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# **Austrian Plan for Aviation Safety 2021**

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### 1 Introduction

### 1.1 Overview of the Austrian Plan for Aviation Safety

Austria is committed to enhancing aviation safety and to the resourcing of supporting activities. The purpose of the Austrian Plan for Aviation Safety (APAS) is to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a national aviation safety strategy. A safe aviation system contributes to the economic development of Austria and its industries.

The APAS constitutes the framework for the proactive management of safety-related activities on national level. It promotes the effective implementation of the Austrian safety oversight system, a risk-based approach to managing safety as well as a coordinated approach to collaboration between Austria and other States, regions, industries and Regional Safety Oversight Organisations. While Safety Management at the State level is defined in the Austrian Aviation State Safety Programme, at the aviation industry level this systemic approach is implemented by means of respective Safety Management Systems (SMS). All stakeholders are encouraged to support the implementation of the APAS as the strategy for the continuous improvement of aviation safety in Austria.

Risk management activities at State and industry level result in the identification of such risks, which may impact the Austrian civil aviation safety system. Consequently, suitable actions and/or mitigating measures are developed, followed by expert evaluation of their effectivity.

Furthermore, the APAS comprises risks and associated actions/mitigating measures, which are included in the ICAO European and North Atlantic Regional Aviation Safety Plan (RASP) and the European Plan for Aviation Safety (EPAS) as Member State Tasks (MST), as applicable.

The Austrian Plan for Aviation Safety is in alignment with the ICAO Global Aviation Safety Plan (GASP, Doc 10004), the ICAO Regional Aviation Safety Plan (ICAO EUR NAT RASP) as well as the European Plan for Aviation Safety (EPAS). It has been established in conformity with Article 8 of Regulation (EU) 2018/1139, to accompany the Austrian Aviation State Safety Programme (AASSP).

### 1.2 Relationship between GASP, RASP, EPAS and APAS

The Global Aviation Safety Plan<sup>1</sup> (GASP) has been established by the International Civil Aviation Organization (ICAO) in order to support the prioritization and continuous improvement of aviation safety worldwide. It promotes coordination and collaboration among international, regional and national initiatives aimed at delivering a harmonised, safe and efficient international civil aviation system.

The GASP assists ICAO Member States and regions around the world in their air navigation safety policies, planning and implementation by

- setting out global air navigation safety objectives;
- providing a planning framework, timetable and guidance material for States and regions; and
- outlining implementation strategies and best practice guidance materials.

The GASP requests the establishment of a National Aviation Safety Plan in order to describe the strategic direction for the management of aviation safety at the national level, for a set time period. It outlines to all stakeholders, where the Civil Aviation Authorities (CAAs) and other entities involved in the management of the respective State's aviation safety should allocate resources for the upcoming years.

In the European aviation system, rulemaking, safety oversight and safety promotion activities are shared between the EU Member States and the European Institutions. The European Aviation Safety Programme<sup>2</sup> (EASP) describes the roles and responsibilities of the Instituionens of the European Union, of the European Union Aviation Safety Agency and of each of the Member States while performing these functions. The European Plan for Aviation Safety (EPAS) is a component of the EASP and provides a framework for safety at the Union level. As an important part of the EPAS, Member State Tasks (MST) are defined and all Member States should strive to implement them.

The aim of this Austrian Plan for Aviation Safety (APAS) is to provide a systematic overview of the strategic priorities, identified safety risks and actions and/or mitigating measures taken. The document allows for the effective communication of relevant information to all

<sup>&</sup>lt;sup>1</sup> ICAO Doc 10004, Global Aviation Safety Plan

<sup>&</sup>lt;sup>2</sup> Commission Staff Working Paper "The European Aviation Safety Programme", COM(2011) 670 final

stakeholders and collaborative efforts to improve safety on a continuous basis. It outlines safety risks and actions/measures taken pertinent to the year 2020 and before. Those have been identified along with the analyses of safety performance at national level, also taking into account European, regional and global levels.

The APAS complements the AASSP in pursuing a strategic perspective with respect to the implementation of Safety Management at both State and industry levels, emphasizing risk-based and performance-based approaches. In this context, Austria is in the process of developing meaningful risk profiles for all relevant industry stakeholders.

Furthermore, the APAS delineates activities, such as safety promotion, aiming at improving safety at the operational level, also considering lessons learnt from occurrences, hazards identification and other available sources.

### 1.3 Structure of the Austrian Plan for Aviation Safety

The APAS presents the strategy for enhancing aviation safety and comprises of the following five sections and the Appendix:

- Introduction,
- Purpose of the Austrian Plan for Aviation Safety,
- Austria's Strategic Approach to Managing Aviation Safety,
- Operational safety risks, and
- Monitoring of the Implementation

# 1.4 Responsibility for the Development, Implementation and Monitoring of the Austrian Plan for Aviation Safety

The Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) is responsible for the development, implementation and monitoring of the APAS, in collaboration with Austro Control GmbH, the Austrian Aero-Club and the national aviation industry.

# 2 Purpose of the Austrian Plan for Aviation Safety

The Austrian Plan for Aviation Safety is the master planning document containing the strategic direction of Austria for the management of aviation safety. This plan lists national, regional, and European safety issues to address identified safety deficiencies.

The APAS addresses all aspects of civil air transport at the State level, with the objective of providing a clear and comprehensive planning and implementation strategy for the future development of the entire civil aviation sector. The Austrian Plan for Aviation Safety contains in-depth information specific to aviation safety.

The Austrian Plan for Aviation Safety has been developed using international safety goals and targets and high-risk categories (HRCs) from the GASP, the EUR NAT RASP and the EPAS. The safety enhancement initiatives (SEIs) listed in the GASP, RASP and EPAS support the improvement of safety at regional and international level. These Plans include several actions to address specific operational safety risks and recommended actions for individual States. Austria has adopted these SEIs where relevant and has included them in the appendix to this plan.

# 3 Austria's Strategic Approach to Managing Aviation Safety

#### 3.1 General

The Austrian Plan for Aviation Safety presents the actions derived from Austria's safety risk management process, the safety data collection and processing systems, as well as the work undertaken by service providers in the development and implementation of their safety management systems (SMS). This plan is developed and maintained by the Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, in coordination with Austro Control GmbH and the Austrian Aero-Club. The APAS is updated on a yearly basis.

The actions in this plan are implemented through Austria's existing safety oversight capabilities and the service providers' SMS. Some of the national actions are linked to overarching actions at the regional and international levels and help to enhance aviation safety globally.

The Austrian Plan for Aviation Safety also addresses emerging issues. Emerging issues include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete typical data-driven analysis. It is important that Austria remains vigilant on emerging issues to identify potential operational safety risks, collect relevant data and proactively develop mitigations to address them.

The full list of actions is presented in the appendix to the APAS.

### 3.2 Safety promotion

Noteworthy is that Austria focuses on numerous safety promotion initiatives and activities, delivered by highly qualified and experienced authority personnel. In the context of safety promotion, such as Season Opener events, Road Shows, trainings, workshops, safety briefings, folders, leaflets, surveys, self-assessment checklists, and tailored industry guidance, topics of significant impact on aviation safety are being shared with the aviation community.

The existing risk management process emphasizes also on human factors or their contribution to safety events. Hence, Austria is enabled to address the human error topic as a recurring factor in occurrences by considering systemic correlations and observing it as an integral part of managing safety more effectively.

Overall, safety promotion is an essential means in the enhancement of safety performance of all stakeholders. Various activities have also resulted in significant improvement of the reporting culture, whereas further efforts are made to refine data and information quality.

Safety recommendations of Union-wide relevance within the European Central Repository for Safety Recommendations in aviation (ECR-SRIS) are now publicly accessible, which allows for direct sharing/dissemination of important information to concerned stakeholders.

## 4 Safety Risks

#### 4.1 General

The Austrian Plan for Aviation Safety includes actions that address national operational safety risks, derived from lessons learned from operational occurrences and from a data-driven approach. These actions may include: rule-making; policy development; targeted safety oversight activities; safety data analysis; and safety promotion.

### **4.2 Operational Safety Risks**

The National Safety Action Points (NAPs) are based on national High Risk Categories (HRC) of occurrences in Austria, identified through a data-driven approach.

The following national high-risk categories (HRCs) of occurrences in the context were considered of the utmost priority because of the number of occurrences reported and the total risk for the aviation systems associated with such events. They were identified based on analyses from mandatory and voluntary reporting systems between 2015 and 2020.

1. MAC: Airprox/ACAS alert/loss of separation /(near) midair collision

2. ARC: Abnormal runway contact

3. LOC-I: Loss of control – inflight

4. NAV: Navigation error

5. CTOL: Collision with obstacle(s) during take-off and landing

All occurrences collected by means of the European Coordination Centre for Accident and Incident Reporting Systems (ECCAIRS) events were reviewed in the period from 01 January 2020 to 31 December 2020. With due regard to tracking of highest risk, occurrences were selected for further processing by assigned area experts/teams. From the overall processing rate of occurrences and otherwise detected concrete or potential safety deficiencies, safety trends were recorded, while the entirety of all other occurrences are continuously monitored.

With respect to those aviation stakeholders having a safety management system (SMS) in place, risk management is conducted as part of their SMS framework. Based on the suggested corrective action(s)/mitigating measure(s), decisions are taken in the context of scheduled surveillance activities. Such decisions reflect whether the proposed measures are sufficient and suitable to identify the root cause(s), potential causal and contributing factors, and therefore reduce the identified risk to an acceptable level.

### 4.3 Other Safety Risks

In addition to the national operational safety risks listed in the Austrian Plan for Aviation Safety, Austria has identified other safety issues and initiatives selected for the APAS. These are given priority since they are aimed at enhancing and strengthening Austria's safety oversight capabilities and the management of aviation safety at the national level.

The eight critical elements (CEs) of a safety oversight system are defined by ICAO. Austria is committed to the effective implementation of these eight CEs, as part of its overall safety oversight responsibilities, which emphasize Austria's commitment to safety in respect of its aviation activities. The eight CEs are presented in Figure 1 below.



Figure 1: Eight critical elements of a State's safety oversight system

The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Austria's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Programme (USOAP), have resulted in the following scores as per December 31<sup>st</sup> 2020:

Overall El score: 93,35 %

Table 1: El Score by CE

Critical Element	Score
CE-1	100,00 %
CE-2	95,92 %
CE-3	96,20 %
CE-4	94,52 %
CE-5	82,35 %
CE-6	96,96 %
CE-7	93,51 %
CE-8	90,70 %

Table 2: El Score by Area<sup>3</sup>

Area	Score
LEG	95,45 %
ORG	81,82 %
PEL	100,00 %
OPS	96,64 %
AIR	100,00 %
AIG	68,89 %
ANS	100,00 %
AGA	90,70 %

The safety oversight index (SOI) of a State is an ICAO indicator of its safety oversight capabilities. Every State audited by ICAO has an SOI. It is a number greater than zero, where "1" represents a level at which the safety oversight capabilities of a State would indicate the minimum expected capabilities considering the number of departures as an indication of the size of that State's aviation system. The calculations conducted by ICAO of Austria's SOI have resulted in the following scores:

- Operations SOI<sup>4</sup>: 1,41
- Air Navigation SOI<sup>5</sup>: 1,64
- Support Functions SOI<sup>6</sup>: 1,39

<sup>3</sup> Eight audit areas pertaining to USOAP, i.e. primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG); personnel licensing and training (PEL); aircraft operations (OPS); airworthiness of aircraft (AIR); aircraft accident and incident investigation (AIG); air navigation services (ANS); and aerodromes and ground aids (AGA).

<sup>&</sup>lt;sup>4</sup> Operations SOI considers the results of the areas PEL, OPS and AIR

<sup>&</sup>lt;sup>5</sup> Air Navigation SOI considers the results of the areas ANS and AGA

<sup>&</sup>lt;sup>6</sup> Support Functions SOI considers the results of the areas LEG, ORG and AIG

## 5 Monitoring of the Implementation

Austria will continuously monitor the implementation of the actions listed in the Appendix of the APAS and measure safety performance of the national civil aviation system, to ensure the intended results are achieved.

Since the Austrian Plan for Aviation Safety is a living document, Austria will review the APAS every year to keep the identified safety risks, safety issues and selected actions updated and relevant as well to ensure inclusion of new emerging safety tasks and actions/measures taken. In addition, the yearly update of the APAS ensures that all relevant MSTs of the latest edition of the EPAS are addressed and that the responsible authority/ies has/have verified and updated their Action Points, if required.

Through close monitoring of the actions, the Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology will update the APAS accordingly.

Austria has adopted a standardized approach to provide information at the regional level, for reporting to the RESG, the EASPG and to EASA. This allows the region to receive information and assess safety risks using common methodologies.

The Austrian Plan for Aviation Safety contains a number of action points, partially national ones (National Action Points - NAPs) and partially those based on the MSTs provided by the latest version of the EPAS (European Action Points – EAPs).

Each Action Point is assigned to one or more responsible authority/ies in charge of proper implementation and monitoring of the specific safety task and actions/measures to be taken as well as coordination, if necessary.

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