



**ANAC**

NATIONAL CIVIL AVIATION  
AGENCY - BRAZIL

# PSOE Safety Programme

## Preface

The civil aviation industry has boosted the economic and social development of several countries and regions around the world. The industry presents significant numbers and a strong growing tendency in terms of its contribution to gross domestic products, to the number of jobs created and to the total number of passengers and paid cargo globally transported every year.

However, the significant growth in air transport on national and international bases brings the need for nations and regions, as well as the industry, to respond in a proactive way to the current and emerging safety risks. The capacity of being responsive translates into the development of strategic regulation and infrastructure capable of guiding and ensuring the sustainable growth of civil aviation industry, based on the balance between financial management and safety management.

Therefore, improving safety and air navigation worldwide essentially depends on planning. It is imperative that countries and regions continuously act to establish, review and manage safety priorities while promoting and monitoring the growth of the civil aviation industry.

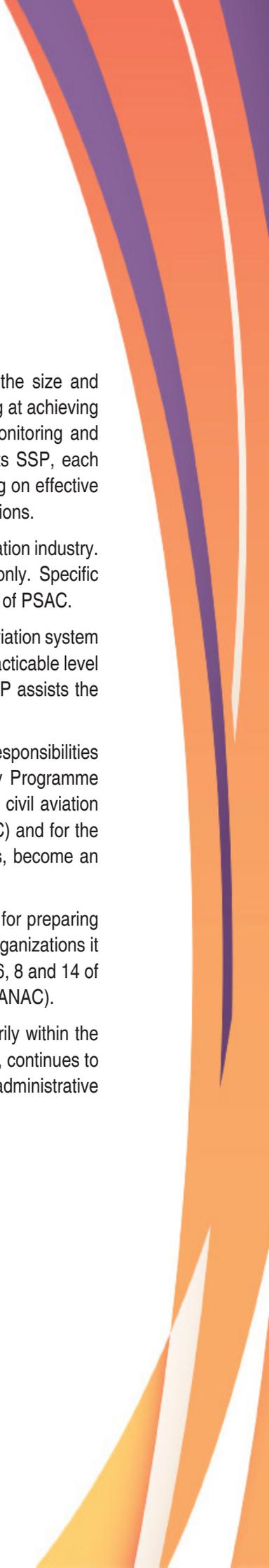
Planning also makes clear to society and other interested parties the desired results, responsibilities and ability of the various sectors of the civil aviation industry to provide services. Planning also makes it possible to demonstrate the ability of the authorities responsible for regulating and inspecting civil aviation industry.

The international civil aviation scenario described in the previous paragraphs justifies the initiative taken by the International Civil Aviation Organization (ICAO) in 2006 to publish an Annex to the International Civil Aviation Convention containing standards and recommendations for safety management within Member States and their Civil Aviation Services Providers (PSAC).

According to the initial proposal, the aforementioned Annex should support the continuous evolution of strategies aimed at improving safety. The set of these strategies was called *State Safety Programme* (SSP), focusing on the systematic treatment of the risks inherent to the State's action on civil aviation industry, which the State regulates and inspects. The document containing ICAO standards and recommendations is the Annex 19, entitled *Safety Management*.

In this sense, the SSP consists of a management system aimed at improving the regulatory and administrative capacity of the State. It should be noted that this capability pre-exists in States that already had organizational structure, processes and responsibilities formally defined and satisfactorily implemented to exercise regulation and inspection over the civil aviation industry, as established by ICAO, and in accordance with the State's Safety Oversight System, DOC 9734. The document presents the key elements for structuring the State, so that it can carry out safety oversight in a satisfactory way. The elements are referred to as "Eight Critical Elements of Safety Oversight" (8 EC). Within ANAC, such system is called *Safety Oversight System* (SSSO).

The operationalization of the Safety Oversight System is planned and controlled by the Safety Oversight Plan (PSSO-ANAC). This Plan specifies procedures and resources necessary for the activities of standardization, inspection, certification and registration performed by ANAC, determining also who will use them, and when.



According to Annex 19, each Member State must establish its SSP consistent with the size and complexity of civil aviation activities developed under its regulation and inspection, and aiming at achieving an acceptable level of safety performance. The SSP guides civil aviation authorities in monitoring and measuring results achieved with the implementation of the SSSO. As an integral part of its SSP, each State should require the PSAC to implement the Safety Management System (SMS) focusing on effective identification and resolution of systemic deficiencies that affect safety required for their operations.

In turn, the State should provide support for the implementation of the SMS in the civil aviation industry. In this respect, it should be noted that, as a rule, the SSP presents general guidelines only. Specific regulations and other applicable normative documents cover details of the SMS for each type of PSAC.

The SSP should be implemented taking into account the size and complexity of the civil aviation system of each State and should have specific objectives related to the achievement of the highest practicable level of safety for air transport activities as established in the State policy. In this context, the SSP assists the State in monitoring and measuring the results achieved with the implementation of the SSSO.

Complying with the commitment of implementing the SSP and considering shared responsibilities between the two civil aviation authorities in the country, the Brazilian Civil Aviation Safety Programme (PSO-BR) was approved on January 8, 2009. The Programme establishes as a strategy for civil aviation safety the development and implementation of specific Programmes for ANAC (PSOE-ANAC) and for the Aeronautical Command – COMAER (PSOE-COMAER), which once approved by authorities, become an integral part of the PSO-BR.

According to article 3 of the PSO-BR, the National Civil Aviation Agency is responsible for preparing and approving its PSOE containing guidelines for itself, as a regulatory agency, and for the organizations it regulates in accordance with its legal competency. It must cover the areas within Annexes 1, 6, 8 and 14 of the Convention on International Civil Aviation (regarding Annex 1, only personnel certified by ANAC).

Finally, it is important to state that as the implementation of the SMS occurs satisfactorily within the PSAC, the PSOE-ANAC consolidates as an integral part of the PSO-BR. The Agency, in turn, continues to implement preventive and corrective actions and improvements in its regulatory, oversight and administrative capacities, focusing on safety.

# Summary

<b>Chapter I: Purpose and Scope of PSOE-ANAC</b>	<b>5</b>
<b>Chapter II: Responsibilities of the National Civil Aviation Agency Regarding Brazilian Civil Aviation Safety Oversight</b>	<b>7</b>
<b>Chapter III: Guidelines, Objectives and Safety Performance Goals for the Brazilian Civil Aviation Industry</b>	<b>9</b>
<b>Chapter IV: Safety Oversight</b>	<b>11</b>
<b>Chapter V: Policy for Treating Violations</b>	<b>13</b>
<b>Chapter VI: Accident and Incident Investigation</b>	<b>14</b>
<b>Chapter VII: Safety Management System (SMS)</b>	<b>15</b>
<b>Chapter VIII: Safety Risk Management – ANAC</b>	<b>19</b>
<b>Chapter IX: Safety Assurance</b>	<b>23</b>
<b>Chapter X: Safety Promotion</b>	<b>27</b>

# Chapter I

## Purpose and Scope of PSOE-ANAC

Art. 1. ANAC Safety Programme (PSOE-ANAC), which is an integral part of the Brazilian Civil Aviation Safety Programme (PSO-BR), establishes the Agency's safety policy and guidelines at the same time that instructs the planning and the execution of its safety related duties, as defined by law.

Art. 2 PSOE-ANAC shall guide the actions taken by ANAC regarding the safety of civil aviation under its jurisdiction, within the scope of its competencies, in order to:

- I. ensure that Brazil has a safety oversight system, which is appropriate to the Brazilian civil aviation industry, subject to the competencies of the Agency;
- II. support the coordinated actions between ANAC and COMAER in their functions of risk management and continuous improvement of civil aviation safety;
- III. include requirements that allow the assessment of safety performance in the civil aviation industry regulation;
- IV. develop, implement and execute the monitoring and measurement of safety performance of the Brazilian civil aviation industry;
- V. support the development, operationalization and continuous improvement of the SMS of Civil Aviation Service Providers (PSAC), as well as ensure their interaction with the Agency's systems; and
- VI. guide the actions of ANAC employees in the planning, development, operationalization, maintenance, monitoring, revision and continuous improvement of PSOE-ANAC in what regards internal aspects and interfaces with the SMS implemented within PSAC.

Art. 3. PSOE-ANAC also establishes safety guidelines for the Brazilian civil aviation industry in accordance with the National Civil Aviation Policy (PNAC).

Sole paragraph. Details of specific requirements for each segment of aviation industry mentioned in the caput of this article shall be published in complementary normative documents.

Art. 4. In order to guarantee the proper execution of safety functions, ANAC must have:

- I. appropriate organizational structure for the exercise of civil aviation safety oversight and management, in which specific roles and responsibilities are clearly established;
- II. resources, including financial, human, technological and infrastructure; and
- III. normative documents that support the execution of functions.

Art. 5. Policy and guidelines set forth by PSOE-ANAC cover legal, normative, organizational, technical, financial and procedural structures of ANAC required for the full exercise of standardization, certification and safety oversight activities of the Brazilian civil aviation industry within the scope of its competencies.

Sole paragraph. ANAC shall monitor and continuously assess the conformity of the aforementioned structures referencing to ICAO standards and recommendations, especially those specified in Annexes 1, 6, 8, 14 and 19, as applicable.

Art. 6. ANAC shall continually improve the Programme, as well as keep it up to date in relation to the context of the Brazilian civil aviation industry, revising it as necessary.

Art. 7. ANAC shall maintain a crisis management plan that contemplates the coordination of its activities in cases of exceptional circumstances that may adversely affect civil aviation safety.

## Chapter II

### Responsibilities of the National Civil Aviation Agency Regarding Brazilian Civil Aviation Safety Oversight

#### Section I Legislation on Safety

Art. 8. The framework of national legislation for safety management oversight under the responsibility of ANAC is composed of, but not limited to:

- I. Law No. 7.565 of December 19, 1986, which provides for the Brazilian Aeronautical Code;
- II. Law No. 11.182 of September 27, 2005, which creates the National Civil Aviation Agency (ANAC), among other provisions;
- III. Decree No. 21.713, of August 27, 1946, promulgating the Convention on International Civil Aviation;
- IV. Decree No. 6.780, of February 18, 2009, which approves the National Civil Aviation Policy (PNAC), among other provisions; and
- V. ANAC Resolution No. 110, of September 15, 2009, which amends Internal Regulation, including subsequent amendments.

Sole paragraph. This legislation is complemented by requirements established by the Brazilian Civil Aviation Regulations (RBAC) or equivalent, as well as by the acceptable methods of compliance with requirements established by Supplemental Instructions (IS) or equivalent documents.

#### Section II Responsibilities of the National Civil Aviation Agency Regarding Safety Management

Art. 9. In accordance with policies established by the Executive and the Legislative and in the exercise of its competencies, ANAC observes and implements the policies and guidelines established by the Civil Aviation Secretary (SAC) and the Civil Aviation Council (CONAC).

Art. 10. The Director-President is responsible for ANAC's safety management and oversight functions, including primary responsibility for:

- I. planning, developing, operationalizing, maintaining, monitoring, reviewing, critically analyzing and continuously improving PSOE-ANAC;
- II. ensuring the existence and allocation of financial, human, technological and infrastructure resources needed for the effective operationalization of PSOE-ANAC;
- III. fostering actions aimed at the dissemination of PSOE-ANAC and initiatives to promote safety;

Art. 11. The Board of Directors of ANAC is responsible for:

- I. ensuring that PSOE objectives are achieved;
- II. monitoring the operationalization of PSOE-ANAC aiming at its continuous improvement;
- III. approving the regulation of civil aviation activities in the interest of safety, taking into account guidelines set forth in the Programme and Brazilian international agreements;
- IV. establishing and monitoring the Acceptable Level of Safety Performance (ALoSP); and
- V. guiding the various branches of ANAC to continuously plan, organize, develop, control, promote, improve and stimulate safety, with the support of Offices assisting the Board of Directors.

Art. 12. Departments, as executive bodies, are responsible for coordinating the development, operationalization, maintenance and continuous improvement of PSOE-ANAC as appropriate.

Art. 13. Considering the areas under their responsibility, Heads of Departments are responsible for:

- I. implementing actions to reach objectives and goals established by PSOE-ANAC and by other normative documents;
- II. ensuring the availability of suitably trained staff to carry out safety oversight and management;
- III. ensuring that the assessment of SMS development, operationalization, maintenance and continuous improvement is included in the certification and continuous oversight processes of the PSAC;
- IV. supervising PSAC safety, including verification of safety performance established in their SMS;
- V. evaluating the implementation of risk management processes by PSAC;
- VI. ensuring the effective implementation of internal risk management processes;
- VII. ensuring analysis of the safety recommendations issued by the authority responsible for aeronautical accident investigations and their incorporation to the regulations, processes, procedures and other activities under his/her responsibility, where applicable; and
- VIII. establishing programs for the promotion of safety events, aiming at the dissemination of PSOE-ANAC and issues and safety information relevant to the development of activities within ANAC.

Art. 14. The implementation of PSOE-ANAC and its alterations shall occur in a coordinated and harmonized way among the various sectors that develop and operationalize related processes and activities.

# Chapter III

## Guidelines, Objectives and Safety Performance Goals for the Brazilian Civil Aviation Industry

### Section I

#### Guidelines of the National Civil Aviation Agency for Safety

Art. 15. Guidelines within Brazilian civil aviation safety:

- I. to ensure that ANAC has the regulatory framework required for the exercise of safety regulation and inspection;
- II. to ensure that civil aviation reaches and maintains an acceptable level of safety performance, observing requirements established by national regulations and international references;
- III. to work in collaboration with the civil aviation industry and with COMAER, promoting harmonization among organizations with respect to their roles and responsibilities regarding the management of safety risks;
- IV. to monitor and measure safety performance achieved by the Brazilian civil aviation industry;
- V. to prioritize the allocation of resources and efforts in the light of the results identified in the safety risk assessment;
- VI. to coordinate and improve safety oversight and management;
- VII. to carry out activities in order to enable the implementation of the SMS of the PSAC; and
- VIII. to promote the interaction between sectors that compose the Brazilian civil aviation industry.

### Section II

#### Objectives and goals for safety performance

Art. 16. As a determining factor for the safety management performance put into effect by ANAC, the Agency's Board of Directors must establish and communicate:

- I. safety performance objectives and goals for the Brazilian civil aviation industry, according to the guidelines established in the Programme;
- II. safety oversight planning that considers safety performance objectives and goals and determines operational resources and processes needed for the achievement of such objectives and goals; and
- III. the parameters for critical analysis of the results achieved by safety oversight in relation to the determined performance objectives and goals.

Sole paragraph. Regulation shall guide and ensure the sustainable growth of the civil aviation industry, based on the balance between financial management and safety management.

Art. 17. The planning referred to in article 16, II, in accordance with ANAC's Strategic Planning, shall support the elaboration of the Safety Oversight Plan (PSSO-ANAC), as established in article 77, especially regarding the definition of the Agency's strategic actions aimed at achieving safety objectives.

Art. 18. Based on article 16, III, ANAC shall carry out the critical analysis of the results achieved by safety oversight through a set of indicators capable of representing:

- I. the level of safety performance achieved by regulated entities, based on the effectiveness of operational risk management approaches adopted by them; and
- I. the effectiveness of the Agency's actions to mitigate and control identified internal risks and risks within the operational environment regulated and inspected by the Agency.

Art. 19. The Board of Directors and the Departments are responsible for:

- I. reviewing the results achieved by safety oversight; and
- II. defining, in a coordinated and harmonized manner and together with other relevant sectors of the Agency, the parameters and indicators for the critical analysis of results referred to in subsection I of this article.

Art. 20. The set of indicators referred to in article 18 shall be used by ANAC to measure and monitor the Acceptable Level of Safety Performance (ALoSP).

Art. 21. ANAC shall critically analyze the results of actions taken to achieve safety performance objectives and goals and revise these actions if indicators show unfavorable trends in meeting the stipulated objectives and goals.

Art. 22. The establishment of measurable limits for indicators and deadlines to reach the objectives constitutes safety performance goals to be monitored by ANAC.

Art. 23. The ALoSP shall be formalized through an appropriate normative document specifically prepared for this purpose, approved by the Board of Directors of ANAC.

## Chapter IV

### Safety Oversight

Art. 24. ANAC shall maintain the Safety Oversight System (SSSO) in order to:

- I. promote the adoption of safety standards and recommendations contained in the Annexes to the Convention on International Civil Aviation (Chicago Convention), as well as its associated directives presented by related documents, as applicable; and
- II. ensure that the Brazilian civil aviation industry is able to provide a level of safety equal to, or better than, the one defined by ICAO standards and recommendations.

Art. 25. ANAC Safety Oversight System, based on ICAO safety oversight eight critical elements, shall ensure:

- I. the effective participation of the Agency in the process of elaborating basic aviation legislation, aiming at contributing to the establishment of legal support necessary for the exercise of the functions of safety oversight;
- II. the elaboration and revision of regulations in order to establish safety requirements, supported by basic legislation, to ensure the existence of standards and procedures for aeronautical activities related to operation, products, services, equipment and infrastructure;
- III. the provision of necessary and sufficient human and financial resources for the execution of safety oversight activities;
- IV. the establishment of competence and experience requirements for the Agency's personnel performing safety oversight functions as well as the offering of appropriate training to maintain and enhance their competence at an appropriate level including initial and recurrent training;
- V. the provision of technical guidance material, tools and critical safety information to technical personnel, as applicable, to enable them to perform their oversight functions in accordance with requirements and in a standardized manner. This provision includes:
  - a. technical guidance provided by ANAC to the industry supporting the adoption and compliance with requirements established in regulations; and
  - b. instructions and/or other applicable normative documents.
- VI. the establishment and implementation of processes and procedures to ensure that civil aviation personnel and organizations comply with requirements before they are issued a license, a certificate, a registration, an authorization and/or an approval to conduct their activities;
- VII. the establishment and implementation of processes and procedures to ensure continuous oversight activities, including inspections and audits, to proactively ensure that holders of licenses, certificates, authorizations and/or approvals continuously comply with requirements and operate with adequate levels of competencies required for the performance of their activities. These processes and procedures shall include the supervision of accredited personnel;

- VIII. the establishment and implementation of processes and procedures to ensure that deficiencies that affect safety which are identified by ANAC or other competent authority are resolved. These processes and procedures shall include, but not be limited to:
- a. the treatment of recommendations;
  - b. the solution of conflicts; and
  - c. the adoption of appropriate coercive measures.

Art. 26. Safety oversight carried out by ANAC must take into account prescriptive and performance elements in the assessment of compliance with safety requirements by regulated entities.

Art. 27. Safety oversight supervision carried out by ANAC must be able to identify degradation of technical and financial conditions, as applicable, required to guarantee the safety of activities performed by regulated entities.

Art. 28. The planning for the revision and improvement of the Safety Oversight System shall be formalized in the Safety Oversight Plan (PSSO-ANAC).

## Chapter V

### Policy for Treating Violations

Art. 29. The sectors of ANAC responsible for the regulation and inspection of Brazilian civil aviation shall define guidelines that allow the interpretation of requirements for coercive purposes, identifying the framework of conditions and the cases in which they apply.

Art. 30. ANAC must establish conditions and circumstances under which the PSAC are allowed to deal with and resolve deficiencies in relation to compliance with regulations, within the scope of their SMS, as long as they prove ANAC the effectiveness of the corrective actions applied.

Art. 31. ANAC shall demand that regulated entities provide evidence that they can identify deficiencies in complying with safety requirements and occurrence of infractions to the Brazilian Aeronautical Code (CBA), as well as propose effective corrective actions aimed at mitigating risks to safety.

Art. 32. In response to the risks identified in the operational environment regulated and supervised by ANAC, the Agency shall:

- I. impose coercive actions against regulated entities that violate existing legislation, especially those that do so repeatedly or deliberately;
- II. carry out actions to promote safety, monitor and guide those who demonstrate commitment to the solution of deficiencies; and
- III. establish parameters for the distinction between violations and errors, as well as establish and execute appropriate administrative actions in each case.

## Chapter VI

### Accident and Incident Investigation

Art. 33. PSOE-ANAC assumes the existence of structures and processes to conduct investigations of aeronautical accidents and incidents by the Brazilian State, which are independent of ANAC.

Art. 34. Technical and scientific analysis of the investigation of aeronautical occurrences shall be used by ANAC as a source of data and information for risk management.

Art. 35. ANAC shall:

- I. establish and document procedures describing how recommendations issued by accident investigation processes will be handled within the Agency to ensure that all relevant actions are effectively implemented;
- II. request the authority responsible for the investigation to participate in the commission on aeronautical accidents and incidents investigation, whenever it is in the interest of the Agency, in order to identify possible gaps and opportunities for improvement within ANAC and adopt appropriate corrective actions; and
- III. consolidate information, data, assessments and risk analysis related to accidents or other safety events prepared by ANAC Departments responsible for safety oversight and financial regulation, and/or provided by external entities.

# Chapter VII

## Safety Management System (SMS)

### Section I

#### Objectives and Implementation of SMS

Art. 36. As part of the Brazilian civil aviation safety management, ANAC shall require the PSAC listed in article 43 the implementation and maintenance of a Safety Management System (SMS).

Art. 37. The implementation of the SMS within the PSAC aims to incorporate principles and tools of organizational management into the activities developed by them, in accordance with the applicable safety regulations.

Art. 38. The application of organizational management principles and tools shall provide as a measurable result the mitigation and effective control of operational risks, which is a condition required for Service Providers to obtain and revalidate their certifications or authorizations, as applicable.

Art. 39. The SMS required by ANAC shall:

- I. establish the organization's safety policy and objectives;
- II. establish safety goals and indicators of safety performance that allow the evaluation of the achievement of safety objectives;
- III. establish the organizational structure and those responsible for the implementation, maintenance and continuous improvement of the system;
- IV. identify hazards and assess associated operational risks;
- V. apply corrective and preventive actions developed based on the evaluated operational risks, as well as evaluate the effectiveness of these actions;
- VI. perform permanent oversight of the activities developed by the organization in order to ensure safety;
- VII. plan and conduct, on a regular basis, internal evaluations or audits of the SMS in order to ensure its adequacy to the operational context of the organization and the continuous improvement of safety performance levels;
- VIII. ensure that those involved in sensitive safety activities have the necessary competencies and are aware of their responsibilities;
- IX. communicate safety performance results, as well as disseminate information that enhances the organization's safety culture;
- X. generate and organize documents and records that provide evidence of the development, operationalization, maintenance and continuous improvement of the SMS; and
- XI. meet any other specific SMS requirements set out in normative documents applicable to PSAC.

Art. 40. ANAC Departments shall establish, in a coordinated and harmonized manner, the criteria for the elaboration of acceptable methods of compliance with SMS requirements, according to the particularities of each category of PSAC.

Sole paragraph. Criteria mentioned in the caput of this article shall be defined by a normative document, taking into account the size of the organization and the complexity of the activities carried out by the PSAC, the level of risks associated with such activities, as well as the responsibilities ANAC has in relation to the users of the PSAC services.

Art. 41. ANAC shall define, in an appropriate normative document, the method for accepting the SMS of regulated PSAC, taking into account the size of the organizations and the complexity of the activities they perform.

## **Section II** **Structuring the SMS**

Art. 42. The structure of the SMS shall have at least the following components and elements:

- I. Component 1 – Safety policy and objectives;
  - a. Element 1.1 – Top management responsibility and commitment;
  - b. Element 1.2 – Primary responsibility for safety;
  - c. Element 1.3 – Appointment of key safety personnel;
  - d. Element 1.4 – Coordination of Emergency Response Planning; and
  - e. Element 1.5 – SMS Documentation.
- II. Component 2 – Safety risk management;
  - a. Element 2.1 – Hazards identification process; and
  - b. Element 2.2 – Risk assessment and mitigation process.
- III. Component 3 – Safety assurance;
  - a. Element 3.1 – Process for safety performance monitoring and measurement;
  - b. Element 3.2 – Process for the management of changes; and
  - c. Element 3.3 – Process for SMS continuous improvement.
- IV. Component 4 – Safety promotion;
  - a. Element 4.1 – Training and qualification; and
  - b. Element 4.2 – Dissemination of the SMS and safety communication.

### Section III

#### SMS Applicability and Scalability

Art. 43. As an integral part of the PSOE-ANAC, the implementation of the SMS is required for the following Civil Aviation Services Providers:

- III. Aero clubs, civil aviation schools and training centers certified according to the Brazilian Regulation of Aeronautical Homologation (RBHA) 140, RBHA 141 (or regulations that may replace them) and RBAC 142, that are exposed to safety risks during the performance of their activities;
- IV. Operators certified according to RBAC 121 and RBAC 135 who hold Air Operator Certificates according to RBAC 119;
- V. Agricultural aviation operators, certified according to RBAC 137;
- VI. Holders of Aeronautical Product Maintenance Certificates issued under RBAC 145 that provide services to the PSAC listed in items I, II or III of this article;
- VII. Organizations responsible for designing or manufacturing aircraft, certified according to RBAC 21;
- VIII. Civil public aerodromes subject to the applicability of RBAC 139; and
- IX. Other Civil Aviation Service Providers required to implement Safety Management Systems as defined by ANAC's Board of Directors.

Sole paragraph. When maintenance services are performed by PSAC referred to in clause II of the caput of this article, in accordance with the established in their Operative Specifications, or by other organizations not subject to certification under RBAC 145, contracting, monitoring, evaluating and accepting these services shall be part of the scope of their SMS.

Art. 44. In order to promote implementation of the SMS within the PSAC in such a way that it is compatible with their different operational contexts, ANAC will define SMS scalability criteria, based on the size of the organizations and the complexity of their activities.

Sole paragraph. ANAC Departments are responsible for establishing, in a coordinated and harmonized way, criteria mentioned in the caput of this article to be incorporated to Regulations or Supplemental Instructions, as applicable.

Art. 45. Regardless of the scalability of the SMS, its scope shall cover all PSAC activities approved or authorized by ANAC.

Sole paragraph. Any changes in activities shall trigger a review of the SMS scope and its adequacy, as necessary.

Art. 46. For the purposes of harmonizing the implementation, operationalization and maintenance of the SMS, as well as for prioritizing its monitoring by ANAC, the PSAC included in article 43 of this document are grouped into the following segments:

- I. segment I: regular operations, involving PSAC responsible for operations under RBAC 121 and those whose operations directly impact safety of the segment: aerodrome operators; maintenance service providers; training centers; and organizations responsible for designing or manufacturing aircraft for the segment;
- II. segment II: regular operations, involving PSAC responsible for operations under RBAC 135 and those whose operations directly impact safety of the segment: aerodrome operators; maintenance service providers; training centers; and organizations responsible for designing or manufacturing aircraft for the segment;
- III. segment III: non-regular operations, involving PSAC responsible for operations under RBAC 135 classified as large operations/of high complexity by RBAC 121, as indicated by the appropriate technical area, and those whose operations directly impact safety of the segment: maintenance service providers; training centers; and organizations responsible for designing or manufacturing aircraft for the segment;
- IV. segment IV: non-regular operations, involving PSAC responsible for operations under RBAC 135 classified as medium size operations/of medium complexity by the appropriate technical area, and those whose operations directly impact safety of the segment: maintenance service providers; training centers; and organizations responsible for designing or manufacturing aircraft for the segment;
- V. segment V: non-regular operations, involving PSAC responsible for operations under RBAC 135 classified as small size operations/of small complexity by the appropriate technical area, and those whose operations directly impact safety of the segment: maintenance service providers; training centers; and organizations responsible for designing or manufacturing aircraft for the segment;
- VI. segment VI: agricultural operations involving PSAC responsible for operations under RBAC 137; maintenance service providers and organizations responsible for designing or manufacturing aircraft for the segment; and
- VII. segment VII: general aviation instruction operations (aero clubs, civil aviation schools and training centers), involving PSAC responsible for operations under RBHA 140 and 141 (or regulations that may substitute them) and RBAC 142 respectively: maintenance service providers and organizations responsible for designing or manufacturing aircraft for the segment.

Sole paragraph. The SMS to be implemented by the PSAC that compose each of the segments presented in the caput of this article shall allow and support effective communication between systems, aiming the exchange of data, information, experiences and solutions of problems inherent to their interactions when providing services.

Art. 47. ANAC Departments shall establish in a specific normative document which safety management strategies will be used for regulation and inspection of regulated entities not included in article 43.

## Chapter VIII

### Safety Risk Management – ANAC

Art. 48. ANAC shall establish a systematic approach to manage safety risks in order to identify, assess and mitigate inherent risks to the operational environment that the Agency regulates and oversees, as well as to its own organizational environment.

Art. 49. The impact generated by the adoption of the systematic approach used by ANAC for risk management shall be the improvement of its capacity to regulate and oversee Brazilian civil aviation safety, considering the size and complexity of air operations.

Art. 50. The systematic approach to risk management discussed in article 48 consists of:

- I. guidelines for risk management established by ANAC and the results of this process;
- II. responsibilities of managers and other ANAC employees in relation to risk management;
- III. the Agency's organizational structure compatible with the performance directed by risk management; and
- IV. documented processes of assessment and treatment of risks typical of the operational environment regulated and overseen by ANAC, as well as of the Agency's organizational structure.

Art. 51. Among guidelines and results for risk management are:

- I. the establishment of requirements related to risk management to be adopted by the PSAC that are required to implement SMS;
- II. the follow up of the safety performance goals established by the PSAC that are required to implement SMS;
- III. the evaluation and direct or indirect action on risks inherent to PSAC activities and regulated entities, regardless of the implementation of the SMS;
- IV. the prioritization of actions based on data and information from the Agency's risk management process and safety assurance processes; and
- V. the assurance that corrective and preventive actions are effective in mitigating and controlling safety risks.

Art. 52. Responsibilities of managers and other ANAC employees in relation to risk management shall be specified by an appropriate normative document, in a standardized way among the Agency's organizational units.

Art. 53. ANAC organizational structure shall support effective and efficient mechanisms of consultation and communication of safety data and information that derives from risk management process, aiming at appropriate and well-timed safety related decision-making and its continuous improvement.

Art. 54. Technical areas of ANAC shall develop, apply and improve the assessment and treatment of risks characteristic of the operational environment regulated and inspected by the Agency in a harmonized way.

Art. 55. The processes of drafting, reviewing and updating safety regulations and other normative documents shall include analysis to identify potential risks that may result from the processes, as well as to consider the results of the systematic approach to risk management.

Sole paragraph. In accordance with the provisions of this article, regulations and other normative documents must contain specific provisions for the mitigation and control of risks identified by ANAC within the operational environment inspected by the Agency, in order to guarantee the effectiveness and efficiency of regulation as a primary mechanism to control operational risks.

Art. 56. Risk management shall be adopted by ANAC as a tool to assist strategic decision-making required for the mitigation and control of risks, directed to the operational environment regulated and inspected by the Agency, as well as to its regulatory capacity.

§ 1 With regard to the operational environment regulated and inspected by ANAC, the following risks shall be assessed and treated as priorities:

- I. evidences of degradation of conditions required for the maintenance of certification or authorization of PSAC activities and other regulated entities;
- II. recurrence of non-conformities and violations of PSAC activities and other regulated entities activities; and
- III. identification of operational behaviors or practices that negatively affect safety.

§ 2º Regarding ANAC capacity to act, the following risks shall be assessed and treated as priorities:

- I. failures in the ability to detect nonconformities and violations related to aircraft operation, aircraft maintenance and personnel qualification;
- II. deficiencies in the performance of persons or organizations accredited by ANAC;
- III. ineffectiveness or incorrect application of regulations; and
- IV. failures in the fulfillment of legal and regimental obligations.

## Section I

### Safety Risk Management Process – ANAC

Art. 57. The risk management process adopted by ANAC is composed of the following phases:

- I. identification of hazards;
- II. analysis of the causes and consequences of hazards;
- III. assessment of the risks associated with the consequences of hazards;
- IV. proposition of actions for mitigation, elimination and control of risks; and
- V. evaluation of effectiveness of implemented actions.

Art. 58. The process of managing safety risks adopted by ANAC shall trigger the following initiatives:

- I. evaluation of recommendations issued by the authority responsible for accident investigation and possible corrective actions, in order to avoid recurrence of conditions or facts that have caused accidents or serious incidents;
- II. monitoring of the operational environment regulated and inspected by ANAC, aiming at the identification of hazards and latent conditions and the implementation of corrective or preventive actions under the responsibility of ANAC; and
- III. identification of PSAC and other regulated entities that represent intolerable risks to the operational environment regulated and supervised by ANAC, aiming at prioritizing them during the inspection planning process.

Art. 59. PSAC and regulated entities referred to in article 58, III, shall propose to ANAC mitigating actions and shall be monitored by the Agency sectors responsible for their oversight, in such a way to guarantee the efficiency of the proposed mitigating measures.

Art. 60. In order to put the process of risk management in operation, ANAC shall establish means for recording, treating and monitoring data and information related to hazards and risks, as well as producing management reports that allow the evaluation of process effectiveness.

Sole paragraph. The following items shall be recorded, handled and monitored:

- I. hazards and latent conditions identified within the operational environment and respective corrective and preventive measures adopted by ANAC for risk mitigation and control;
- II. safety reports classified as mandatory, voluntary, anonymous or identified; and
- III. data or information from other sources deemed relevant to risk management.

Art. 61. Details regarding the development and operationalization of risk management shall be included in appropriate normative documents in order to guarantee the standardization of terminology, procedures and actions adopted by the various sectors of ANAC.

## **Section II**

### **Responsibilities for Managing Safety Risks within ANAC**

Art. 62. The management of safety risks within ANAC is carried out by the Board of Directors, with the participation of General Branches and Departments responsible for the regulation and oversight of civil aviation industry, counting with the support of other appropriate sectors of the Agency.

Art. 63. The Board of Directors and appropriate General Branches and Departments are responsible for planning and coordinating, in a harmonized way, the mitigation and risk control actions identified within ANAC and within the external safety environment, as established in article 56.

Art. 64. The Board of Directors and appropriate General Branches and Departments are responsible for evaluating, in a coordinated and harmonized way, the effectiveness of the implemented risk mitigation actions, as well as communicating interested managers about the results achieved.

# Chapter IX

## Safety Assurance

### Section I

#### Safety Assurance Processes

Art. 65. Under the safety assurance component, ANAC shall establish processes related to the monitoring of the achievement of safety objectives, as well as to the maintenance and continuous improvement of PSOE-ANAC.

Sole paragraph. The following processes shall be covered by PSOE-ANAC safety assurance:

- I. monitoring and measurement of the safety oversight conducted by ANAC;
- II. monitoring and measurement of the Brazilian civil aviation safety performance;
- III. support to the Agency's decision-making process regarding safety;
- IV. prioritization of risk-based inspections;
- V. adequacy of international agreements related to safety;
- VI. continuous improvement of PSOE-ANAC;
- VII. management of changes within the Agency; and
- VIII. PSOE-ANAC internal audits.

Art. 66. The monitoring referred to in article 65, I, consists of the periodic evaluation carried out by ANAC of its internal processes and results achieved through its action on the regulated and inspected operating environment, aiming at the maintenance and improvement of the capacity to perform its duties.

Sole paragraph. ANAC Departments responsible for inspections shall evaluate the effectiveness of their actions regarding situations considered adverse to safety, seeking support from and interaction with other areas of the Agency, as necessary.

Art. 67. ANAC shall continuously monitor and measure the performance levels of Brazilian civil aviation safety, based on the establishment of goals and indicators, focusing inspections on identified safety risks.

Sole paragraph. In order to comply with article 67, sectors responsible for inspections shall monitor the safety performance of PSAC.

Art. 68. The monitoring and measurement referred to in article 65, I and II, shall generate data and information relevant to ANAC's decision-making process, including the review of strategic safety objectives.

Sole paragraph. The monitoring and measurement of the Brazilian civil aviation safety performance shall support the monitoring of goals and indicators that compose the Brazilian ALoSP within the scope of ANAC.

Art. 69. ANAC resources allocation and inspection efforts based on identified risks shall consider critical analysis conducted to detect evidences of degradation of the conditions necessary to ensure an acceptable level of safety performance in the activities developed by PSAC.

Sole paragraph. The critical analysis shall be formally documented.

Art. 70. International agreements that affect safety shall be periodically evaluated by ANAC in order to ensure that Brazilian civil aviation safety standards are maintained.

Sole paragraph. Technical areas within ANAC that provide subsidies to such agreements are responsible for periodically evaluating the maintenance of standards, pointing out the need for adjustments.

Art. 71. The continuous improvement of PSOE-ANAC aims at continuously improving the Programme, as well as the Brazilian civil aviation safety performance.

§ 1 The continuous improvement of PSOE-ANAC shall result from the periodic review by the Board of Directors and Departments of the results achieved by ANAC actions in the operational environment regulated and inspected by the Agency, considering its interactions with other relevant authorities.

§ 2 In order to guarantee a constant improvement of the processes of PSOE-ANAC and of the country's safety, identified opportunities for improvement shall be analyzed through:

- I. external audits performed by international organizations;
- II. internal audits;
- III. recommendations, data and information obtained from the authority responsible for aeronautical accidents investigation;
- IV. data and information resulting from the performance evaluation of PSOE-ANAC and the SMS of PSAC;
- V. data and information from other relevant sources.

Art. 72. The management of changes aims to promote a prior analysis of the impacts of significant changes ANAC intends to implement, and to recommend measures to reduce any possible negative consequences for safety.

§ 1 For the purposes of the caput of this article, the following non-comprehensive list shows significant changes:

- I. review of ANAC's organizational structure;
- II. relevant changes in processes critical to ANAC's performance;
- III. review, inclusion or revocation of regulations and other normative documents; and
- IV. policy and strategic objectives changes.

§ 2 Change management process shall consult appropriate sectors within ANAC in order to obtain support to identify the impacts mentioned in the caput of this article.

Art. 73. Internal PSOE-ANAC audit aims at formally evaluating the implementation of the Programme and its results, in accordance with the guidelines established in this document.

Art. 74. ANAC shall establish the necessary means and mechanisms for collection, storage and use of safety data and information resulting from both its internal environment and the Brazilian civil aviation environment, which constitute the inputs to the Agency's safety assurance processes.

§ 1 For the purposes of this article, the following are sources of safety data or information:

- I. mandatory reporting;
- II. voluntary reporting;
- III. data and information from aeronautical and safety events; and
- IV. other sources deemed appropriate for the improvement of safety assurance and safety processes.

§ 2 Mechanisms for secrecy and protection of the data and information indicated in paragraph 1 of this article shall be established when applicable.

Art. 75. ANAC shall develop initiatives, in collaboration with the civil aviation industry, for safety data and information sharing.

§ 1 Initiatives shall aim at improving safety assurance processes;

§ 2 Mechanisms for secrecy and protection of data and information arising from the initiatives mentioned in paragraph 1 of this article shall be established.

Art. 76. Details related to the processes that compose safety assurance shall be specified and standardized in applicable normative documents.

## **Section II**

### **Safety Oversight Plan**

Art. 77. Supporting the continuous improvement of safety oversight activities, ANAC shall implement a Safety Oversight Plan (PSSO-ANAC), as established in article 28.

Art. 78. The Safety Oversight Plan (PSSO-ANAC) shall establish guidelines for prioritizing safety oversight activities, guiding their scheduling and planning, as well as the allocation of resources for their execution.

§ 1 Guidelines shall include the definition of safety topics and demands for development or revision of standards or procedures that shall be prioritized.

§ 2 Guidelines shall include the definition of safety topics and demands for inspections that shall be prioritized within inspection plans of each Department.

§ 3 The aforementioned inspection plans shall contain the scheduling and planning of safety oversight activities and estimate the human and financial resources needed for the execution of these activities.

Art. 79. PSSO-ANAC shall be linked to the Agency's Strategic Planning Cycle and have the same validity of the Cycle.

Sole paragraph. PSSO-ANAC shall establish the validity of specific inspection plans and programs that may be unrelated to the validity of the PSSO.

# Chapter X

## Safety Promotion

Art. 80. ANAC shall promote safety through the following actions:

- I. training actions aimed at developing the necessary competencies for managers and employees to implement and maintain PSOE-ANAC;
- II. internal and external communication of ANAC's strategic decisions and actions related to the achievement of safety objectives within the operational environment regulated and supervised by the Agency; and
- III. internal and external dissemination of information relevant to the development and improvement of the safety culture.

Art. 81. ANAC shall guarantee the necessary competencies to all managers and employees who perform specific functions within PSOE-ANAC or support the implementation and maintenance of the SMS within the PSAC.

§ 1 ANAC shall develop and maintain an updated safety management training program in order to ensure its employees keep their competencies updated.

§ 2 ANAC shall keep records of training actions related to safety management.

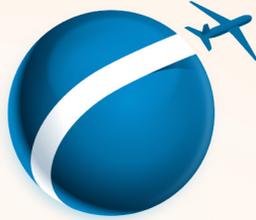
Art. 82. ANAC shall develop a plan for communicating and disseminating PSOE-ANAC.

Sole paragraph. Communication and dissemination actions, among other things, aim at:

- I. developing and improving the safety culture;
- II. making people aware of individual responsibilities regarding safety;
- III. developing a non-punitive environment that supports a wide exchange of safety information between ANAC and the Brazilian civil aviation industry;
- IV. disseminating good safety practices; and
- V. disseminating information to facilitate the implementation and maintenance of PSOE-ANAC and the SMS of the PSAC.

Art. 83. In cases deemed necessary by ANAC Departments that regulate and inspect the SMS, the Agency shall promote training actions to facilitate the development of competencies within the PSAC for the implementation and maintenance of their SMS.

Art. 84. Details related to the processes that compose safety promotion shall be specified and standardized in applicable normative documents.



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