No 452/2014 — third country operators
PCG	Programme Coordination Group (ICAO)
R&I	research & innovation
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RES	research task (EPAS)
RMT	rulemaking task (EPAS)
RSOO	Regional Safety Oversight Organisation
SAB	Stakeholders Advisory Body
SAFA	Safety Assessment of Foreign Aircraft
SARPs	Standards and Recommended Practices (ICAO)
SERA	Standardised European Rules of the Air - Regulation (EU) No 923/2012
SES	Single European Sky

SESAR	Single European Sky ATM Research
SIA	safety investigation authority
SIB	safety information bulletin
SMS	safety management system
SPAS	State Plan for Aviation Safety
SPI	safety performance indicator
SPN	Safety Promotion Network
SPT	safety promotion task (EPAS)
SRIS	Safety Recommendations Information System
SRM	safety risk management
SSP	State Safety Programme
SSPIA	State Safety Programme Implementation Assessment
SYS 2.0	Standardisation inspection in the domain 'Systemic enablers for safety management' (SYS). 2.0 refers to Phase II, whereby the scope of the initial inspection is extended to the assessment of the effective implementation of SSP and SPAS.
TCO	third-country operator
ТеВ	technical body (sub-body of MAB)
TeC	technical committee (sub-body of SAB)
TFEU	Treaty on the Functioning of the European Union
UAS	unmanned aircraft system
USOAP	Universal Safety Oversight Audit Programme (ICAO)
USSP	U-space service provider