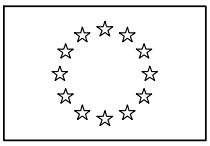

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EUROPEAN AVIATION SAFETY PROGRAMME

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LIST OF ACRONYMS

AIB	Accident Investigation Body
AMC	Acceptable Means of Compliance
ANSP	Air Navigation Service Provider
ATM	Air Traffic Management
BR	Basic Regulations
CAST	Commercial Aviation Safety Team
CS	Certification Specification
EASA	European Aviation Safety Agency
EASP	European Aviation Safety Programme
ECA	European Court of Auditors
ECAC	European Civil Aviation Conference
ECAST	European Commercial Aviation Safety Team
ECCAIRS	European Co-ordination Centre for Aviation Incident Reporting System
EGAST	European General Aviation Safety Team
EHEST	European Helicopter Safety Team
ESARR	European Safety Regulatory Requirements
ESSI	European Strategic Safety Initiative
EU	European Union
FAA	Federal Aviation Administration
FAB	Functional Airspace Block
GM	Guidance Material
ICAO	International Civil Aviation Organisation
IR	Implementing Rules
MS	Member States
NAA	National Aviation Authority
NextGen	Next Generation Air Transportation System

PDCA	Plan Do Check Act
PRB	Performance Review Body
SARPS	Standards And Recommended Practices
SES	Single European Sky
SESAR	Single European Sky ATM Research Programme
SMS	Safety Management System
SPI	Safety Performance Indicator
SSC	Single Sky Committee
SSP	State Safety Programme

PREAMBLE

This document describes how aviation safety is managed at European Union level. It was prepared by the European Commission and the European Aviation Safety Agency. It will be amended by the European Commission from time to time to reflect any changes that occur within the European aviation safety system.

INTRODUCTION

The Standards in Annexes to the Chicago Convention require the establishment of a State Safety Programme (SSP). The SSP is a system for the management of safety by a State. However, as the Member States[1] of the European Union (EU) have vested the EU with legal competence in certain areas of aviation safety it is not possible for them to describe how safety is managed within their State without reference to the EU dimension. This document describes this dimension. It will be continually updated as the various components of the aviation safety system in the EU evolve.

In the EU standards are set at the level of the European Union in the fields of EU competence, and the Member States and the European Aviation Safety Agency (EASA) are responsible for their implementation. Safety is achieved through compliance with the requirements as well as performance to the desired safety levels. The activities contributing to the improvement of safety in Europe can be conceptually grouped into three complementary functions: the rulemaking function, the oversight function and the safety assurance and promotion function.

- The **rulemaking function** consists of developing all the necessary regulatory material in order to not only take action where a specific safety risk must be mitigated through regulation, but also to create the proper environment for the aviation industry to function safely. In the EU aviation safety system the Commission makes proposals and the setting of regulations is the responsibility of the European Institutions. EASA is responsible for setting the complimentary technical rules and guidance such as Acceptable Means of Compliance (AMC), Certification Specifications (CS)and Guidance Material (GM).

- The **oversight function** involves all those who act to ensure that regulated persons, products or services comply with the regulations. Oversight encompasses both the review that is done when issuing an approval for the first time, and the continuous surveillance thereafter. The responsibility for carrying out oversight rests with the Member States, EASA and the Commission, each one acting according to the division of responsibilities detailed in EU Regulations.

- The **safety assurance and promotion function** gathers, shares and analyses safety data coming from accident and occurrence reports, issues safety recommendations for the improvement of safety, fosters research in particular areas where safety concerns exist and promotes safety through National and pan-European initiatives or communication campaigns. Through this function safety data is fed into the system enabling its performance to be measured.

The EASP describes the integrated set of regulations at EU level, together with the activities and processes used to jointly manage safety at European level. In doing so it first sets high level safety

[1] When reference to the Member States is used in this document it also refers to those States that have agreed to adopt the EU acquis in aviation safety. The States are Switzerland, Norway, Iceland and Liechtenstein.

policies and objectives. It describes how the European Commission, the Member States and EASA cooperate to detect unsafe conditions and take actions as appropriate in order to minimise safety risks.

The components for a safe aviation system in Europe comprise, firstly, of a set of rules and regulations that reflect the complexity and variety of EU aviation activities, enforced by action at both Member State and EU level; and, secondly, a system of detailed investigations conducted by the Member States into the causes of accidents and serious incidents. The lessons learned following such investigations are used by both Member States and EASA to prevent a repetition of such events. These two pillars of sound regulation and detailed safety investigations, together with an effective system of safety oversight by the various competent authorities, are the bedrock on which the current high safety standards in Europe have been built.

The system described above represents a, primarily, reactive approach to safety. However, there is a need to add further tools to the armoury of safety management in order to continue to obtain improvements in safety performance to cope with the ever expanding scale and complexity of commercial aviation. Therefore the EU, with the active participation of the Member States and the Industry, is developing a more systematic and proactive system which utilises modern safety management techniques. The cornerstone of this safety management system is a risk assessment using information from a variety of sources, analysing this data to identify significant risks to safety, and then taking specific actions to mitigate those risks. In doing so it combines the work of both EASA and the Member States in order to obtain the greatest benefit for the EU as a whole.

In addition, in order to continue to achieve a high level of safety in aviation it is necessary to view the activities in the various aviation domains as a whole. They are all, to a degree, dependent upon each other and consequently actions taken in one domain will inevitably effect the safety performance in another. Thus the EU approach to safety management is to use a "total system approach" based on the fact that the aviation system components – products, organisations, operators, crews, aerodromes, ATM, ANS, on the ground or in the air – are part of a single network.

The total system approach aims to reduce the risk of safety gaps or overlaps, and seeks to avoid conflicting requirements and confused responsibilities. Rules are designed to be interpreted and applied in a standardised manner and best practices are provided. At the same time, the approach not only aims to protect EU citizens but also to provide the level playing field for the functioning of the internal market and to permit the realisation of increased interoperability of products and services. The total system approach also streamlines the certification processes and reduces the burden on regulated persons and organisations.

The annexes to this document contain a matrix of interactions showing where responsibilities lie among the various stakeholders within the European Aviation Safety Programme. In addition, an annex is provided which shows the links between the EASP, which follows the ICAO framework for SSPs, and the Deming Cycle of Plan, Do, Check, Act (PDCA). The Deming cycle is a practical tool to facilitate a process of continuous improvement. When applied to the system of European aviation safety management it enables a clear picture to emerge of how the various activities relate to one another, and how they contribute to the improvement in safety performance within the EU.

PART 1

EUROPEAN SAFETY POLICIES AND OBJECTIVES

1.1. The Objective of the European Aviation Safety Programme

The objective of the European Aviation Safety Programme is to ensure that the system for the management of aviation safety in the European Union (EU) delivers a safety performance that is the best of any world region, uniformly enjoyed across the whole Union, and continuing to improve over time. In doing so the EU will use, as a measurement of success, the rate of fatal accidents per 10 million flights per world region.

This high and uniform level of protection of the European citizen is ensured by the adoption of common safety rules and by measures ensuring that products, persons and organisations within the EU comply with such rules; and by sound accident and serious incident investigations that enable safety gaps to be identified and action taken to close the gap. These elements are complimented by the analysis of safety information, including occurrence reports, and by other activities aimed at the promotion of safety. To this end the Member States have vested the EU with legal competence in certain areas of aviation safety. In discharging this competence the EU has developed a set of Regulations applicable to all the Member States. This regulatory framework is described in paragraph 1.2 below.

Furthermore, the EU has established a European Aviation Safety Agency (EASA) to implement the provisions of Regulation (EC) No 216/2008[2] (the Basic Regulation) by undertaking certain tasks and formulating opinions.

Finally, the EU intends to continue to develop a Safety Management System at EU level which will assist Member States and EASA in acting pro-actively in identifying safety risks and in taking the appropriate action to mitigate those risks.

1.2. European Aviation Legislative Framework

1.2.1 The Basic Regulation

Regulation (EC) No 216/2008 is the foundation upon which the EU aviation safety system has been built. It established common rules, enabled the mutual recognition of certificates, introduced a standardisation process and created EASA. The Essential Requirements were established in line with standards and recommended practices set by the Chicago Convention for aeronautical products, parts and appliances, operators involved in commercial air transport, as well as pilots and persons, products and organisations involved in their training and medical examination. The Regulation enables them to be certified or licensed once they have been found to comply, and empowered the European Commission to develop the necessary implementing rules for establishing the conditions for the issue of a certificate or the conditions for its replacement by a declaration of capability, taking into account the risks associated with the different types of operations.

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[2] Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC

In addition, Regulation (EC) 1108/2009[3] enabled the EU to lay down, in line with the Standards and Recommended Practices of the Chicago Convention, essential requirements applicable to aeronautical products, parts and appliances, aerodromes and the provision of ATM/ANS; essential requirements applicable to persons and organisations involved in the operation of aerodromes and in the provision of ATM/ANS; and essential requirements applicable to persons and products involved in the training and medical assessment of air traffic controllers. The Commission was empowered to adopt the related implementing rules on the basis of an opinion of EASA.

Under the EU institutional system, implementation of EU law is primarily the responsibility of the Member States. Certification and oversight tasks required by Regulation (EC) No 216/2008 and its implementing rules are therefore executed at national level. In certain clearly defined cases, however, EASA is also empowered to conduct certification tasks as specified in Regulation (EC) No 216/2008 and is also allowed to take the necessary measures related to the operation of aircraft, the qualification of crew or the safety of third-country aircraft when this is the best means to ensure uniformity and facilitate the functioning of the internal market.

1.2.2 Hard and soft law

The European Parliament and the Council act as the EU legislator, with the Commission retaining the right of initiative to propose legislation. In addition, the Commission has, in certain specific cases, the power to adopt regulations. These legal instruments can be described as 'hard law', and includes those codes and regulations that are legally binding.

On the other hand 'soft law' includes recommended practices, such as CS, AMC, or GM, which are explanations on the content of regulations. The latter, even though not binding, provide a presumption of compliance with the legal requirements. Industry and Member States may deviate from 'soft law' provided they comply with the rule.

The table below summarises the regulatory framework:

Applicable to all Member States	Adopted by	Status
Regulations of the European Parliament and the Council	**The European Parliament and Council**	**Legally binding**
Implementing Rules (IR)	**European Commission**	**Legally binding**
Certification Specifications (CS) Acceptable Means of Compliance (AMC) Guidance Materials (GM)	**EASA**	**Not legally binding**

[3] Regulation (EC) No 1108/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services and repealing Directive 2006/23/EC

A list of the specific aviation safety related Regulations currently in force in the EU is contained in Annex A.

1.2.3 Flexibility Arrangements

Article 14 of Regulation EC 216/2008 contains flexibility provisions enabling Member States to react immediately to a safety problem which involves a product, person or organisation subject to the provisions of the Basic Regulation. The Member State are required to immediately notify EASA, the European Commission and the other Member States of the measures taken and the reasons for taking such action. Upon being notified of such measures EASA decides within one month if action is required under the appropriate provisions of the Basic Regulation concerning airworthiness and environmental certification, air operations certification, ATM/ANS, air traffic controller certification, third country operators, the Inspection of Member States and the Investigation of Undertakings. If EASA concludes that the safety problem cannot be addressed by such action it will issue a recommendation regarding whether the Basic Regulation, or its implementing rules should be amended and whether the notified measures should be withdrawn or maintained.

Article 14 also includes flexibility provisions allowing Member States to grant exemptions or to derogate, provided safety is not adversely affected. This provides the essential flexibility for addressing special circumstances such as urgent safety measures, unforeseen or limited operational needs. It also allows for proposals by the Member States to achieve an equivalent level of safety by alternative means. If a Member States makes use of this provision it informs EASA, the European Commission and the other Member States in the event that they become repetitive or where exemptions are granted for periods of more than two months. In such events EASA will assess whether the exemptions notified by a Member State are less restrictive than the applicable EU provisions and, within one month of being notified, will issue a recommendation on whether these exemptions comply with the general safety objectives of the Basic Regulation or any other rule of EU law. If an exemption does not comply with the general safety objectives of the Basic Regulation or any other rule of EU law, the European Commission will decide not to permit the exemption. In such a case, the Member State concerned must revoke the exemption.

Where an equivalent level of safety can be achieved by other means, Member States may grant an approval derogating from implementing rules. In such cases, the Member State concerned will notify EASA and the European Commission that it intends to grant such an approval, and gives the reasons demonstrating the need to derogate as well as the conditions laid down to ensure that an equivalent level of safety is achieved. Within two months of being notified EASA will issue a recommendation to the European Commission on whether the approval fulfils the condition of equivalent safety. The European Commission then notifies its decision to all Member States, who will then also be entitled to apply that measure.

1.2.4 Single European Sky Regulations

The Single European Sky (SES) legislative package comprises four basic regulations, which reinforce safety and foster the restructuring of European airspace and air navigation services. The regulations provide the framework for the creation of additional capacity and for improved efficiency and interoperability of the ATM system in Europe.

(a) The Framework regulation (EC No 549/2004) - laying down the framework for the creation of the Single European Sky;

(b) The Service provision regulation (EC No 550/2004) - on the provision of air navigation services in the Single European Sky;

(c) The Airspace regulation (EC No 551/2004) - on the organisation and use of airspace in the Single European Sky;

(d) The Interoperability regulation (EC No 552/2004) - on the interoperability of the European Air Traffic Management network.

The Framework regulation requires that the European Commission periodically reviews the application of the SES legislation and reports on the progress of its implementation. The First Report on the implementation of the Single Sky Legislation was published in December 2007. Based on the report findings, the European Commission brought forward proposals for a second SES legislative package, including the extension of EASA's remit to ATM and airports and the adoption of the European ATM Master Plan.

The second SES legislative package:

(a) Created a single safety framework to enable the harmonised development of safety regulations and their effective implementation;

(b) Aimed to improve the performance of the ATM system through the setting of targets;

(c) Opened the door to new technologies enabling the implementation of new operational concepts and aiming to increase safety levels by a factor of ten;

(d) Launched initiatives with a view to improve the management of airport capacity.

1.2.5 Information on civil aviation occurrences.

Mandatory Occurrence Reporting System in the EU.

Experience has shown that often before an accident occurs, a number of incidents and numerous other deficiencies have shown the existence of safety hazards. Therefore, in order to achieve an improvement in the safety of civil aviation knowledge of these occurrences is required to facilitate analysis and trend monitoring in order to initiate corrective action.

In order for this to be possible within the EU the European Parliament and the Council of the European Union adopted a Directive[4] with the objective of contributing to the improvement of air safety by ensuring that relevant information on safety is reported, collected, stored, protected and disseminated. The Directive made clear that the sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.

The Directive applied to occurrences which endanger or which, if not corrected, would endanger an aircraft, its occupants or any other person. It required Member States to

[4] Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation.

introduce legislation whereby when an occurrence takes place involving aircraft registered in a Member State or operated by an undertaking established in a Member State, the occurrence is reported even when it happened outside the territory of the EU. In addition the Directive required Member States to designate one or more competent authorities to put in place a mechanism to collect, evaluate, process and store reported occurrences.

In addition, the Directive required Member States to participate in an exchange of information by making all the relevant safety-related information from occurrence reports available to the competent authorities of the other Member States and the Commission. To allow this exchange of information, the EU has made available a European Central Repository[5](ECR) in which Member States must integrate all occurrences contained into their national databases and all safety relevant data linked to those occurrences. The access to this ECR is however currently limited and EASA and Member states cannot have access to occurrences narratives.

The rules concerning the dissemination of information to interested parties on occurrences are set out in Commission Regulation (EC) No 1330/2007[6]. This Regulation defined those who are considered to be interested parties, described the requirement to deal with information requests in the safest and most efficient manner, including the need for those requesting information to ensure that the confidentiality of the system is protected.

In order to enable entities entrusted with regulating civil aviation safety or with investigating civil aviation accidents and incidents within the EU the Directive provided the ability for access to information on occurrences in order to enable them to draw safety lessons. However, the decision to disseminate information is limited to what is strictly required for the purpose of its user.

The sensitive nature of safety information is such that the Directive required that Member States took effective action to guarantee the confidentiality of information provided in order to ensure the protection of the source of the report and the confidence of the personnel working in civil aviation.

Finally, the Directive introduced the possibility, but did not mandate, of Member States putting in place a system of voluntary reporting to collect and analyse information on observed deficiencies in aviation which are not required to be reported under the system of mandatory reporting, but which are perceived by the reporter as an actual or potential hazard.

In addition, Part 21 of Regulation (EC) No 1702/2003[7] contains provisions concerning requirements for design approval holders to report failures, malfunctions and effects and

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5 Commission Regulation (EC) No 1321/2007 of 12 November 2007 laying down implementing rules for the integration into a central repository of information on civil aviation occurrences exchanged in accordance with Directive 2003/42/EC of the European Parliament and of the Council

6 Commission Regulation (EU) No 1330/2007 of 24 September 2007 laying down implementing rules for the dissemination to interested parties of information on civil aviation occurrences referred to in Article 7(2) of Directive 2003/42/EC of the European Parliament and of the Council

7 Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

have in place a system to collect, analyze and propose corrective actions and reporting obligations of the manufacturers (production without POA, POA, and DOA holders). Furthermore, Part M of Regulation (EC) No 2042/2003[8] also contains requirements regarding reporting obligations for organisations involved in continuing airworthiness, and Part 145 of Regulation (EC) No 2042/2003 contains requirements for occurrence reporting and analysis for Part-145 organizations. Finally Annex III to Council Regulation (EEC) No 3922/91 contains specific occurrence reporting requirements for aeroplane operators.

Furthermore, Article 19 of Regulation (EU) No 996/2010 requires that EASA and the competent authorities of the Member States collaborate in the regular exchange and analysis of information covered by Directive 2003/42/EC. In so doing they are required to ensure the confidentiality of such information and limit its use to the analysis of safety trends which can, in turn, be used to form the basis for safety recommendations or airworthiness directives.

In summary, the EU has legislation that has created a system of ensuring that occurrences in civil aviation are reported, collected, stored, protected and disseminated. The information from the ECR, together with other safety related information, can be used by both Member States and EASA to determine safety risks and to help set priorities for mitigating actions.

1.2.6 The containment of safety risks by the use of a list of banned air carriers.

Regulation (EC) 2111/2005 on the establishment of a Community list of air carriers subject to an operating ban within the Community and on informing passengers of the identity of the carriers entered into force on 16 January 2006.

In deciding which air carriers should be placed on the list the Annex to Regulation (EC) 2111/2005 contains the common criteria for imposing a total or partial operating ban, and for updating the list by removing an individual or group of air carriers. Any one of these criteria, on its own, or in combination with others, may be used as the basis for proposing the inclusion or exclusion of an air carrier, or a number of air carriers, in the list. The criteria themselves are all based upon the relevant international safety standards established by the Chicago Convention and its Annexes where non-European air carriers are concerned, and the European *Union air safety *acquis* where European Union air carriers are concerned.

The Regulation applies to all air carriers which, for safety reasons, are banned from operating into the EU irrespective of their nationality and the network of operations. However, the Regulation applies only to air carriers engaged in commercial air transport. The Regulation also applies to air carriers which do not operate into the Community, because the Regulation also requires that passengers be informed when they travel inside and outside the EU whether the airline they plan to use is banned from operating into the EU. In this way the Regulation pursues a twofold objective: ensuring that those airlines which do not meet the common criteria are banned from operating into the EU, and informing European passengers about airlines banned and thus protecting them when they travel within and outside the Community.

The common criteria are grouped in three areas: a) objective evidence showing deficiencies on the part of the air carrier; b) lack of ability or willingness by an air carrier to

[8] Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks

address safety deficiencies and c) lack of ability or willingness of the civil aviation authority with responsibility of oversight of the air carrier(s) in question to address safety deficiencies.

In addition, with the entry into force of Implementing Rules resulting from the application of Regulation (EC) No 216/2008, all operators intending to operate into the EU will be required to hold a Third Country Operators (TCO) Authorisation. This authorisation, issued by EASA, will permit operators to fly into the EU provided their aircraft, crews, and their operations comply with applicable ICAO Standards. To the extent that there are no such standards, these aircraft and their operations must comply with EU requirements provided these requirements are not in conflict with the rights of third countries under international conventions. The operator engaged in commercial operations are required to demonstrate their capability and means of complying with the requirements detailed above. The privileges granted to the operator and the scope of the operations will be specified in that authorisation.

1.2.7 SAFA Programme

Directive 2004/36/EC established the inspection of third country aircraft using EU airports as a legal obligation on Member States. The Directive also introduced a harmonised approach to the effective enforcement of international safety standards within the EU by harmonising the rules and procedures for ramp inspections of third-country aircraft landing at EU airports. Within this context, it also laid the groundwork for the facilitation of harmonised training of inspectors and personnel participating in the programme, the development of procedures and proposals for improving the programme and its tools, and the reporting on the information gathered.

Additionally, the Directive has promoted and facilitated the exchange of aviation-safety related information between the Member States themselves together with the European Commission (EC) and EASA as well as foreign civil aviation authorities and international organisations.

EASA plays a key role in the SAFA programme by administering the data base in which all reports of ramp checks conducted under the SAFA programme are stored. Using these reports EASA provides the Commission with regular analysis reports containing factual details concerning the results of SAFA checks, and advice to the Commission concerning any follow-up action they consider appropriate. In doing so EASA are advised by a group of technical experts from the Member States. These reports, and other safety information, are used by the European Commission as a basis for their investigations under the auspices of Regulation (EC) No 2111/2005.

The SAFA programme does not prevent Member Sates from conducting ramp checks on air carriers certified by that State on their own territory.

1.3. Responsibilities and Accountabilities

1.3.1 The Member States

Member States are responsible for the aviation safety standards and performance in their States. They should have in place a safety policy and objectives which describe how they oversee the management of safety in their State, and should also have a system of safety risk management, safety assurance and safety promotion.

However, in certain areas the Member States have agreed to transfer competence to the EU, nonetheless the implementation of EU law remains primarily the responsibility of the Member States. Most of the certification tasks required by Regulation (EC) No 216/2008 and its implementing rules are therefore executed at national level, such as certification of individual aircraft, approvals of national organisations and personnel. The Member States oversee the organisations they approve, conduct inspections and take measures to prevent the continuation of an infringement.

The Member States remain solely responsible for the regulation of:

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

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

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

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

(e) Aerodromes below a certain size (including equipment, personnel and organisations involved in their operation) that do not meet the following criteria:

(i) are open to public use; and

(ii) serve Commercial Air Transport and

(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.

Member States should set out all of the components above in their State Safety Programme, together with how their safety system takes account of EU acquis.

1.3.2 The European Institutions and Bodies

The EU's decision-making process in general and the co-decision procedure in particular involve three main institutions, The European Parliament, The Council of the European Union, and the European Commission.

The European Parliament.

The European Parliament is involved in adopting European laws jointly with the Council. The European Parliament also provides impetus for new legislation by examining the European Commission’s annual work programme, considering what new laws would be appropriate, and asking the European Commission to put forward proposals.

The Council of the European Union (The Council).

The Council sets the objectives for the EU, and the Transport Council deals with issues concerning aviation safety. Each transport minister in the Council is empowered to commit

his or her government, thus the minister's signature is the signature of the whole government that he/she represents. Moreover, each minister in the Council is answerable to his or her national parliament and to the citizens that parliament represents. In aviation the Council only acts on a proposal from the Commission, and the Commission normally has responsibility for ensuring that EU legislation, once adopted, is correctly applied.

The European Commission (The Commission).

The Commission is independent of national governments. Its role is to represent and uphold the interests of the EU as a whole. It drafts proposals for new European aviation safety laws, which it presents to the European Parliament and the Council.

The Commission is also the EU's executive arm and has responsibility for implementing the decisions of the European Parliament and the Council. The Commission, with the technical assistance of EASA, therefore discharges its responsibilities for aviation safety on behalf of the EU by implementing its policies, running its programmes and spending its funds. It is the Commission, therefore, that is responsible for the EASP. It discharges this responsibility by, when necessary, making proposals to the European Parliament and the Council for regulations in the field of air safety; by ensuring that the Regulations of the European Parliament and of the Council are adhered to by the Member States; by ensuring the implementing measures associated with such regulations are appropriate; and by the allocation of adequate funds for those activities conducted by EASA which are dependent upon EU funding.

In order to provide for better arrangements in all the fields covered by the Basic Regulation so that certain tasks performed at EU or Member State level are carried out by a single specialised expert body the European Aviation Safety Agency (EASA) was established.

The European Aviation Safety Agency (EASA)

EASA is independent in relation to technical matters and has legal, administrative and financial autonomy. It has legal personality and exercises implementing powers conferred on it by Regulation (EC) No 216/2008. It is empowered to implement the provisions of Regulation (EC) No 216/2008 by undertaking tasks and formulating opinions on:

(a) the design, production, maintenance and operation of aeronautical products, parts and appliances, as well as personnel and organisations involved in the design, production and maintenance of such products, parts and appliances;

(b) personnel and organisations involved in the operation of aircraft;

(c) the design, maintenance and operation of aerodromes, as well as personnel and organisations involved therein and, without prejudice to EU and national legislation on environment and land-use planning, the safeguarding of surroundings of aerodromes;

(d) the design, production and maintenance of aerodrome equipment, as well as personnel and organisations involved therein;

(e) the design, production and maintenance of systems and constituents for air traffic management and air navigation services (ATM/ANS), as well as personnel and organisations involved therein;

(f) ATM/ANS, as well as personnel and organisations involved therein.

In addition, EASA was established to:

(g) assist the Commission by preparing measures to be taken for the implementation of the basic Regulation;

(h) provide the Commission with the necessary technical, scientific and administrative support to carry out its tasks;

(i) take the necessary measures within the powers conferred on it by the Basic Regulation or other EU legislation;

(j) conduct inspections and investigations as necessary to fulfil its tasks; and

(k) in its fields of competence, carry out, on behalf of Member States, functions and tasks ascribed to them by applicable international conventions, in particular the Chicago Convention

In carrying out its duties EASA:

(a) issues opinions addressed to the Commission;

(b) issues recommendations addressed to the Commission concerning the use of flexibility provisions exercised by the Member States;

(c) issues certification specifications and acceptable means of compliance, as well as any guidance material for the application of Regulation (EC) No 216/2008 and its implementing rules;

(d) takes the appropriate decisions concerning airworthiness and environmental certification, pilot certification, air operation certification air traffic management/air navigation services, air traffic controller certification, third country operators, the Inspections of Member States and the investigation of undertakings. including the granting of exemptions to holders of certificates it has issued, from the substantive requirements laid down in Regulation (EC) No 216/2008 and its implementing rules in the event of unforeseen urgent operational circumstances or operational needs of a limited duration.

(e) issues the reports following standardisation inspections carried out to monitor the application by the competent authorities of the Member States of Regulation (EC) No 216/2008 and its implementing rules.

Eurocontrol

Eurocontrol supports EASA and the Member States in achieving safe air traffic operations across the whole of the European region. Eurocontrol works together with all aviation partners to deliver a Single European Sky which aims to meet the safety, capacity and performance challenges of European aviation. It provides the technical expertise for building the Single European Sky.

1.3.3 Cooperation, Assistance and Advisory mechanisms

Aviation safety in Europe is ensured by cooperation among all the elements of the system, notably the industry, Member States, Eurocontrol, EASA and the European Institutions.

Assistance and advice is provided to the European Institutions, EASA, and Eurocontrol by means of various procedures and bodies, including:

EASA Committee. The EASA Committee is established under Article 65 of Regulation (EC) No 216/2008 to assist the Commission in dealing with issues associated with that Regulation.

EASA Management Board. The EASA Management Board brings together representatives of the Member States and the European Commission and is responsible for the definition of the Agency's priorities, the establishment of the budget and for monitoring the Agency's operation.

EASA Advisory Board. The EASA Advisory Board assists the Management Board in its work. It comprises organisations representing aviation personnel, manufacturers, commercial and general aviation operators, maintenance industry, training organisations and air sports.

Rulemaking consultative bodies. The drafting of EASA opinions on safety rules is assisted by two consultative bodies: the Safety Standards Consultative Team (SSCC) and the Advisory Group of National Authorities (AGNA). They both provide advice on the content, priorities and execution of the rulemaking programme of EASA. The SSCC is made up of representatives of persons and organisations directly subject to the Basic Regulation, the implementing rules, certification specifications or guidance material. AGNA is made up of one representative per Member State.

European Aviation Safety Advisory Committee. The EASAC was created in October 2009 to contribute to the development of European aviation safety by providing advice on the EASP, and to facilitate the development and regular review, with the aim of continuous improvement, of the European Aviation Safety Plan. It is composed of safety experts from the Member States, the European Commission, Eurocontrol, Industry and EASA.

The Performance Review Commission (PRC) was established by the Permanent Commission of Eurocontrol to provide advice to ensure the effective management of the European air traffic management system through a strong, transparent and independent ATM performance review and target setting system. The PRC advises on the development of the ATM performance review and target setting system, which will is implemented and enforced by the Member States.

1.4. Safety Investigations

Member States are responsible for the investigation of accidents and serious incidents in order to improve aviation safety by determining their causes and making safety recommendations intended to prevent recurrence. The authority in charge of investigating accidents and incidents is independent from other State aviation organizations 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. An Accident Investigation Authority's activities may be extended to the gathering and analysis of aviation safety related information, in particular for accident prevention purposes. These investigations can also result in an Accident Investigation Authority issuing safety recommendations in relation to the management of safety in the EU.

Building on the lessons learned from the implementation of Council Directive 94/56/EC the European Parliament and European Council brought into force Regulation (EU) No

996/2010[9] on the investigation and prevention of accidents and incidents in civil aviation. This Regulation took into account the changes in the institutional and regulatory framework governing civil aviation safety in the European Union which had taken place since the adoption of Directive 94/56/EC, and in particular the establishment of the European Aviation Safety Agency (EASA). It aimed to improve aviation safety by ensuring 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 established a European Network of Civil Aviation Safety Investigation Authorities, ensured that safety investigation authorities, on the one hand, and other authorities likely to be involved in the activities related to the safety investigation, such as the judicial, civil aviation, search and rescue authorities, on the other hand, cooperate with each other through advance arrangements. It also provided rules concerning the timely availability of information relating to all persons and dangerous goods on board an aircraft involved in an accident. It also aimed to improve the assistance to the victims of air accidents and their relatives.

1.4.1 The European Network of Civil Aviation Safety Investigation Authorities.

Member States have set up a 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. In particular ENCASIA:

(a) prepares suggestions to and advising EU institutions on all aspects of the development and implementation of EU policies and rules relating to safety investigations and the prevention of accidents and incidents;

(b) promotes the sharing of information useful for the improvement of aviation safety and actively promotes structured cooperation between safety investigation authorities, the Commission, EASA and national civil aviation authorities;

(c) coordinates and organises 'peer reviews', relevant training activities and skills development programmes for investigators;

(d) promotes best safety investigation practices with a view to developing a common EU safety investigation methodology, and draws up an inventory of such practices;

(e) strengthens the investigating capacities of the safety investigation authorities, in particular by developing and managing a framework for sharing resources;

(f) provides, at the request of the safety investigation authorities, appropriate assistance, including, but not limited to, a list of investigators, equipment and capabilities available in other Member States for potential use by the authority conducting an investigation;

9 Commission Regulation (EU) No 996/2010 of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC.

(g) has access to information contained in the EU central repository, and analyses the safety recommendations therein with a view to identifying important safety recommendations of EU-wide relevance.

In order to achieve these tasks ENCASIA draws up an annual work programme which complies with the objectives and responsibilities set out above. The Commission transmits the work programme to the European Parliament and the Council.

1.4.2 The Role of EASA

EASA carries out, on behalf of the Member States, the functions and tasks of the State of Design, Manufacture and Registry when related to design approval, as specified in the Chicago Convention and its Annexes. Regulation 996/2010 therefore placed on safety investigation authorities in the EU the obligation, in accordance with Annex 13 to the Chicago Convention, of inviting EASA, and the national civil aviation authorities of the Member State concerned, to participate in safety investigations provided that the requirement of no conflict of interest is satisfied. 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 can also participate in the safety investigations as advisors.

1.4.3 European Safety Recommendation Database.

Safety investigation authorities record in a common European database all safety recommendations made at any stage of a safety investigation concerning preventive action that it considers necessary to be taken promptly to enhance aviation safety, and also any safety recommendations made on the basis of studies or analysis of a series of investigations or any other activities conducted in the gathering and analysis of safety trend information. They also include the responses to such recommendations. Safety investigation authorities equally record all safety recommendations received from third countries in the common European database.

1.5. Enforcement

1.5.1 Action to prevent Infringements of EU law.

Each Member State, and in its areas of responsibility EASA, are responsible for the implementation of EU law. This includes such issues as the adoption of implementing measures before a specified deadline, and the conformity and correct application of EU law within its own legal system. The Commission, acting as guardian of the Treaties, may take action in cases of breaches with EU law and, consequently, has powers of its own to try to bring any infringement to an end and, where necessary, can refer the case to the European Court of Justice.

The Commission takes whatever action it deems appropriate in response to either a complaint or indications of infringements which it detects itself. Non-compliance means failure by a Member State to fulfil its obligations under EU law and may consist either of action or omission.

Under the non compliance procedure started by the Commission, the first phase is the pre litigation administrative phase, also called “Infringement proceedings” The purpose of this pre-litigation stage is to enable the Member State to conform voluntarily with the legal requirements. There are several formal stages in the infringement procedure. The European Commission may first have to carry out some investigation, namely when infringement procedures are launched further to a complaint. A letter of formal notice

represents the first stage in the pre-litigation procedure, during which the Commission requests a Member State to submit its observations on an identified problem regarding the application of EU law within a given time limit.

Following this the Commission may set out a reasoned opinion. The purpose of the reasoned opinion is to describe the Commission's position on the infringement and to determine the subject matter of any action, requesting the Member State to comply within a given time limit. The reasoned opinion gives a coherent and detailed statement, based on the letter of formal notice, of the reasons that have led it to conclude that the Member State concerned has failed to fulfil one or more of its obligations.

In this respect the Commission enjoys a discretionary power in deciding whether or not to commence infringement proceedings and to refer a case to the Court.

In addition, Regulation (EC) No 216/2008, in articles 10 and 11, requires the Member States, the Commission and EASA to cooperate with a view to ensuring compliance with the Regulation and its implementing rules. Member States are required, in addition to the oversight of certificates that they have issued, to conduct investigations, including ramp inspections, and take any measure, including the grounding of aircraft, to prevent the continuation of an infringement.

In terms of the recognition of certificates, the Commission, on its own initiative or at the request of a Member State or EASA, may initiate proceedings to decide whether a certificate issued in accordance with Regulation (EC) No 216/2008 effectively complies the appropriate rules. In case of non-compliance or ineffective compliance, the Commission can require the issuer of a certificate to take appropriate corrective action and safeguard measures, such as limitation or suspension of the certificate.

PART 2

EUROPEAN SAFETY RISK MANAGEMENT

2.1 Safety Requirements for Organisations Safety Management Systems.

The controls established to govern how service providers will identify hazards and manage safety risks are the province of the Member States and, where appropriate, EASA. The Commission, with the help of EASA and the Member States, is in the process of developing Implementing Rules which will include requirements concerning management systems, and EASA is developing the AMC and guidance material which will support these implementing rules.

2.2 Safety Requirements for Member State's State Safety Programmes

The Commission, with the assistance of EASA and the Member States, is in the process of developing Implementing Rules which will include authority requirements. These requirements will contribute to the safety requirements of a Member State's SSP. EASA is developing the AMC and guidance material which will support these implementing rules.

2.3 Agreement on Safety Performance at EU level.

With the exception of Air Traffic Management (ATM) the EU has yet to decide on setting safety performance targets. However, some work in this direction has been started and at the ICAO High Level Safety Conference, held in Montreal on March 2010, the EU presented proposals on a multi-layered approach to measure safety performance at European level. The European Commission, drawing on this work and the experience of the Member States, is considering how best to bring forward proposals in this area to cover other aviation domains.

Thus, the current situation in the EU is that, with the exception of those described below for ATM, the setting of safety performance targets remains the sole responsibility of the Member States.

2.3.1 ATM

Regulation (EC) No 549/2004[10] required that a performance scheme for air navigation services and network functions be set up by means of implementing rules. These Implementing Rules were published as Commission Regulation No 691/2010[11] laying down a performance scheme for air navigation services and network functions. The performance scheme aims to contribute to the sustainable development of the air transport system by improving overall efficiency of the air navigation services across the key performance areas of not only safety, but also environment, capacity and cost-efficiency, all having regard to the overriding safety objectives.

In setting up the scheme reference periods were agreed, the first being the calendar years 2012 to 2014 inclusive, followed by periods of five calendar years. The same periods are

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[10] 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)

[11] Commission Regulation (EU) No 691/2010 of 29 July 2010 laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) No 2096/2005 laying down common requirements for the provision of air navigation services.

used by EU wide performance targets and national or functional airspace blocks (FAB) performance plans and targets. The key performance indicators (KPI), used for the purpose of performance target setting, remain unchanged during a reference period and the performance of air navigation services are assessed by means of binding targets for each KPI.

Under Regulation No 691/2010, the European Commission is responsible for managing the performance scheme, including the adoption of EU-wide targets and the consistency assessment of National/FAB performance plans. In this role, it is supported by a Performance Review Board (PRB)[12] providing independent, evidence based analysis to contribute to assessments.

No European Union-wide targets for key performance indicators will be set between 2012 and 2014. During this period the Commission will use the data collected to validate these key performance indicators and assess them with a view to ensuring that safety risk is adequately identified, mitigated and managed. On this basis the Commission will, if necessary, adopt new safety key performance indicators.

2.4 Safety Planning

Safety planning closes the safety management cycle by connecting the safety issues identified through the analysis of safety occurrences with the action plans and initiatives launched to mitigate the underlying risks.

In the EU the result of this process is documented in a European Aviation Safety Plan[13] It is developed, agreed and implemented in collaboration with regulatory bodies, European safety organisations and industry. It builds on their input and relies on their expertise. It proposes a path for the next 4 years that depicts a comprehensive picture of how the EU is conducting targeted safety work in Europe across all domains of aviation. Currently the Plan, drawn up by EASA, is not legally binding on the Member States, and relies on a cooperative framework in order to take specific actions, with Member States agreeing, informally, to support the actions identified in the Plan.

The Safety Plan establishes the first layer of priorities which is further complemented at national level by local safety plans and programmes and at Agency level by an internal safety programme. It builds a network for action. Coordination and close collaboration are key to keeping it up to date and effective.

Ideally the EU Safety Plan would be formulated following specific data analysis work to identify the major hazards within the European aviation system, a risk analysis to determine where the major risk lie, and mitigating actions addressed at those risks where action at EU level can be effective. However, as the EU system for safety risk management is under development, the first safety Planning cycle, covering the period 2011-2014, is based on inputs from existing national plans, together with Eurocontrol and EASA safety priorities.

For subsequent planning cycles the Member States and EASA will aim to:

(a) Collect safety data

(b) Develop a systematic method to identify hazards and potential new issues

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[12] Commission Decision of 29 July 2010 on the designation of the Performance Review Body of the Single European Sky.

[13] The European Aviation Safety Plan can be found at www.easa.europe.eu/sms

(c) Conduct a risk assessment to identify priorities.

(d) Develop 2nd Tier Indicators (high level risks) to monitor key safety areas.

(e) Establish achievable targets in accordance with available resources

Note: Currently a process to set up targets has only been established in the ATM domain.

2.4.1 Roles of the Member States & EASA.

In developing a EU Safety Plan Member States endeavour to identify safety issues at the national level while EASA endeavours to identify issues at pan-European level. The EU will develop the mechanism to enable the coordination of pan-European issues to be achieved collectively by all stakeholders.

2.4.2 Hazard Identification.

Currently a systematic approach to identify hazards has yet to be implemented at European level. However, two strategies are described below that will be further developed by EU stakeholders as experience is gained in order to develop a system which will provide the best results:

a. A common approach at European level

Top Down approach

Data is collected by the Member States and EASA and hazards are identified at European level using a common methodology.

Bottom up approach

The identification of hazards is performed by the States and EASA using a common methodology and then exchanged at European level.

b. The use of existing approaches

National inputs

Member States use their own methodology to identify hazards and provide input.

ESSI and other safety initiatives.

ESSI uses its own methods for hazard identification and provides input.

2.4.3 Risk Assessment

In order to ensure a common approach to the process of risk assessment, it is necessary to use a common risk assessment methodology when gathering the inputs from the Member States. The EU is, to a degree, data rich but is hampered in dealing with issues at EU level by a variety of risk assessment methodologies used by Member States. For the EU a key challenge is to succeed in managing a large amount of data in a way that enables the selection of key issues to be achieved as practically as possible.

The EU will, collectively, have to develop a common risk assessment methodology in order to be more effective in its risk assessments. Meanwhile, the EU relies on inputs from Member States or other stakeholders.

2.4.4 Risk Mitigation

Member States are responsible for actions required to mitigate their own aviation safety risks that they have identified

At EU level, mitigation actions are proposed by EASA, through the EASA European Aviation Safety Advisory Committee (EASAC), and are described in the EU Safety Plan. The EU Safety Plan is presented to the EASA Management Board where the Member States have the opportunity to discuss the proposals and to note the contents of the Plan. It is then for the Member States to incorporate the actions in their own safety planning processes to ensure a coordinated approach to safety risks at EU level.

2.5 Safety Performance Indicators

Activities critical to safety can be managed effectively provided there are the means to measure safety performance. With a vast quantity of raw data available to the various stakeholders in the Aviation System there is a need to develop specific indicators to provide clarity on safety performance and to aid the identification of areas that may need intervention action. Safety Performance Indicators can also be used to measure whether the actions taken have been effective.

In the EU a multi-layered approach has been adopted in the development of Safety Performance Indicators (SPIs). Since the information needs of interested stakeholders may differ, the chosen levels are based on the intended use and the reported data:

- **First tier SPIs** aim to provide a general assessment of safety and inform the public or other stakeholders external to aviation about broad safety trends.
- **Second tier SPIs** help monitor specific areas of the system which require safety measures, initiatives or actions.
- **Third tier SPIs** aim to provide information on the effectiveness of the safety measures, initiatives or actions.

First tier SPIs are used mainly for public information purposes. They measure the outcomes that affect the public (e.g. accidents). In using the rate of fatal accidents per 10 million flights per world region as a measurement of success in terms of the EU's safety objective the Commission is making use of a first tier SPI.

EASA produces an Annual Safety Review[14]. The review makes use of safety data from ICAO for international operations and safety data from NAAs for general aviation. It presents the results of an analysis of civil aviation safety in a simple and easy to understand form to indicate whether there is an increase in the safety risk. This information allows European safety levels to be compared with that of other world regions.

[14] Article 15 (4) of European Regulation (EC) 216/2008 of the European Parliament and of the Council of 20 February 2008 - the EASA Basic Regulation. The EASA Annual Safety Review is available at www.easa.europa.eu.

PART 3

EUROPEAN SAFETY ASSURANCE

3.1 Safety Oversight

3.1.1 Member States

Member States are solely responsible for the oversight of aviation activities not covered by competencies shared at EU level. They are also responsible for the oversight of all the activities covered by EU regulation providing that executive powers have not been transferred to the EU, and in particular the following :

Airworthiness:

(a). Airworthiness and noise certification of individual aircraft.

(b) Organisations involved in production, maintenance and maintenance management of aircraft; and the training of certifying staff

(c) Certifying staff

Flight Standards:

(a) Air Operators.

(b) Flight Crew Training Organisations and Aeromedical Centres.

(c) Flight Simulation Training devices used by the training organisations it approves.

(d) Flight crew.

ATM and Aerodromes:

(a) ATM service providers and aerodrome operators.

(b) Aerodrome and ATM equipment.

(c) Air traffic controllers and other ATM or aerodrome personnel.

3.1.2 European Union

EASA Oversight of Certificate holders

EASA is responsible for the oversight of activities where executive powers have been transferred to the EU, and in particular the following:

Airworthiness:

(a) Design of aircraft;

(b) Organisations involved in the design of aircraft;

(c) Organisations involved in the production of aircraft when agreed by the member States.

(d) Organisations based outside the EU that are involved in design, production, maintenance and maintenance management of aircraft; and the training of certifying staff

Flight standards:

(a) Third country operators

(b) Organisations based outside the EU that are involved in the training of pilots

(c) Flight Simulation Training Devices (FSTD) located outside the EU or used by organisations certified by EASA.

ATM:

(a) Air Navigation Service Providers providing services of pan-European nature

(b) Air Navigation Service Providers located outside the EU, but providing a service inside the EU

(c) Foreign Air Traffic Controller (ATCO) Training organisations.

EASA may also be asked to perform oversight for certain activities at the request of the Member States

Standardisation

To ensure a high level of oversight is maintained throughout the EU the Commission, assisted by EASA, monitors the application of the provisions contained in Regulation (EC) No 261/2008.

EASA plays a key role in this process by conducting standardisation inspections of Member States. In doing so the officials conducting the inspections are empowered to:

(a) Examine the relevant records, data, procedures and any other material relevant to the achievement of aviation safety levels.

(b) To take copies of or extracts from such records, data, procedures and other material.

(c) To ask for an oral explanation on the spot.

(d) To enter any relevant premises, land or means of transport.

The working methods for such inspections are contained in Commission Regulation (EC) No 736/2006.[15]It includes, inter alia, the ability of EASA to inspections of undertakings or associations of undertakings under the oversight of the inspected national aviation authority, as well as the authority itself. It ensures that standardisation inspections are

[15] Commission Regulation (EC) No 736/2006 of 16 May 2006 on working methods of the European Aviation Safety Agency for conducting standardisation inspections

conducted in a transparent, effective, harmonised and consistent manner. In addition it requires that standardisation inspections are conducted by EASA on both a regular and, where appropriate and requested by the Commission, an ad-hoc basis. The Regulation also places on the Member States the obligation to provide EASA with all necessary information for the purpose of carrying out inspections.

At the conclusion of the inspection EASA provides a final inspection report containing details of the conduct of the inspection and addressing findings identified during the inspection. The report also includes the comments, if any, of the national aviation authority inspected. The final inspection report is provided to the national aviation authority inspected, to the Commission and to the Member State concerned. The Commission may subsequently transmit this report to all national aviation authorities.

In the event where a preliminary inspection report requests immediate remedial actions and such requests are not answered satisfactorily by the national aviation authority concerned, the final inspection report contains evidence of such failure.

In following up the final report EASA agrees an action plan with the national aviation authority inspected which defines any remedial action and the relevant timeframe within which such action has to be undertaken to resolve any findings. EASA monitors the progress of the agreed remedial actions.

In order to close the inspection report EASA verifies and validates the satisfactory progressive implementation of the action plan, and when satisfied the findings have been addressed issues a statement of closure. This statement is addressed to the aviation authority inspected, to the Member State concerned and to the Commission. The Commission may subsequently transmit this report to all national aviation authorities.

Following an inspection report EASA may at any time, or upon request from the European Commission, conduct inspections of national aviation authorities and, where necessary, of undertakings or associations of undertakings to assess the satisfactory completion of remedial actions. Such inspections are announced to the national aviation authority concerned

3.2 Safety Data, Analysis and Exchange

As described in Part 1 of this document the EU has in place legislation to ensure that occurrences in civil aviation are reported, collected, stored, protected and disseminated.

Information on occurrences submitted to the European Central Repository is made available to the competent authorities of the other Member States, EASA and the Commission. Information can also be disseminated to any entity entrusted with regulating civil aviation safety or with investigating accidents and incidents within the EU. Furthermore, Regulation 216/2008, as well as Regulation 1330/2007, empowers the Commission to disseminate safety information 'to interested parties on its own initiative'.

An essential part of this entire safety reporting process is the creation and preservation of a 'just culture'. This is a complex area and cannot be resolved by legislation alone, however the various controls that have been established are aimed to encourage a more open reporting culture in Europe.

In order to help identify safety issues the various sources of safety data collection are available, including accident reports, ramp inspection reports (SAFA), the investigation and follow-up of incidents, data from occurrence reports integrated into the European Central Repository (ECR), oversight audits, including EASA Standardisation Inspections, and information exchange.

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

The EU is putting in place the regulatory material which will enable EASA and the Member States to conduct oversight in the areas of their responsibility prioritised towards the areas of greater risks. This will also apply to the standardisation activities carried out by EASA.

PART 4

EUROPEAN SAFETY PROMOTION

4.1 Activities at EU Level

4.1.1 Communication and dissemination of safety information.

Annual Safety Review. As required by Reg (EC) 216/2008, EASA publishes an annual safety review to inform the public of the general safety level in the field of civil aviation. The review presents statistics on European and worldwide civil aviation safety

4.1.2 European Strategic Safety Initiative (ESSI)

ESSI is an aviation safety partnership facilitated by EASA and powered by the industry. The ESSI objective is to further enhance safety in Europe and for the European citizen worldwide. Its current remit is to focus on the timeframe of 2007-2017, and it conducts its activities through the analysis of safety data, the coordination with safety initiatives worldwide, and the implementation of action plans.

ESSI has three pillars: the European Commercial Aviation Safety Team (ECAST), the European Helicopter Safety Team (EHEST), and the European General Aviation Safety Team (EGAST).

4.1.3 Safety Research

Research for civil aviation in Europe is financed, subsidised or sponsored by various institutions and by different instruments. In the first place there are the EU Framework Programmes (FP), and similar programmes at national level.

Other instruments used by MS governments are the direct funding of national research institutes, and finally research projects launched by EASA and the NAAs Compared to the first two schemes, EASA's and NAAs' research projects are usually 100 % financed service contracts with a very focused objective and task oriented towards very specific issues whilst the programmes are generally more oriented towards thematic areas of certain subjects which provide the potential tenderers more flexibility about what they are going to propose as a research project.

The main objective of research activities in aviation safety developed by EASA and National Aviation Authorities (NAA) is to ensure that decisions, regulations, guidance material and recommendations for safety improvements and environmental protection measures are based on sound scientific grounds. Simultaneously, the safety regulator benefits from guaranteeing its independence and impartiality in developing its approach and policy.

In line with the above, a European Aviation Research Partnership Group (EARPG) has been formed with representatives of EASA, National Aviation Authorities (NAA), European Commission DG MOVE and DG RTD and Eurocontrol with the following main objectives:

(a) Gather information from the EASA member states on on-going and planned research programmes,

(b) Identify and coordinate priorities to avoid unnecessary duplication of work,

(c) Establish collaborative programmes where appropriate.

At the front end of conducting research are the aviation industry, research institutes, universities and other kinds of science entities. It is common practice, or often required, that proposals are made by consortia, usually ones which are pan-European.

4.1.4 Workshops. EASA regularly conducts workshops 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 standardisation inspections.

4.2 Training

As the EU moves from the current compliance based system to a more performance-based system new training capabilities will need to be developed to ensure all those involved have the relevant skills to ensure the successful implementation of the new approach.

Annex A: List of EU Aviation Safety Legislation

Reference	Subject	Date
Council Regulation (EEC) No 3922/91	on the harmonization of technical requirements and administrative procedures in the field of civil aviation	16 December 1991
Commission Regulation (EC) No 1702/2003	laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations	24 September 2003
Commission Regulation (EC) No 2042/2003	on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks	20 November 2003
Commission Regulation (EC) No 2096/2005	laying down common requirements for the provision of air navigation services	20 December 2005
Commission Regulation (EC) No 474/2006	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	22 March 2006
Commission Regulation (EC) No 736/2006	on working methods of the European Aviation Safety Agency for conducting standardisation inspections	16 May 2006
Commission Regulation (EC) No 768/2006	implementing Directive 2004/36/EC of the European Parliament and of the Council as regards the collection and exchange of information on the safety of aircraft using Community airports and the management of the information system	19 May 2006
Commission Regulation (EC) No 1315/2007	on safety oversight in air traffic management and amending Regulation (EC) No 2096/2005	8 November 2007
Commission Regulation (EC) No 1321/2007	laying down implementing rules for the integration into a central repository of information on civil aviation occurrences exchanged in accordance with Directive 2003/42/EC of the European Parliament and of the Council	12 November 2007

Commission Regulation (EC) No 1330/2007	laying down implementing rules for the dissemination to interested parties of information on civil aviation occurrences referred to in Article 7(2) of Directive 2003/42/EC of the European Parliament and of the Council	24 September 2007
Regulation (EC) No 216/2008 of the European Parliament and of the Council	on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC	20 February 2008
Commission Regulation (EC) No 351/2008	implementing Directive 2004/36/EC of the European Parliament and of the Council as regards the prioritisation of ramp inspections on aircraft using Community airports	16 April 2008
Commission Regulation (EU) No 691/2010	laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) No 2096/2005 laying down common requirements for the provision of air navigation services	29 July 2010
Regulation (EU) No 996/2010 of the European Parliament and of the Council	on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC	20 October 2010

ANNEX B: RELATIONSHIP BETWEEN ICAO STATE SAFETY PROGRAMME FRAMEWORK AND DEMING CYCLE

1. Introduction

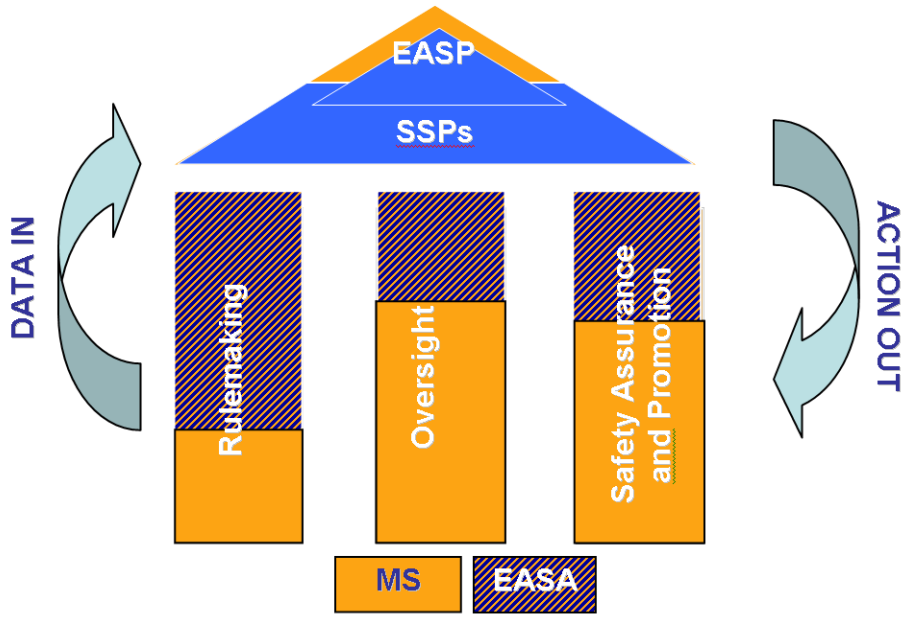
In obtaining a clear view of how aviation safety is managed in the EU it is convenient to use the Deming Cycle model to understand how each activity fits into the overall safety system. The Deming Cycle is arranged into four sections, namely Plan, Do, Check, and Act (PDCA). In essence the cycle commences with the activities that are necessary to collectively manage safety risks. The risks identified through this mechanism are mitigated by a set of measures compiled in a Safety Plan.

2. Plan

In the PLAN phase, Member States are expected to identify safety issues at the national level while EASA would identify issues at pan-European level. The coordination of pan-European issues are done collectively by all stakeholders.

3. Do

The DO phase comprises of the activities that EASA, the Member States and industry organisations do to manage safety at their level on a regular basis. These activities can be understood using the three pillar concept described in the Introduction, namely rulemaking, oversight and safety promotion (see picture below)



4. Check

This phase are the activities conducted to check the performance of the European Aviation Safety Programme in order to make sure that the initial expectations are being met. These mechanisms should include the selection of appropriate safety performance indicators to assess the effectiveness of the measures proposed in the Safety Plan as well as the setting of thresholds and targets when appropriate. In this phase, Member States should check their performance against their own safety plans.

This phase should also include the results of the different safety studies and reviews performed at European level, the different proposals for safety enhancements and the production of safety reports. Safety recommendations received from the Safety Investigation Authorities contribute to checking pan-European performance by revealing the causes of accidents and incidents.

5. Act

This phase is the process to take decisions regarding the actions that are necessary to incorporate in a revision of the Safety Plan. These decisions would be based on the oversight data collected on the DO phase and the monitoring of performance carried out during the CHECK phase.

Member States act on the data that comes out of their own State Safety Programmes and should agree to ACT collectively on certain common issues.

A review of the improvement actions is carried out on a yearly cycle, except when there is a need to ACT before

The table below indicates where the descriptions contained in this document in accordance with the ICAO elements of the SSP framework can be linked to a Plan, Do, Check, Act cycle.

ICAO SSP Framework		Plan	Do			Check	Act
			R	O	SP		
I	**EU safety policy and objectives** 1.1 State safety legislative framework 1.2 State safety responsibilities and accountabilities 1.3 Accident and incident investigation 1.4 Enforcement policy						
II	**EU's safety risk management** 2.1 Safety requirements for service providers SMS and States SSP.	X	X			X	X
	2.2 Agreement on States safety performance	X					
III	**EU's safety assurance** 3.1 Safety oversight			X			
	3.2 Safety data collection, analysis and exchange	X					
	3.3 Safety-data-driven targeting of oversight of areas of greater concern or need			X			
IV	**EU's safety promotion** 4.1 Internal training, communication and dissemination of safety information 4.2 External training, communication and dissemination of safety information.				X		

R = Rule Making

O = Oversight

SP = Safety Promotion

ANNEX C: INTERACTIONS BETWEEN THE 'PLAYERS' IN THE EU AVIATION SAFETY SYSTEM