

# TRAFICOM

Liikenne- ja viestintävirasto  
Transport- och kommunikationsverket  
Finnish Transport and Communications Agency

## Finnish Plan for Aviation Safety 2022-2026

Finnish Aviation Safety Programme Annex 1



Traficom Publications

7/2022

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Photo by: Nina Kaverinen

## Foreword

The aviation sector is in the process of returning to post-COVID-19 operations<sup>1</sup>. The pandemic has affected the whole of society. It has shown signs of subsiding, and it has also unfortunately brought setbacks. Commercial air transport, both in Finland and abroad, strives to anticipate, react and adapt, and currently to bring back to daily operation those activities that were suspended due to COVID-19. However, it is not yet possible to anticipate all the effects of the pandemic on society and for example on how people travel for leisure and for business.

Simultaneously with recovering from the pandemic, the aviation sector is also affected by measures to combat climate change. In regard to these measures, the industry has proactively created the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)<sup>2</sup>. Furthermore, the aviation sector is undergoing significant changes due to the rapid development of unmanned aviation and digitalisation and the creation of the U-space concept that utilises the possibilities of digitalisation. All ongoing changes are strongly present also in the Strategy and Actions volumes of the European Plan for Aviation Safety (EPAS)<sup>3</sup>. The effects on air traffic management, air navigation services, aircraft and aircraft operation will be significant during the coming years.

Traficom is the civil aviation authority in Finland. Like the European Union Aviation Safety Agency EASA, Traficom also takes the strategic priorities of aviation specified

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<sup>1</sup> Return to Normal Operations (the RNO stage) and the currently used term Safe return to operations

<sup>2</sup> [Carbon Offsetting and Reduction Scheme for International Aviation](#)

<sup>3</sup> [European Plan for Aviation Safety](#)

above into consideration in its operations. Safety and passenger confidence in the air transport system are key objectives in **Finnish aviation safety policy**<sup>4</sup> and, on the other hand, vital for the profitability of commercial air transport. The more comprehensive utilisation of digitalisation and the safe integration of unmanned aviation as part of the aviation system requires a strong management of cybersecurity. Aviation organisations and authorities must ensure that the Finnish aviation safety policy is implemented in all ongoing changes: *"The foundation pillars of confidence are safety, security and environmental friendliness. In addition, the parties must ensure that economy, reliability and precision form a part of smoothly operating travel chains that support the accessibility of Finland and ensure the safe integration of new technologies and operating models into the aviation system."*

The aviation sector is accustomed to change and structured to keep operations safe in a changing world. The current challenges of global politics can also be seen in Europe. The situation naturally also affects air transport in Europe and for example to Asia. The aviation sector has created mechanisms for ensuring safe operations and for relaying necessary information on conflict zones, threats or increased risks around the world. The mechanisms coordinated by the European Commission together with EASA include *the European Information Sharing and Cooperation Platform on Conflict Zones*<sup>5</sup> and *the Conflict Zone Information Bulletin (CZIB)*<sup>6</sup>. Finland is actively involved in this work. The aviation authority and the aviation organisations have already reacted in the necessary way. They are staying alert and ensuring safe operations in every situation.

Jarkko Saarimäki, Deputy Director-General, Finnish Transport and Communications Agency Traficom

Jari Pöntinen, Director General of Civil Aviation (DGCA) Finland, Finnish Transport and Communications Agency Traficom

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<sup>4</sup> The safety policy is discussed in section 1 of the Finnish Aviation Safety Programme (FASP)

<sup>5</sup> [European Information Sharing and Cooperation Platform on Conflict Zones](#)

<sup>6</sup> [Conflict Zone Information Bulletin](#)

## Finnish Plan for Aviation Safety, document version history

Date issued	Date valid	Valid
6.4.2022	6.4.2022	Until further notice
Underlying international standards, recommendations and other documents		
Aviation Act (864/2014)		
Act on Transport Services (320/2017)		
Convention on International Civil Aviation, Annex 19 (Safety Management)		
Global Aviation Safety Plan GASP (ICAO Doc 10004)		
EASA Regulation (EU) 2018/1139 <sup>7</sup>		
The European Aviation Safety Programme		
European Plan for Aviation Safety (EPAS) 2022–2026		
COM(2011) 144 White Paper - Roadmap to a single European transport area - Towards a competitive and resource-efficient transport system		
COM(2015) 598 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An Aviation Strategy for Europe		
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Date	Version	Change
20/12/2013	1.0	First publication
11/2/2015	2.0	Status of actions updated for 2014. OPS.009 Fire and smoke, added.
9/5/2017	3.0	Extensive update: layout and structure modified, measures updated based on EPAS 2017–2021 and the Finnish aviation risk management process
19/2/2018	4.0	Annual update based on EPAS 2018–2022 and Finnish Aviation Safety Risk Management
20/3/2019	5.0	Annual update based on EPAS 2019–2023 and Finnish Aviation Safety Risk Management
23/4/2020	6.0	Annual update based on EPAS 2020–2024 and Finnish Aviation Safety Risk Management
17/3/2021	7.0	Annual update based on EPAS 2021–2025 and Finnish Aviation Safety Risk Management
6.4.2022	8.0	Annual update based on EPAS 2022–2026 and Finnish Aviation Safety Risk Management

<sup>7</sup> REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91

## Acronyms

ADR	Aerodromes
AIR	Airworthiness
AMO	Approved Maintenance Organisation
ANS	Air Navigation Services
AOC	Air Operator Certificate
ATO	Approved Training Organisation
CAMO	Continuing Airworthiness Management Organisation
CAO	Combined Airworthiness Organisation
C-UAS	Counter UAS
DGCA	Director General of Civil Aviation
EASA	European Union Aviation Safety Agency
EASP	European Aviation Safety Programme
EPAS	European Plan for Aviation Safety
Eurocontrol	European Organisation for Safety of Air Navigation
FASP	Finnish Aviation Safety Programme
FDM	Flight Data Monitoring
FPAS	Finnish Plan for Aviation Safety
FRMS	Fatigue Risk Management System
GASP	Global Aviation Safety Plan
GH	Ground handling
GRF	Global reporting format (for assessing and reporting runway surface conditions)
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Air Line Pilots' Associations
RPAS	Remotely Piloted Aircraft System
SIAP	Standardisation Inspection Annual Programme
SMICG	Safety Management International Collaboration Group
SMS	Safety Management System
SPAS	State Plan for Aviation Safety
SPI	Safety Performance Indicator
SPO	Specialised operations
SPN	Safety Promotion Network
SPT	Safety Performance Target
SSP	State Safety Programme
SSPIA	State Safety Programme Implementation Assessment
UAS	Unmanned Aircraft System

# 1 European Plan for Aviation Safety EPAS

## 1.1 EPAS as part of safety management in European aviation

The commercial aviation safety situation in Europe is good at the moment. Maintaining this status requires taking measures to reduce the number of accidents and prevent the annual number of fatalities from increasing from its present low level, even if the number of flights increases as forecast before the COVID-19 pandemic. Advanced safety management will also be needed when responding to potentially rapid changes in the aviation system’s structures, business models and technical solutions, as well as in the context of developments like the COVID-19 pandemic, which have an adverse impact on business conditions and traffic volumes. The tools of advanced safety management allow us to identify new threats posed by such changes and respond to their attendant challenges.

The **European Plan for Aviation Safety, EPAS**, has been published since 2011. Obligations concerning the European Aviation Safety Programme and Plan as well as national aviation safety programmes and plans are included in EASA Regulation (EU) 2018/1139. These safety management obligations also apply to states under ICAO Annex 19.

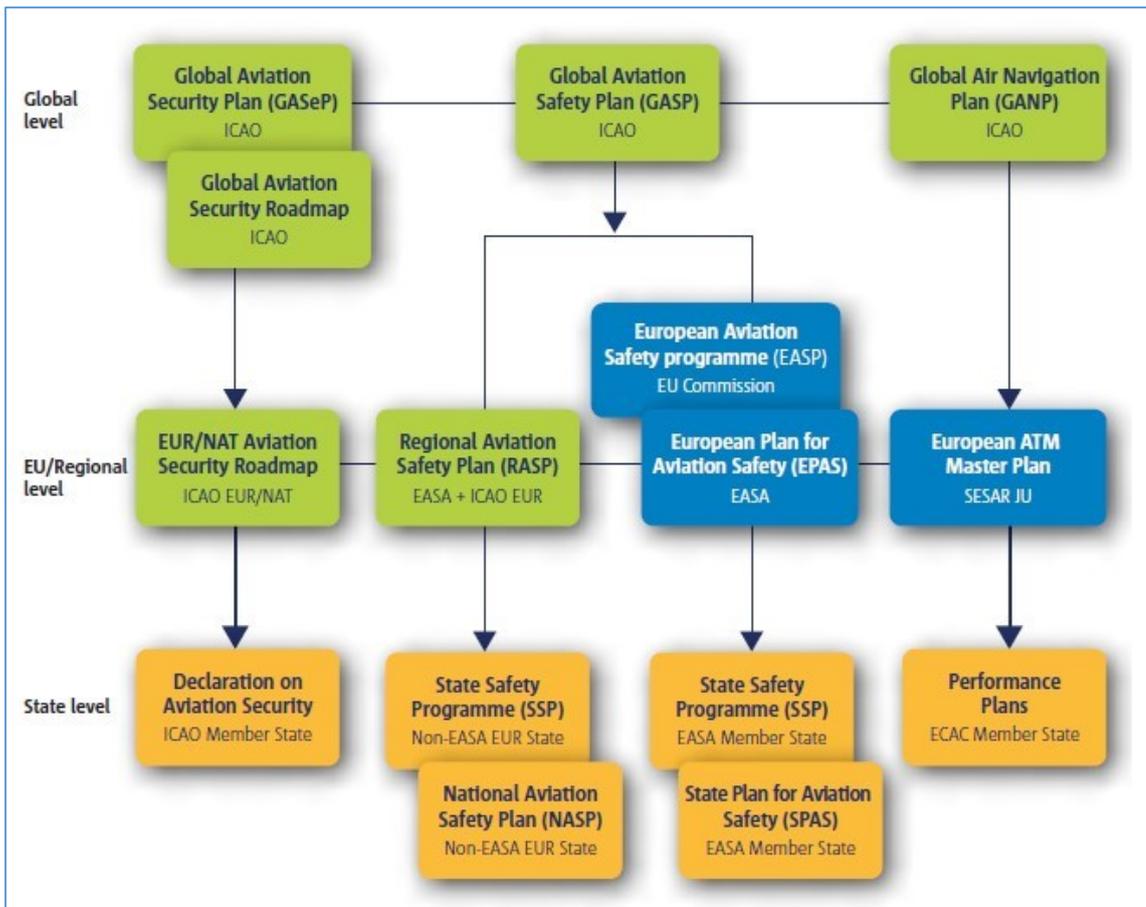


Figure 1: Image by EASA (EPAS 2022–2026, vol 1), relationship between EPAS and other programmes and plans

[EPAS 2022-2026, published by EASA on 17/01/2022](#) is a comprehensive package of the strategic priorities and measures of aviation in Europe. EPAS consists of an Introduction & Strategy volume (volume 1), an Actions volume (volume 2) and a

European Safety Risk Portfolios volume (volume 3). The strategic priorities of EPAS are based on the Commission's Aviation Strategy<sup>8</sup> and EASA's strategic plan. In addition to safety, EPAS also takes into account objectives and measures to increase the environmental sustainability and fluency of air transport. The impacts of the COVID-19 pandemic will also be reflected in strategy work in the coming years, with elements such as increasing the resilience of the aviation system given increased emphasis. Efforts have been made to harmonise the global work for maintaining and improving the performance of the air transport system. EPAS is strongly connected to the *Global Aviation Safety Plan GASP* and *Global Air Navigation Plan GANP* published by ICAO<sup>9</sup> and also takes into account other relevant regional plans and strategic papers, including *The ATM Master Plan*<sup>10</sup> and the *Report of the Wise Persons Group on the future of the Single European Sky*<sup>11</sup>. EPAS is also the regional aviation safety plan (RASP) required by ICAO for EASA Member States. ICAO and EASA cooperate in producing an EUR RASP for the EPAS and EUR region.

In the context of safety, EPAS includes **identified key risks in aviation at the European level, strategic safety objectives and actions** for achieving these, and takes into account the global objectives defined by GASP.



Figure 2: Image by EASA (EPAS 2021–2025, vol 3), European-level SRM process principle

**The safety-related content** of EPAS is produced as part of EASA's Safety Risk Management process (SRM). Within the framework of its SRM process, EASA coordinates the identification of key safety risks in European aviation, and the creation and maintenance of the European Safety Risk Portfolio. Through the forums of this process that progresses following an annual cycle, Member States and aviation stakeholders can participate in and influence European aviation risk

<sup>8</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_17\\_1552](https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1552)

<sup>9</sup> <https://www4.icao.int/ganportal>

<sup>10</sup> <https://www.atmmasterplan.eu/>

<sup>11</sup> [https://ec.europa.eu/transport/modes/air/news/2019-04-15-recommendations-on-air-traffic-management-in-europe\\_en](https://ec.europa.eu/transport/modes/air/news/2019-04-15-recommendations-on-air-traffic-management-in-europe_en)

management. Themes or actions can also be proposed for EPAS directly at any time of year using *the Candidate Issue Identification form*<sup>12</sup>. The actions defined as the result of this process are published annually in EPAS and implemented in a coordinated manner at the European level and nationally.

The actions contained in EPAS seek to influence **systemic and operational safety** in commercial air transport and general aviation. These actions concern manned aviation with aeroplanes and helicopters and unmanned aviation. They are also a means to prepare for **changes in the aviation system or operating environment**. While changes, such as new technologies or operating models, bring benefits, they can also introduce new threats. Well-functioning safety management structures **strengthen the resilience of Finland's aviation system** to threats and changes in the system and operating environment, and ensure **that changes are safely integrated into the aviation system in an anticipatory manner**.

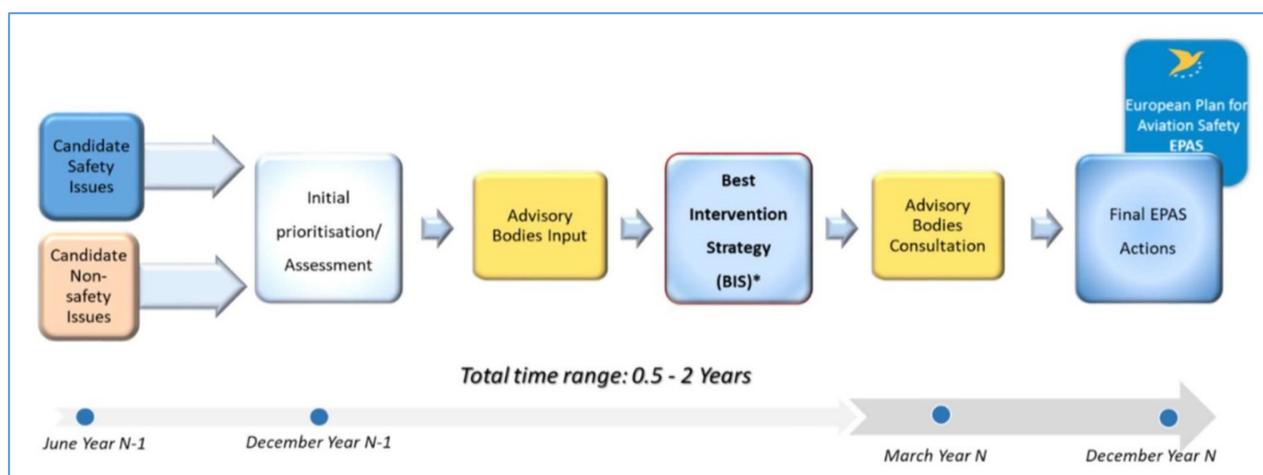


Figure 3: Image by EASA: Prioritisations of EPAS actions

The actions included in EPAS, i.e. the range of tools for improving safety, can be divided into five categories: **safety promotion, oversight capabilities and focus areas, regulation, research and evaluation**. The most appropriate means of safety management is chosen for each action. Actions assigned to Member States are divided into safety promotion, maintaining and improving oversight capabilities and oversight focus areas.

The European Plan for Aviation Safety is drawn up by EASA for a five-year period at a time, and it is updated annually. The actions defined in the plan are assigned to EASA, the European Commission, Member States and various networks and groups that participate in EASA's SRM process as well as various working groups established for the actions.

Finland includes EPAS actions assigned to Member States in the Finnish Plan for Aviation Safety. Aviation stakeholders must process, document and implement the actions where applicable. Traficom oversees the processing and implementation of the actions and reports to EASA annually on their progress.

The European Aviation Safety Programme and Safety Plan can be accessed at [EASA's safety management website](#) and [Traficom's aviation safety management website](#).

<sup>12</sup> <https://www.easa.europa.eu/rulemaking-proposal-candidate-issue-identification-form>

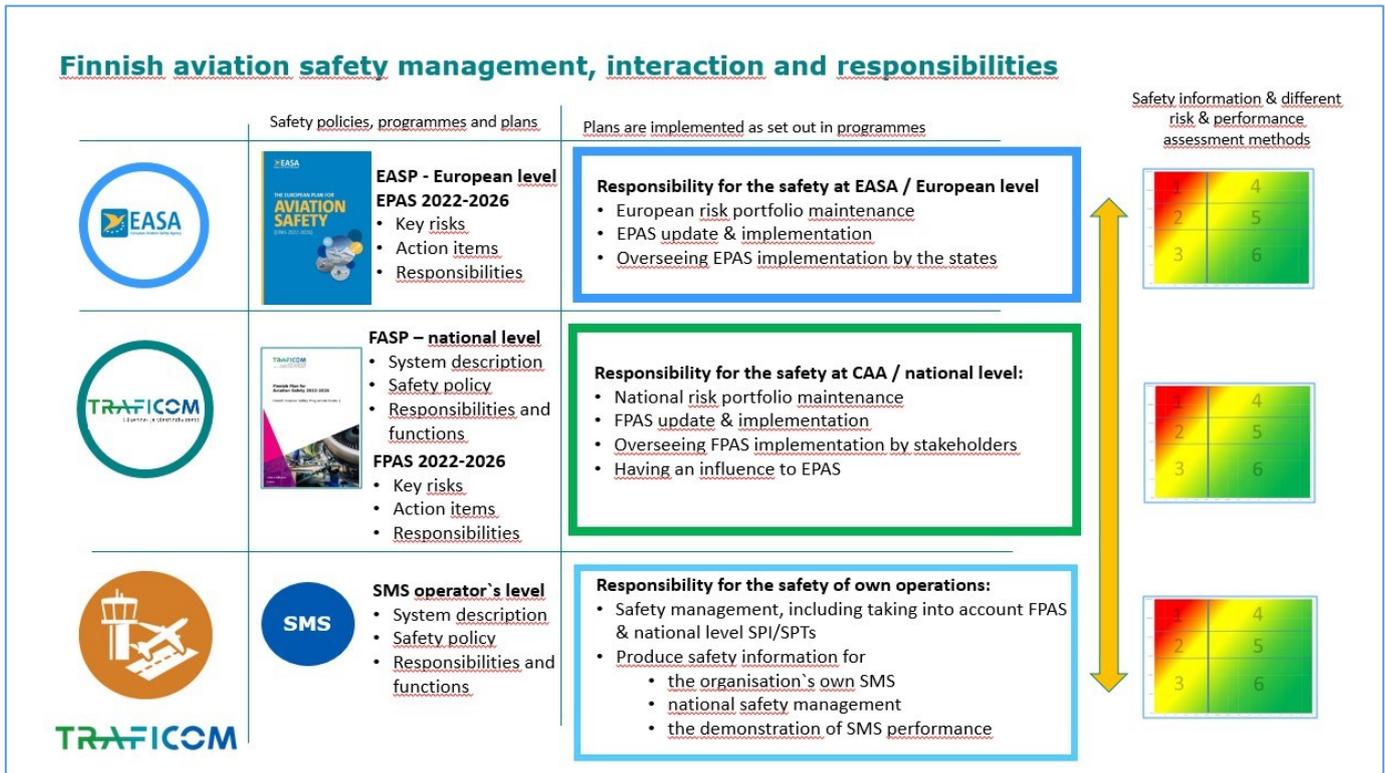


Figure 4: Roles and responsibilities in aviation safety management in Finland

## 2 Finnish Plan for Aviation Safety

### 2.1 Role of the Safety Plan in Finnish aviation safety management

**The Finnish Aviation Safety Programme (FASP)** describes the national aviation safety management system. It contains an aviation safety policy and a high-level description of the legislative framework, processes and safety work. By maintaining FASP, Finland fulfils the obligations laid down in Article 7 of EASA's Regulation (EU) 2018/1139 on a national safety programme.

**The Finnish Plan for Aviation Safety (FPAS)** is appended to the Safety Programme as Annex 1. It describes key safety risks for Finnish aviation identified through European and national level safety risk management, the specified strategic safety objectives and the actions to be taken to achieve them (see FASP, section 2.6). By maintaining FPAS, Finland fulfils the obligations laid down in Article 8 of EASA's Regulation (EU) 2018/1139 on a national safety plan.

The FASP and its Annexes also comply with the ICAO requirement of establishing and maintaining a State Safety Programme (SSP).

Finland has phrased the obliging nature of the FASP and its Annexes in section 4 of the Aviation Act (864/2014) as follows:

*"The Finnish Transport and Communications Agency shall prepare and validate the national safety programme referred to in Article 7 of the EASA Regulation as well as the national safety plan referred to in Article 8, taking into consideration the standards referred to in the Chicago Convention as well as the European Aviation Safety Programme referred to in Article 5 of the EASA Regulation and the European Plan for Aviation Safety referred to in Article 6 of the EASA Regulation.*

*Aviation stakeholders shall process the national aviation safety programme as well as the national plan for aviation safety in their own safety management."*

Each aviation stakeholder is responsible for the safety of its own operations. Stakeholders must address in their Safety Management Systems the threats identified by them and those identified in the Finnish aviation safety risk management process in respect of their own operations, assess the associated risks and, if necessary, implement actions aiming to reduce risks to an acceptable level. Traficom and aviation stakeholders must process, document and implement the actions of the Finnish Plan for Aviation Safety where applicable. As part of its oversight activities, Traficom assesses how stakeholders have addressed the actions described in the FPAS and the threats relevant to them in their safety management.

The effectiveness of FPAS actions is monitored as part of Finnish aviation safety risk management and safety assurance.

The Finnish Plan for Aviation Safety is updated annually. For information on the responsibilities for maintaining FPAS, see FASP section 1. The FPAS can be accessed on [Traficom's aviation safety management website](#).

## **2.2 Safety Plan structure**

The actions described in section 3 are divided into systemic and operational level actions addressed to a number of domains in aviation and those addressed to individual aviation domains. The objectives, parties responsible for implementation, schedule and status of implementation of each action are described, and an EPAS reference is given if the action is based on an EPAS action assigned to Member States. Some of the EPAS actions assigned to Member States are straightforward, while others leave it to the Member State to define the action in detail. Details of EPAS actions and nationally identified actions are defined in the Finnish aviation safety risk management process (*FASP, section 2.6*).

Annex 1, included at the end of this document, contains a list of actions for each stakeholder group to help aviation organisations identify actions that concern them. New and deleted actions have also been marked in the list.

## 3 Safety Plan actions

### 3.1 Systemic issues – safety management

#### Systemic issues, introduction

Systemic themes are issues that concern an individual organisation, a system element or the entire aviation system. Systemic actions comprehensively improve the safety level of aviation in Finland. They also maintain and reinforce the activities and competence that have helped us reach the current level of safety.



Systemic themes do not necessarily have a direct, short-term link to an individual occurrence, incident or accident. Systemic threats are background factors, either easily identifiable or latent. They can be associated with shortcomings in processes, methods or operating cultures, for example. If systemic threats are not identified and if the risks caused by them are not managed, they may trigger or contribute to an occurrence, incident or accident.

Identifying systemic threats is particularly important in relation to changes in the aviation system, in case of new, emerging issues. The safety data available on these issues is often limited or non-existent, highlighting the importance of proactive safety risk and impact assessments and related research.

The global safety management chain (GASP–EASP/EPAS–FASP/FPAS–SMS) was created to systematically develop the safety of the entire aviation system and its elements (FASP, section 1). Key system-level elements are the state safety programmes (SSPs, including the FASP in Finland) and stakeholders' Safety Management Systems (SMS).

#### **3.1.1 SYS.001. Finnish Aviation Safety Programme**

*EPAS reference: MST.0001: Member States to give priority to the work on SSPs*

#### SYS.001.1, Finnish Aviation Safety Programme

##### Action:

Traficom has published the Finnish Aviation Safety Programme (FASP). Traficom updates and further develops the programme. Traficom actively communicates about the programme contents and sees to the implementation of the programme and the continuous improvement of activities based on the programme.

##### Objective of the action:

Finnish aviation safety management is systematic, effective and continuously improving. Finland complies with ICAO and EU regulation requirements regarding the development and implementation of a safety programme.

##### Stakeholder responsible for implementation:

**Traficom:** FASP maintenance, development and implementation

**Aviation organisations:** Processing FASP and its Annexes with reference to their operations.

##### Timetable

Continuous

### Deliverable

An up-to-date national safety programme has been published and implemented

### Status

The need to update the FASP is assessed annually. The latest version of the programme, FASP version 7.0, was published on 10 December 2020. ICAO reviewed the FASP and its implementation in terms of GEN, SDA, ANS, OPS and AIG in its SSP implementation assessment (SSPIA) in November 2018. Finland was the pilot country for SSP assessments. EASA will audit Finland's SSP implementation as part of its *Standardisation Inspection Annual Programme (SIAP)* in September 2022. Traficom continuously improves the FASP and related national aviation safety work based on development proposals.

## **3.1.2 SYS.002. Finnish Plan for Aviation Safety**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety (SPAS)*

### **SYS.002.1, Finnish Plan for Aviation Safety**

#### Action:

Traficom maintains the national Finnish Plan for Aviation Safety (FPAS). Traficom actively communicates about the plan content, sees to the implementation of actions assigned to it, and promotes and oversees the implementation of actions assigned to other stakeholders.

#### Objective of the action:

Finland implements the actions assigned to EPAS Member States in the European Plan for Aviation Safety and those identified through the national aviation safety risk management process (see FASP, section 2.6).

#### Stakeholder responsible for implementation:

**Traficom:** FPAS maintenance, development and implementation

**Aviation organisations:** Implementation of the FPAS's actions in their operations

#### Timetable

Continuous, annual updates

#### Deliverable

FPAS updated and published, actions implemented in practice

#### Status

The first version was published on 20 December 2013, this document is the latest update. Traficom implements FPAS as described in the FASP section 2.6 and oversees the implementation of the actions assigned to stakeholders

## **3.1.3 SYS.003. Finnish aviation safety performance targets and indicators**

*EPAS reference: MST.0001: Member States to give priority to the work on SSPs and MST.0028 Member States to establish and maintain a State Plan for Aviation Safety (SPAS)*

### **SYS.003.1. Finnish aviation safety performance targets and indicators**

#### Action:

Traficom assesses the national aviation safety performance targets (SPT) and indicators (SPI) in Annex 2 to the Finnish Aviation Safety Programme as well as any need to update them, and updates Annex 2 where necessary. Traficom

communicates about the targets and indicators, and applies them to safety management in Finnish aviation.

Stakeholders take the national safety performance targets and indicators into account, and assess and process them in relation to their own operations as part of their safety management.

Objective of the action:

Effective and useful targets and indicators for monitoring and assessing the safety levels and performance of the Finnish aviation system have been specified and introduced. Finland fulfils EU regulation and ICAO requirements.

Stakeholder responsible for implementation:

**Traficom**  
**Aviation organisations**

Timetable

Continuous

2020–2022: Traficom will create a comprehensive monitoring system and publish the outcome of the FASP Annex 2/Annex A targets.

Deliverable

FASP Annex 2, *Finnish aviation safety performance targets and indicators*, has been assessed, updated, published and implemented

Status

The latest content update, version 5.0, was published on 17 October 2018 and became applicable on 1 January 2019. Due to the agency reform, during which Trafi became Traficom, version 5.1, which included some editorial changes and incorporated the publication into Traficom’s publication series, was published on 12 August 2020. Traficom has been developing BI-based SPI monitoring and will use the monitoring in its authority duties. Traficom publishes monitoring data on the [Liikenne fakta website](#) (in Finnish).

### **3.1.4 SYS.004. Finnish aviation safety risk management**

*EPAS reference: MST.0001: Member States to give priority to the work on SSPs and MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

#### **SYS.004.1, Finnish aviation safety risk management**

Action:

The Finnish aviation safety risk management process (FASP, section 2.6) is implemented by Traficom and aviation stakeholders. For the division of responsibilities, see FASP section 1.5.

Finnish aviation safety risk management consists of identifying threats to be addressed and strengths and functions to be fostered, maintaining the risk pictures of aviation domains, determining the acceptable risk level, measures for maintaining risks at an acceptable level and strengthening the issues to be fostered, and monitoring the effectiveness of the actions. Information about the results is provided to the relevant stakeholders and incorporated into Traficom’s operating system and annual planning (FASP, section 2.6).

Each aviation stakeholder is responsible for the safety of its own operations. Each aviation organisation must, within the scope of its SMS, identify hazards/threats –

including threats caused by the COVID-19 pandemic during the pandemic itself and the recovery from it – and assess risks related to its own operations, determine the acceptable risk level in its operations and take any necessary actions to eliminate risks or to reduce them to an acceptable level. Stakeholders have the opportunity to participate in creating and updating national risk pictures by participating in joint risk workshops and through the safety information they produce.

Organisations must also process the Finnish Plan for Aviation Safety and nationally identified safety threats in respect of their own operations and, if necessary, implement actions to eliminate risks related to threats or reduce them to an acceptable level. Organisations have the duty to demonstrate the performance of their management system to the supervising aviation authority, on the basis of which Traficom assigns actions to organisations. For a description of acceptable levels of safety performance, see the FASP sections 3.2 and 3.3.

As part of national risk picture work, Traficom continues to proactively identify existing and potential threats to the safety of the aviation system caused by the COVID-19 pandemic and the recovery from it as well as the recent developments in the security policy environment in Europe, carry out related risk assessment and define and implement actions necessary for risk management. See also action *SYS.005.4, Safety promotion during recovery from the COVID-19 pandemic*.

The aforementioned is carried out as necessary in cooperation with EASA, ICAO and other international stakeholders and Finnish aviation stakeholders. The aviation sector has created mechanisms for ensuring safe operations and for relaying necessary information on conflict zones, threats or increased risks around the world. The mechanisms coordinated by the European Commission together with EASA include *the European Information Sharing and Cooperation Platform on Conflict Zones* and *the Conflict Zone Information Bulletin (CZIB)*. Finland is actively involved in this work. Traficom and the aviation organisations are monitoring the situation and ensuring that the risks are maintained at an acceptable level regardless of the situation of the operating environment.

Objective of the action:

Risk management in Finnish aviation is systematic, effective and continuously improving. Finland complies with ICAO and EU-level requirements regarding risk management in Finnish aviation.

Stakeholder responsible for implementation:

**Traficom:** Implementing Finnish aviation safety risk management as described in the FASP section 2.6

**Aviation organisations:** Implementing safety risk management relevant to their operations, including the action described above

Timetable

Continuous

2021–2022: Traficom maintains national risk pictures in cooperation with aviation stakeholders. During 2021, an aim was to launch joint workshops with the organisations also in the last four domains (general aviation maintenance, hot air balloon operations, ground handling and aviation medicine). Traficom was already carrying out risk picture work in the aforementioned domains internally.

An aim for 2022 is to hold safety culture workshops as part of the risk workshops held with all stakeholder groups as a continuation of Traficom’s webinar concerning

safety culture supporting SMS work, [Turvallisuuskulttuuri SMS-työn osana-mitä se on?](#), organised on 26 January 2022.

#### Deliverable

Finnish aviation safety risk management process is implemented

#### Status

The FASP process was introduced in phases starting in Q3/2016. National aviation risk pictures are created and updated in 14 aviation domains and in regard to the authority's own operations. Aviation organisations have been engaged in this cooperation.

The aims for 2021 have mainly been implemented, and the risk workshops with stakeholders have been initiated also in regard to hot air balloon operations, ground handling and aviation medicine. For 2022, a risk workshop for general aviation maintenance organisations has been planned for spring and a risk workshop for general aviation DTOs (*Declared Training Organisations*) for the end of the year. In addition, other stakeholder group workshops have been continued, and a safety culture workshop segment has been held as part of those. All stakeholder groups will receive an invitation to either the spring or autumn risk workshops.

#### **NEW ACTION: SYS.004.2, Aviation safety, security and cybersecurity occurrence reporting coordination mechanisms**

*EPAS reference: MST.0040 Safety and security reporting coordination mechanism*

#### Action:

Traficom ensures and, if needed, develops the occurrence reporting coordination mechanisms for aviation safety, aviation security and aviation cybersecurity. This will be done in a way that complies with the reporting obligations of different areas so that information submitted to Traficom can be used appropriately also in regard to the interfaces of different areas and their risk management.

#### Objective of the action:

To ensure the use of required information in national aviation safety risk management work. National aviation safety risk management covers aviation safety, aviation security and cybersecurity with interfaces.

#### Stakeholder responsible for implementation:

**Traficom**

#### Timetable

2022–2023

#### Deliverable

The required coordination mechanism in regard to occurrence reporting of aviation safety, security and cybersecurity has been ensured.

#### Status

New action in EPAS. In Traficom, all aviation occurrence reporting (*safety, security, cybersecurity*) is processed in *the Safety Information Team*. Safety and security reporting is already processed in the same system and the necessary coordination for risk management needs exists. In regard to aviation cybersecurity occurrence reporting, development needs for implementing the action are currently being examined.

### **3.1.5 SYS.005. Safety promotion**

#### **SYS.005.1, Safety promotion in relation to safety management systems (SMS)**

*EPAS reference: MST.0002: Promotion of SMS*

##### Action:

Traficom raises safety awareness as part of its aviation authority duties by visiting customers, organising internal events or external events for its stakeholders and taking the matter into account in different phases of approval and certification management as described in the FASP section 4.2, *External training and sharing of safety information*. Examples of sharing and developing safety management information include the risk workshops with stakeholders, as described in action SYS.004.1, and FASP-SMS seminars.

Traficom ensures that materials produced by [EASA Safety promotion activities](#) (incl. SPN, E-SPN-R), the [SM ICG group](#) and other guidance materials relevant to safety management (SSP, SPAS, SMS) are available to aviation stakeholders. Traficom publishes guidance materials on its website where they are easily accessible and encourages stakeholders to use them. Information about the European working groups and forums whose work stakeholders have an opportunity to participate in and/or influence are also compiled on the website.

As regards the impacts of the COVID-19 pandemic, Traficom ensures that stakeholders are aware of and have access to all the guidance material relevant to safety management and the operations of organisations produced by EASA and ICAO or cooperation forums coordinated thereby.

##### Objective of the action:

Supporting stakeholders in SMS implementation and development by making guidance material available to them

##### Stakeholder responsible for implementation:

**Traficom**

##### Timetable

Continuous: In terms of the activities described in the FASP section 4.2, *External training and sharing of safety information*

2022: Sharing safety management guidance material useful to stakeholders on Traficom's website and informing aviation stakeholders about the material.

##### Deliverable

Sharing and use of best practices

##### Status

Continuous implementation in line with the principles of the FASP section 4.2, *External training and sharing of safety information*. Traficom will continue to participate in EASA's SPN and ESPN-R groups and in the work of SMICG and will continue to develop its aviation website. One of the priorities in safety promotion for 2022 are cultural elements. On 26 January, Traficom organised a webinar concerning safety culture supporting SMS work called [Turvallisuuskulttuuri SMS-työn osana-mitä se on?](#) for aviation organisations and professionals. The significance of cultural elements as part of SMS work will be discussed further in the risk workshops held with all stakeholder groups in 2022.

### **SYS.005.2, Promoting safety through proficiency in and use of English in aviation**

*EPAS reference: SPT.0105: Language proficiency requirements — raise awareness on language proficiency requirement implementation, together with ICAO, the industry and the Member States*

#### Action:

Refresher training for language proficiency examiners and the training of new language proficiency examiners are used to harmonise the activities of the examiners, collect best practices and emphasise the significance of language proficiency requirements for safety. Traficom is a member of the EASA LPRI TF working group and actively participates in its activities.

#### Objective of the action:

Raise awareness among language proficiency examiners of the significance of their work and among organisations and individuals of the significance of language proficiency issues in relation to safety. Improve learners' proficiency in English and understanding of the significance of language proficiency as a safety factor.

#### Stakeholder responsible for implementation:

**Traficom and aviation language proficiency examiners where relevant**

#### Timetable

Continuous

Refresher training sessions when necessary. Monitoring is used to oversee the quality and harmonisation of the language proficiency examinations. Training will be developed based on the observations made during oversight.

#### Deliverable

Harmonised language proficiency examinations and good English proficiency among pilots

#### Status

Refresher training sessions are organised when necessary. [The latest training session](#) was organised in February 2022.

### **SYS.005.3, Promoting safety through proficiency in and use of English in aviation**

*EPAS reference: MST.0033 Language proficiency requirements — share best practices, to identify areas for improvement for the uniform and harmonised language proficiency requirements implementation*

#### Action:

Training for language proficiency examiners is used to harmonise the activities of the examiners, collect best practices, and emphasise the significance of language proficiency requirements for safety. Traficom is a member of the EASA LPRI TF working group and actively participates in its activities. Traficom participates in producing information and responds to EASA's surveys on language proficiency.

#### Objective of the action:

Raise awareness among language proficiency examiners of the significance of their work and among organisations and individuals of the significance of language proficiency issues in relation to safety

#### Stakeholder responsible for implementation:

**Traficom and aviation language proficiency examiners where relevant**

Timetable

Continuous

Refresher training sessions when necessary. Monitoring is used to oversee the quality and harmonisation of the language proficiency examinations. Training will be developed based on the observations made during oversight.

Deliverable

Harmonised language proficiency examinations and good English proficiency among pilots

Status

Refresher training sessions are organised when necessary. The latest training session was organised in February 2022.

**NEW ACTION: SYS.005.4, Safety promotion during recovery from the COVID-19 pandemic**

*EPAS reference: MST.0039 Safety promotion to support ramp-up / safe return to operations*

Action:

As regards the COVID-19 pandemic, the recovery from it and possible changes to obligations, Traficom ensures that aviation stakeholders are aware of and have access to all the guidance material relevant to safety management and the operations of organisations.

The COVID-19 pandemic or threats related to the recovery from it, including EASA's COVID-19 Safety Risk Portfolio with updates, will be processed in risk workshops held for stakeholders (*see FASP, section 2.6*) as part of the national risk management process. The COVID-19 situation and the recovery from it concerning management of change as well as safety and reporting culture and just culture will be processed as one particular theme.

Objective of the action:

Supporting stakeholders in ensuring safe operations during the COVID-19 pandemic and recovery from it

Stakeholder responsible for implementation:

**Traficom**

Timetable

2021–2022

Deliverable

Guidance material and guidance in combination with other activities for aviation organisations to support safe operations during recovery from the COVID-19 pandemic

Status

New action in EPAS. Traficom has been implementing the action (communicating guidelines and changes to obligations and processing the matter in joint risk workshops) since the beginning of the COVID-19 pandemic.

### **3.1.6 SYS.006. Just culture**

**SYS.006.1, Just culture**

*MST.0027: Develop Just Culture in GA (in FPAS extended to cover all aviation domains)*

In general, it can be said that positive development has taken place for several years in the reporting culture of all domains of Finnish aviation. There is an atmosphere of trust, an integral element of just culture, between the aviation community and the aviation authority.

Finnish Aviation Safety Programme (FASP) section 2.5.3, *Confidentiality of occurrence information and Just Culture as elements of a good safety culture*, describes the elements of a good reporting culture and the principles of just culture in Finnish aviation. In Finland, the reporting obligation under the [Occurrence Regulation \(EU\) No 376/2014](#) also applies to aircraft listed in Annex I to the EASA Basic Regulation (EU) 2018/1139.

Action:

All aviation:

Traficom publishes guidance material on themes concerning safety culture and just culture, and organises a related event for aviation stakeholders.

General and recreational aviation:

The [recreational aviation safety project in 2015](#) built analysis cooperation between Traficom, SIL and SMLL. This cooperation has since been further developed and is one way to maintain and strengthen good reporting culture. The cooperation developed in the context of safety work in recreational aviation also plays an important role in maintaining an atmosphere of trust. These cooperation forms will be continued and further developed. Particular areas of development include the quality and immediacy of feedback on reporting. For more information, please see action SYS.GA.002, *Safety promotion in GA*.

Objective of the action:

Maintaining and reinforcing just culture in Finnish aviation and encouraging stakeholders to maintain and develop a good reporting and safety culture

Stakeholder responsible for implementation:

General action: **Traficom**

Action on general and recreational aviation: **Stakeholders committed to the operating model for Finnish recreational aviation safety work: Traficom, Finavia, Fintraffic ANS, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)**

Timetable

Continuous

2019–2022: just culture and safety culture website that collects guidance material and just culture - safety culture event/seminar

Deliverable

Cooperation in promoting a good reporting and safety culture and the principle of just culture

Status

The section on safety culture was strengthened in the FASP update (see FASP version 7.0 section 2.5.3). [Traficom's website for cultural elements](#) (in Finnish) with plenty of material was published on 15 April 2021.

A webinar concerning safety culture supporting SMS work, [Turvallisuuskulttuuri SMS-työn tukena-mitä se on?](#), was organised on 26 January 2022 for aviation organisations and professionals. As a continuation to the webinar, the theme will be

processed in regular risk workshops held with stakeholders throughout the year (see FASP, section 2.6).

### **3.1.7 SYS.007. Safety management systems (SMS)**

#### **SYS.007.1, Assessment of safety management system (SMS) performance**

*EPAS reference: MST.0026: SMS assessment*

##### Action:

To assess organisations' compliance management systems (CMS) and safety management systems (SMS), Traficom uses methods that produce evidence of the compliance and performance of the organisations' management systems. As one element of the development work, the management system assessment tool developed by EASA has been taken into account, either as such or for its contents.

Traficom revises its assessment tool to take into account the latest revision of EASA's assessment tool.

Target levels are set for the performance of the entire safety management systems used by organisations or for different elements of these systems. Based on the results, Traficom decides on the need for action (e.g. oversight, safety promotion). As part of the assessment of stakeholders' SMS performance, Traficom assesses how the impacts of the COVID-19 pandemic during the pandemic itself and the recovery from it have been processed in the different areas of the stakeholders' SMS.

National safety performance indicators (FASP, Annex 2) are used to also monitor the development of SMS performance in organisations.

##### Objective of the action:

Traficom uses the results of and develops performance-based oversight, and the assessment criteria for SMS audit practices between Member States are harmonised.

##### Stakeholder responsible for implementation:

**Traficom**

##### Timetable

Continuous

##### Deliverable

Traficom has assessment methods and tools for assessing overall performance, and it uses these in its risk- and performance-based activities. Traficom is able to provide EASA with the required information on the SMS performance of Finnish organisations and to give feedback on areas where EASA's SMS assessment tool needs to be further developed.

##### Status

The assessment tool is used systematically as part of OPS (AOC and SPO), ATO, GH, ADR and ANS oversight, and the results of the assessment lay the foundation for organisations' profile and risk-based oversight. The use of the tools will be gradually expanded to also cover AIR oversight (Part-CAMO 2022, Part-145 2023). Expanding the use of the tool to also cover the activities of AeMC organisations is being examined.

Traficom provides EASA with information on the compliance and performance of organisations' SMS in the manner specified by EASA either separately or in connection with standardisation. A Traficom representative participates in the EASA working group that revises EASA's SMS assessment tool.

### **SYS.007.2, Management of change as part of safety management**

*No EPAS reference: The action listed below was defined on the basis of nationally identified needs for action.*

#### **Action:**

Aviation organisations constantly develop and improve their operations. In an assessment carried out by Traficom on the effectiveness of stakeholders' SMS procedures for management of change (MoC), it was observed that the procedures do not yet efficiently support all aspects of the identification of safety threats caused by changes and the associated safety risk management. Organisations must ensure that:

- they have an appropriate MoC procedure, including required personnel training
- they identify changes that need to be processed; the management informs the organisation of the changes in advance, ensuring that they can be processed and that necessary actions can be implemented before the change takes place
- the performance of the MoC procedure is subject to an internal audit as part of the SMS system
- the performance of the MoC procedure can be verified.

As part of oversight activities, Traficom assesses the performance of stakeholders' SMS MoC functions and internal audits. The assessment also takes into consideration how the organisation has identified and processed different current changes, like changes to the operating environment and the operation of the organisation due to for example pandemics or conflict zone situations, both during the situation itself and during the recovery from the situation. The assessment also focuses on how the organisation has utilised available information on identified threats caused by the situations (including information produced by EASA and the Conflict Zone information coordinated by the Commission together with EASA), how it has strived to identify potential threats caused by the changes, and how it has processed the above mentioned as part of the organisation's management of change.

#### **Objective of the action:**

Ensuring that aviation stakeholders implement timely and comprehensive MoC procedures and identify the changes in their operations that require the activation of the MoC procedure.

#### **Stakeholder responsible for implementation:**

**Aviation organisations**

**Traficom**

#### **Timetable**

2019–2023

For Part-CAMO organisations, actions are required from the date of issue of the final Part-CAMO certificate.

#### **Deliverable**

Stakeholders have highly effective MoC procedures, the functioning of which can be verified.

#### **Status**

Ongoing. Based on the observations, the focus of the oversight is on the description of the MoC procedure, timely identification of changes requiring a risk assessment, risk management as the change process progresses (updating the risk assessments made) and comprehensive implementation of change management.

### **SYS.007.3, New business models**

*EPAS reference: MST.0019: Better understanding of operators' governance structure*

#### Action:

Traficom examines how the stakeholders' key persons – including safety managers and accountable managers – in reality implement and perceive the responsibilities related to their roles. In this, Traficom also uses the following guidance material prepared by EASA: [Practical Guide: Management of hazards related to new business models of commercial air transport operators.](#)

The stakeholders' management has the duty to ensure that new business models and any threats associated with them are addressed in the company's SMS, including timely processing through change management procedures (MoC) where required. This duty also applies to the subcontracting of safety-critical functions and the subcontracting of chained or large-scale functions.

#### Objective of the action:

Identifying threats related to new business models and assessing and reducing their risks.

#### Stakeholder responsible for implementation:

**Traficom**  
**Aviation organisations**

#### Timetable

2021–2023

#### Deliverable

Oversight action: discussion

#### Status

For Traficom's part, the action is implemented in connection with safety discussions and oversight and taken into consideration in the organisations' profile.

### **3.1.8 SYS.008. Cybersecurity in aviation**

#### **SYS.008.1, Cybersecurity in aviation**

*No EPAS reference: the need for the action has been identified based on national risk management.*

#### Background:

International cyber regulation in aviation is developed in a risk- and performance-based manner. The management of cyber risks, or more precisely the management of operative information security risks, will become increasingly central in flight safety activities. To this end, the management of information security must become a more integral part of the operational activities (management of flight safety and security issues) carried out by the authority and organisations in the aviation system.

In Finland, the aviation cybersecurity work implements the ICAO<sup>13</sup> and ESCP strategies<sup>14</sup> as well as Finland's Cyber Security Strategy<sup>15</sup> and fulfils the international and national obligations set for cybersecurity in aviation.

<sup>13</sup> <https://www.icao.int/cybersecurity/Pages/Cybersecurity-Strategy.aspx>

<sup>14</sup> <https://www.easa.europa.eu/sites/default/files/dfu/Cybersecurity%20Strategy%20-%20First%20Issue%20-%2010%20September%202019.pdf>

<sup>15</sup> <https://turvallisuuskomitea.fi/en/finlands-cyber-security-strategy-2019/>

Action:

Cybersecurity has been included in the Finnish Aviation Safety Programme (FASP) and the Finnish Aviation Security Programme. Cybersecurity is addressed in connection with Finnish aviation safety risk management (FASP, section 2.6).

Stakeholders must ensure the identification of cybersecurity threats – including ones caused by the COVID-19 pandemic during the pandemic itself and the recovery from it – and the management of related risks concerning critical aviation systems.

Objective of the action:

Efficiently identifying cybersecurity threats and managing the risks caused by them

Stakeholder responsible for implementation:

**Traficom**  
**Aviation organisations**

Timetable

Continuous: Traficom: Maintaining the FASP, Security Programme and risk picture/portfolio in terms of cybersecurity

Continuous: Stakeholders: Identifying cybersecurity threats and managing the risks caused by them

2021–2024:

- Active influencing of the development of EU regulation and ICAO standards and recommendations of cybersecurity in aviation and the implementation of the gradually increasing cybersecurity regulation in Finland.
- Maintaining the cybersecurity risk picture/portfolio of Finnish aviation; identifying threats, paying attention to changes in the operating environment, risk management and strengthening resilience
- Appropriate consideration and inclusion of the management of information security related to aviation as part of the flight safety work of all aviation stakeholders
- Utilisation of Kybermittari in ensuring the cybersecurity management capabilities of key stakeholders; definition, realisation and coordination of follow-up work

Deliverable

- Cybersecurity included in the FASP and its Annexes as well as the Finnish Aviation Security Programme
- A formed and maintained Finnish aviation cybersecurity risk picture/portfolio
- Stakeholders have methods for identifying threats to cybersecurity and managing the related risks.

Status

The work is progressing as planned. Finland is actively influencing the renewal of the NIS directive and EASA's Part-IS regulation and its AMC and GM material that will be published during 2022–2023. Finland also has a representative on the ICAO Cybersecurity panel established in 2022.

On a national level, the focus in 2022–2023 will be on the implementation of regulation (EU) 2019/1583 that became applicable in the beginning of the year, the promotion of cybersecurity in regard to all aviation stakeholders and on risk picture and situational awareness work in cooperation with strategic aviation stakeholders. In December 2021, Traficom published a [website on cybersecurity in aviation](#) (in

Finnish) with information on cybersecurity work in aviation, regulations and guidance material.

### **3.1.9 SYS.009. Oversight competence, resources and focus areas**

#### **SYS.009.1, The oversight of Part-147 organisations**

*EPAS reference: MST.0035: Oversight capabilities/focus area: Fraud cases in Part-147*

##### Action:

Part-147 organisations must ensure that:

- all changes to the examination system are made in a controlled manner
- the personnel involved in the examination activities have been appropriately trained and familiarised with their task
- the roles of the persons involved in processing the examination questions have been defined
- the confidentiality of the examination questions is ensured before each exam
- risk factors related to the examination situation are identified and anticipated
- arrangements are made for external individuals taking the examination outside the school in a manner approved by the authorities.

Traficom continuously monitors the activities of Finnish Part-147 organisations. Examination activities are monitored by following the preparation of the examination, the examination situation and the processing of questions. The themes listed above are also reviewed in discussions and meetings with the persons responsible for the examination activities and supervising the examinations. The process has proven to be reliable. Future changes to the examination system require implementing the change management procedure (MoC) as well as identifying threats caused by the change and other factors and related risk management.

##### Objective of the action:

Ensuring that stakeholders carry out the examination process in accordance with the Regulation and that they recognise any such risks in their own activities that may jeopardise the reliability of the examination.

##### Stakeholder responsible for implementation:

**Traficom**  
**Part-147 organisations**

##### Timetable

Continuous

##### Deliverable

Stakeholders have a safe, operational and reliable Part-147 examination system

##### Status

Ongoing

#### **SYS.FOT.009.2, Resources and competence**

*EPAS reference: MST.0032: Oversight capabilities/focus area ((a) Availability of adequate personnel in CAs, b) Cooperative oversight in all sectors, c) Organisations management system in all sectors)*

##### Action:

Traficom is committed to ensuring it has the resources and expertise required for its official duties as an aviation authority. This is supported by continuous training and international cooperation.

Resources are continuously assessed.

Objective of the action:

The level of safety in Finnish aviation remains high.

Stakeholder responsible for implementation:

**Traficom**

Timetable

Continuous

Deliverable

Official duties in the field of aviation are performed with sufficient resources and expertise

Status

Ongoing

**SYS.009.3, Cooperative oversight**

*EPAS reference: MST.0032: Oversight capabilities/focus area ((a) Availability of adequate personnel in CAs, b) Cooperative oversight in all sectors, c) Organisations management system in all sectors)*

Action:

Traficom engages in active cooperation with other states concerning the management and oversight of approvals and certificates issued to Finnish companies that also operate outside Finland. Traficom also seeks to make cooperation agreements with the aviation authorities in its key partner countries.

Objective of the action:

The level of safety in commercial air transport remains high. State aviation authorities in different countries have the means and cooperation mechanisms they need for oversight in situations where several countries share responsibility for overseeing an organisation.

Stakeholder responsible for implementation:

**Traficom**

Timetable

Continuous

Deliverable

Sufficient and effective oversight in cooperation with the aviation authorities of other countries.

Status

Ongoing

**SYS.009.4, Performance- and risk-based operations management**

*EPAS reference: MST.0032: Oversight capabilities/focus area ((a) Availability of adequate personnel in CAs, b) Cooperative oversight in all sectors, c) Organisations management system in all sectors)*

Action:

Traficom maintains and develops performance- and risk-based operations management based on the principles of continuous improvement.

Traficom carries out and develops national-level risk management (*see actions SYS.004.1 and SYS.004.2*) and utilises the results thereof in the performance- and risk-based operations management of organisations. Traficom utilises and develops its capabilities and existing methods in regard to the assessment of organisations' performance (*see action SYS.007.1*) and strengthens its competence in taking human factors and safety culture into consideration in the assessment of performance (*see action SYS.009.6*).

Objective of the action:

Risk management in Finnish aviation is systematic, effective and continuously improving. Finland complies with ICAO and EASA requirements regarding risk management in Finnish aviation.

Stakeholder responsible for implementation:

**Traficom**

Timetable

2021–2023

Deliverable

Performance and risk-based operations management.

Status

Ongoing as regards actions.

**SYS.009.5, Fatigue Risk Management System (FRMS) utilisation and FRMS competence as part of risk management**

*EPAS reference: MST.0034: Oversight capabilities/focus area: flight time specification schemes*

Action:

Traficom develops competencies and methods for assessing the functionality and efficiency of the Fatigue Risk Management System (FRMS), including the development and implementation of the FRMS operability and performance assessment tool.

Traficom participates in the activities of the *Fatigue Risk Management Forum* for forming an up-to-date, international situational picture and obtaining most recent research knowledge.

Objective of the action:

Increasing the competence of inspectors. Forming a reliable picture of the operability and performance of organisations' FRMS systems. Increasing cooperation and harmonisation between EASA Member States with regard to FRMS.

Stakeholder responsible for implementation:

**Traficom**

Timetable

2020–2023

Deliverable

Creating an EASA-level FRMS tool and incorporating this assessment into organisations' performance profiles.

Status

The FRMS assessment tool is ready and in test use. Further development of the tool to be used as part of organisations' management system assessment and its inclusion in organisations' performance profiles is currently ongoing.

### **SYS.009.6, Strengthening competence in taking human factors and human performance into account in aviation authority work**

*EPAS reference: MST.0037: Foster a common understanding and oversight of Human Factors*

#### **Action:**

Human factors and human performance (HF) are already part of the competencies that staff is provided with training in and required to possess in many of Traficom's official duties in the field of aviation, and part of personnel training programmes. HF has also become one of the focus areas in EASA and ICAO safety work. To strengthen the practical implementation of HF themes, Traficom will:

- assess the HF competency of its staff in relation to the competency requirements of different positions
- prepare a separate HF training programme and plan or make the necessary changes to existing training programmes and plans
- organise necessary additional HF training.

After this, Traficom will regularly assess the need for HF training and the level of HF competency as part of its existing processes for ensuring the maintaining of competency.

In carrying out the action described above, Traficom will utilise guidance material produced in EASA's SPT.0115 and relevant existing ICAO and EASA material, including the ICAO [Manual on Human Performance \(HP\) for Regulators Doc 10151](#) (First Edition).

#### **Objective of the action:**

Strengthen competency in regard to the oversight, analysis and consideration of human factors and human performance in Traficom's aviation authority work and implement the aforementioned themes into practice in a systematic manner.

#### **Stakeholder responsible for implementation:**

**Traficom**

#### **Timetable**

By the end of 2023

2021: as an interim objective, Traficom will maintain and continue existing HF training and provide basic HF training to staff who have not been trained but are assessed to need or benefit from it in their work.

#### **Deliverable**

The importance and impact of human factors are more comprehensively taken into account in Traficom's regulatory work, including oversight, analysis, safety promotion and the assessment of SMS performance of organisations.

#### **Status**

In 2021, the HF themes were included as part of Traficom's training programme regarding SSP (FASP) issues and they are included in the training programmes for service areas and teams.

### **SYS.009.7, PPL/LAPL learning objectives in the Meteorological Information part of the PPL/LAPL syllabus**

*EPAS reference: MST.0036 PPL/LAPL learning objectives in the Meteorological Information part of the PPL/LAPL syllabus*

Action:

Traficom will prepare the proposed learning objectives and include corresponding questions in the pool of PPL/LAPL theory exam questions. Traficom will strive to collaborate with EASA and other Member States in the preparation of the learning objectives to achieve a harmonised result.

Objective of the action:

Strengthen the competency of PPL/LAPL pilots in regard to meteorological information and its use through practical learning objectives.

Stakeholder responsible for implementation:

**Traficom**

Timetable

2021–2022

Deliverable

PPL and LAPL training programmes updated with supplementary learning objectives concerning meteorological information and the use thereof.

Status

The planned implementation start is in Q2/2022. The training organisations' training programmes will be updated during 2022.

## 3.2 Operational issues



### Operational issues, introduction

Operational themes are more directly linked to the actions of an individual person, organisation or operational area or to environmental factors, including weather events. At the operational level, threats may directly cause a situation to develop into an occurrence, incident or accident.

Operational threats and safety factors are often identified by analysing occurrence data from flight safety reports and by carrying out risk assessments. Risk management measures seek to reduce the probability of events that result in occurrences, incidents and accidents and mitigate the severity of their consequences.

For information on the safety situation of Finnish aviation, see Traficom's [Liikennefakta website](#) (in Finnish).

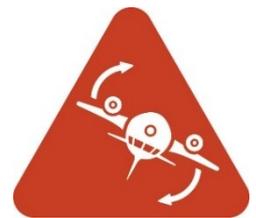
Among other aspects, EPAS requires national safety plans to include threats identified at the international level. These include the following themes:

- Loss of control in flight (LOC-I) ([LOC-I data on the Liikennefakta website](#))
- Runway excursions (RE) ([RE data on the Liikennefakta website](#))
- Runway incursions (RI) ([RI data on the Liikennefakta website](#))
- Mid-air collisions (MAC) ([MAC data on the Liikennefakta website](#))
- Controlled flight into terrain (CFIT) ([CFIT data on the Liikennefakta website](#))
- Fire, smoke and fumes ([follow up data on the Liikennefakta website](#))
- Airspace infringement (AI) ([AI data on the Liikennefakta website](#))

### **3.2.1 OPER.001. Loss of control in flight (LOC-I)**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on LOC-I events and the safety situation in regard to them is available on [Traficom's Liikennefakta website](#).



#### **OPER.LOC.001.1, Loss of control in flight (LOC-I)**

##### Action:

Loss of control in flight (LOC-I) threats and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process LOC-I threats in their safety management and take action to reduce the risk thereof. Examples of factors that may cause LOC-I threats include, among other things, bird strikes and incidents involving foreign object debris (FOD).

Traficom monitors the number and risk level of LOC-I events, defines required actions as part of Finnish aviation safety risk management and assesses how stakeholders have addressed and processed LOC-I threats.

To process LOC-I threats as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

Objective of the action:

Mitigating LOC-I risks

Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations and stakeholders (AOC, SPO, ATO, NCC, ANS, ADR):**

Addressing of LOC-I threat in their operations

Timetable

Continuous

Deliverable

LOC-I events and their causal factors are included in FASP Annex 2 and addressed in Finnish aviation safety risk management and stakeholders' safety management.

Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

### **3.2.2 OPER.002. Runway excursions (RE)**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on RE events and the safety situation in regard to them is available on [Traficom's Liikenne fakta website](#).



#### **OPER.RE.002.1, Runway excursions (RE)**

Action:

Runway excursion (RE) threats and their identified causal factors, such as runway conditions (RWY CON), have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process RE threats in their safety management and take action to reduce the risk thereof. In their processing work, stakeholders must also take into account changes to the operating environment, like for example the new Global Reporting Format (GRF) for runway surface condition assessment and reporting that was implemented on 12 August 2021.

Traficom monitors the number and risk level of RE events, defines the required actions as part of Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed RE threats.

To process RE threats as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

The definition of required actions also includes measures and preparation for arranging the moving of an immobilised aircraft in a situation in which precautionary, preventive and recovery-focused protection measures (*i.e. safety barriers*) have failed, an RE risk has been realised, a runway excursion has occurred and all that is left is minimising the damage.

Objective of the action:

Reducing RE risks

Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations (AOC (aeroplanes), SPO (aeroplanes), ATO (aeroplanes), NCC (aeroplanes), ANS, ADR):** Addressing RE threat in their operations

Timetable

Continuous

Deliverable

Runway excursions and their causal factors are included in FASP Annex 2 and addressed in Finnish aviation safety risk management and stakeholders' safety management.

Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

### **3.2.3 OPER.003. Runway safety**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

#### **OPER.RWY.003.1, Local runway safety teams (LRST)**

Action:

A Local Runway Safety Team has been set up at Helsinki-Vantaa Airport. Traficom oversees its activities. The aerodrome operator must also ensure the effectiveness of LRST activities at other aerodromes.

Objective of the action:

The objective of the action is improving runway safety in Finland.

Stakeholder responsible for implementation:

**Traficom**

**Aviation organisations (ADR, ANS)**

Timetable

Continuous

Deliverable

Efficient LRST activities, the effectiveness of LRST activities at other aerodromes has been assessed

Status

An LRST is operating at EFHK. Traficom is involved in EFHK's LRST and processes the subject matter with the stakeholders as part of oversight.

### **OPER.RWY.003.2, Solutions to improve runway safety**

*EPAS reference: MST.0029: Implementation of SESAR runway safety solutions*

#### Action:

Traficom contacts aerodrome operators and air navigation service providers to assess which runway safety solutions identified in the SESAR project have already been implemented in Finland. It also assesses the feasibility of the solutions and the possibility of introducing those solutions that have not yet been implemented in Finland. The solutions are presented in the [2019 SESAR Solutions Catalogue, 2019 third edition](#). Additional information is also available in the [ATM Master Plan updated in 2019](#).

#### Objective of the action:

The objective of this action is to improve runway safety in Finland and to ensure that runway safety solutions of the SESAR project have been implemented to the extent possible.

#### Stakeholder responsible for implementation:

**Traficom**

**Aviation organisations (ADR, ANS)**

Timetable2020–2022: Assessing the implementation  
2023–continuous

#### Deliverable

The runway safety solutions of the SESAR project have been implemented to the extent possible

#### Status

Ongoing

### **3.2.4 OPER.004. Runway incursions (RI)**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on runway incursions and the safety situation in regard to them is available on [Traficom's Liikennefakta website](#).



#### **OPER.RI.004.1, Runway incursions (RI)**

##### Action:

Runway incursion (RI) threats and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process RI threats in their safety management and take action to reduce the risk thereof.

Traficom monitors the number and risk level of RI events, defines the required actions as part of Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed RI threats.

To process RI threats as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

Objective of the action:

Reducing RI risks

Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations (AOC (aeroplanes), SPO (aeroplanes), ATO (aeroplanes), NCC (aeroplanes), ANS, ADR):** Addressing RI threat in their operations

Timetable

Continuous

Deliverable

Runway incursions and their causal factors are included in FASP Annex 2 and addressed in Finnish aviation safety risk management and organisations' safety management

Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

### **3.2.5 OPER.005. Mid-air collisions (MAC)**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on the safety situation in regard to MAC threats is available on [Traficom's Liikenne fakta website](#).



#### **OPER.MAC.005.1, Mid-air collisions (MAC)**

Action:

Mid-air collision (MAC) threats and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process MAC threats in their safety management and take action to reduce the risk thereof.

Traficom monitors the number and risk level of MAC events, defines the required actions as part of Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed MAC threats.

To process MAC threats as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

Objective of the action:

Reducing MAC risks

Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations (AOC, SPO, ATO, NCC, ANS, RPAS):** Addressing MAC threat in their operations

Timetable

Continuous

Deliverable

Mid-air collisions and their causal factors are included in FASP Annex 2 and addressed in the Finnish aviation safety risk management and stakeholders' safety management

Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

**OPER.MAC.005.2, Loss of separation between civil and military aircraft (MAC)**

*EPAS reference: MST.0024: 'Due regard' for the safety of civil traffic over high seas*

Action background

In collaboration with ICAO, Finland has convened a working group (*Ad-hoc civil military expert group on flight safety over Baltic sea*), the work of which is contributed to by all states in the Baltic Sea region except Lithuania as well as EASA, NATO and Eurocontrol. The group prepared the document '*Principles and best practices in case of air encounters, especially in the High Seas airspace commonly shared by civil & military aviation over the Baltic Sea*' for ICAO EUR OPS Bulletin (EUR OPS Bulletin 2017\_001). The group also established a strategic cooperation network that can, if necessary, address issues related to the coordination of civil and military aviation in the Baltic Sea region. Finland has announced its readiness to continue organising meetings on this theme, should this be considered necessary.

Action:

Finland creates, maintains and uses its "due regard"<sup>16</sup> procedures, updates them to ICAO EUR Doc 032 and ensures that stakeholders who operate state aircraft are aware of the requirements and have access to the required guidelines for using the "due regard" procedures.

Finland maintains the coordination between civilian and military aviation, also using the ICAO Manual on Civil-Military Cooperation in Air Traffic Management (Doc 10088).

On a general level, Finland monitors military aviation traffic volumes and the nature of activities over the Baltic Sea. Reported incidents where the involved parties are civilian and military aircraft are especially being monitored. The purpose is to identify trends that may have a negative impact on aviation safety. Finland utilises information as part of national aviation risk management and reports the information to EASA according to the obligations in regard to occurrence reporting ((EU) 376/2014).

Finland continues with active cooperation on a European level and in ICAO to ensure safety in regard to these themes and maintains its readiness to, if necessary, lead working groups like the Ad-hoc Baltic sea group.

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<sup>16</sup> A due regard procedure means that the theme in question is given appropriate attention. See also <https://skybrary.aero/articles/due-regard>

Objective of the action:

Reducing threat of loss of separation between civil and military aircraft and MAC over the high seas by harmonising methods and increasing cooperation between relevant stakeholders

Stakeholder responsible for implementation:

**Traficom**

Timetable

Continuous

Deliverable

Mid-air collisions and their causal factors are included in FASP Annex 2 and addressed in the Finnish aviation safety risk management and stakeholders' safety management.

Status

Finland has published its "*due regard*" procedures and appended them to ICAO EUR Doc 032. Finland has chaired the Baltic Sea Project Team, which has drafted recommendations on operations over the high seas. Together with other Baltic Sea states, Finland has published waypoints for state aircraft that will improve flight planning and route predictability. Better use of military radar systems by civil air traffic control is also being investigated. Coordination between civil and military operations has been improved by establishing a network of contact persons between air traffic control organisations of the Baltic Sea states. Finland has also participated in the drafting of the EUR OPS Bulletin (2015\_002).

Finland has actively promoted increased civil-military cooperation in several international forums, such as the ICAO GANIS-SANIS symposium in 2017, the ICAO Air Navigation conference in 2018 and the OSCE Security Days in 2018, and an OSCE Structured Dialogue group in the autumn of 2019.

Finland has announced its readiness to facilitate further work, should the parties consider this necessary. Finland actively monitors the coordination of civil and military aviation, the implementation of the agreed actions and the level of safety in the Baltic region.

**OPER.MAC.005.3, Mid-air collisions (MAC) and SESAR solutions**

*EPAS reference: MST.0030: Implementation of SESAR solutions aiming to reduce the risk of mid-air collision en-route and TMA*

Action:

Traficom assesses in cooperation with air navigation service providers to what extent SESAR solutions for reducing the risk of mid-air collisions (MAC) have been implemented in Finland. It also assesses the feasibility of the solutions and the possibility of introducing those solutions that have not yet been implemented in Finland. The solutions are presented in the [2019 SESAR Solutions Catalogue, 2019 third edition](#). Additional information is also available in the [ATM Master Plan updated in 2019](#).

Objective of the action:

The objective of the action is to reduce the risk of MACs in Finland and to ensure that SESAR solutions for reducing risk have been implemented to the extent possible.

Stakeholder responsible for implementation:

**Traficom**

## Aviation organisations (ANS)

### Timetable

2020–2023

### Deliverable

SESAR solutions for reducing risk of MACs have been implemented to the extent possible.

### Status

Ongoing

### 3.2.6 OPER.006. Controlled flight into terrain (CFIT)

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on CFIT events and the safety situation in regard to them is available on [Traficom's Liikennefakta website](#).



#### **OPER.CFIT.006.1, Controlled flight into terrain (CFIT)**

##### Action:

Controlled flight into terrain (CFIT) threats and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process CFIT threats in their safety management and take action to reduce the risk thereof.

Traficom monitors the number and risk level of CFIT events, defines the required actions as part of Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed CFIT threats.

To process CFIT threats as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

##### Objective of the action:

Reducing CFIT risks

##### Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations (AOC, SPO, ATO, ANS):** Addressing CFIT threats in their operations

### Timetable

Continuous

### Deliverable

Controlled flight into terrain and related threat factors are included in FASP Annex 2 and addressed in the Finnish aviation safety risk management and stakeholders' safety management.

### Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

### **3.2.7 OPER.007. Fire, smoke and fumes**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on fire, smoke and fumes events and the safety situation in regard to them is available on [Traficom's Liikenne fakta website](#).



#### **OPER.FIRE.007.1, Fire, smoke and fumes**

##### Action:

Threats of fire as well as observations of smoke and other fumes and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address and process these threats in their safety management and take action to reduce the risk thereof.

Traficom monitors the number and risk level of fires and observations of smoke and other fumes, defines the required actions as part of the Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed these threats.

To process the threats associated with fire, smoke and fumes as part of their safety management, organisations must:

- assess risks in their own operations
- define the acceptable level of safety and the necessary alert and response levels
- define and implement the required actions
- monitor the effectiveness of their actions.

The definition of required actions as regards ADR operators, for example, includes possible direct radio contact between the aerodrome's rescue service and the aircraft and operating procedures for organising evacuation and rescue operations for aircraft on the ground, including in the vicinity of terminals and passenger boarding bridges.

##### Objective of the action:

Mitigating the risks of fire, smoke and fumes

##### Stakeholder responsible for implementation:

**Traficom:** As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)

**Aviation organisations (AOC, AIR, ADR):** threats related to fire, smoke and fumes in their operations

##### Timetable

Continuous

##### Deliverable

Threats of fires, smoke and fumes and their causal factors are included in FASP Annex 2 and addressed in the Finnish aviation safety risk management and stakeholders' safety management

### Status

Traficom's part has been implemented, and Traficom ensures implementation by stakeholders as part of oversight.

### 3.3 Actions concerning individual domains of aviation

Section 3.3 contains actions assigned separately to each domain of aviation. These actions were specified on the basis of EPAS (*EPAS reference given*) and/or the results of the Finnish aviation safety risk management process. The section for each domain begins with the topical threat scenarios for the domain in question (see *FASP section 2.6*) for which it has been considered necessary to include actions in the Safety Plan. These threat scenarios are defined on the basis of national safety risk pictures, which are based on an assessment of the safety risk level in the relevant domain of Finnish aviation. The results of this assessment do not provide information on the performance of individual stakeholders regarding the threat in question.



In some domains, it was found that the actions in sections 3.1 and 3.2 already cover the key threats that have been identified. For these domains, actions have not been separately included in section 3.3.

#### 3.3.1 Helicopter safety

##### **SYS.HECO.001, Collaboration forums for helicopter safety**

*EPAS reference: MST.0015: Helicopter safety events*

##### Action:

Traficom has established a [national working group on helicopter safety \(FHST\)](#). The group convenes regularly. Traficom also organises an FHST Safety Day for Finland's helicopter operators each year as part of its safety promotion activities (*FASP section 4.2*). Traficom also distributes material produced for the Safety Day and other safety information to helicopter operators via its Helicopter safety website (in Finnish) and as part of its daily regulatory work.



At the European level, Traficom promotes helicopter safety by participating in the activities of [EASA's ESPN-R-\(European Safety Promotion Network – Rotorcraft\)](#). Traficom is an observer on EASA's R.COM committee. Traficom also participates in the Nordic Meeting - Helicopter and General Aviation forum, which deals with safety issues from a Nordic perspective.

Traficom relays safety information produced at the European level to Finnish helicopter operators. In addition to this, helicopter operators can utilise EASA's helicopter safety website "*Rotocraft - EASA community*" and the open ESPN-R LinkedIn forum.

##### Objective of the action:

Improving helicopter safety

##### Stakeholder responsible for implementation:

**Traficom**

##### Timetable

Continuous

##### Deliverable

FHST is operational, Traficom participates in European activities to promote helicopter safety

Status

Implementation underway. Traficom organises *Helicopter Safety Day* events. In addition, the FHST working group has convened regularly. On the initiative of the FHST group, Traficom also organised an event on the safe and flexible coordination of helicopter and drone operations on 12 January 2022, where different perspectives and practices to promote safety were discussed.

**SYS.HECO.002, Helicopter safety**

The system-level theme of **developing standard operating procedures (SOP) and supporting their implementation** was identified as a key scenario in the national risk picture for the domain of helicopter operations in commercial air transport (CAT RW) and aerial work (SPO RW). The theme is also one of the national safety performance indicators that helicopter operators are obliged to monitor (*FASP Annex 2, Finnish Aviation Safety Objectives and Safety Performance Indicators and Targets, helicopter operation indicator RW-SPI-SOP*). The development and introduction of SOP is also considered necessary for helicopter flight training.

Action:

Helicopter operators, including helicopter training organisations (ATO), ensure that they have standard operating procedures (SOP) which describe in sufficient detail and scope all helicopter operations relevant to their activities. SOPs are to be taken into account in all training and helicopter operations, they are reviewed regularly, and they are updated based on the needs identified in risk management.

Traficom includes SOPs and their implementation in its oversight plan as one of the oversight priorities and promotes their use by means of safety promotion (*FASP section 4.2*).

Objective of the action:

Implementing Finnish aviation safety risk management in the domain of helicopter operations by strengthening one of the key safeguards for reducing risks, the use of standard operating procedures, and thereby ensuring that risk level in helicopter operations remains acceptable

Stakeholder responsible for implementation:

**Organisations involved in helicopter operations in commercial air transport (CAT RW) and aerial work (SPO RW)**

**Approved training organisations for helicopter operation (ATO RW)**

**Traficom**

Timetable

2019–2023

Deliverable

The action described above has been addressed in organisations' safety management and the results have been processed in connection with Traficom's oversight. The SOP theme is included as part of safety promotion.

Status

Implementation underway

**SYS.HECO.003, Development of a network of low-level IFR routes**

*EPAS reference: MST.0031: Implementation of SESAR solutions aiming to facilitate safe IFR operations*

Action:

Comprehensive assessment of the prerequisites and need for the implementation of a network of low-level IFR routes in Finland.

Objective of the action:

The objective of the action is to determine what kinds of needs and, on the other hand, prerequisites there are for the development of a network of low-level IFR routes and to clarify the roles of different stakeholders in the development of the network.

Stakeholder responsible for implementation:

The operators using the network, procedure design organisations, air navigation service providers and Traficom, each from the perspective of their respective roles

Timetable

By the end of 2025

Deliverable

An assessment and the necessary decisions on whether a network of low-level IFR routes will be promoted in Finland

Status

A preliminary survey on the need for the network has been [implemented and published](#) (in Finnish). Stakeholders are currently examining prerequisites for making progress in the planning of the network.

### 3.3.2 Airport safety

#### **SYS.ADR.001, Airport safety**

In terms of airport safety, the key scenarios at the operational level in the national safety risk picture continue to be as follows:

- runway conditions and maintenance at airports in Northern Finland, especially in regard to foreign flight operators not accustomed to winter conditions
- unauthorised vehicles on runways (*runway incursion, RI*) in summer and especially in winter conditions
- operational compliance and usability of the manoeuvring area.



At the systemic level, the key scenarios are as follows:

- shortcomings in airport maintenance reporting
- shortcomings in the use of information produced within SMS for decision-making (*see also action SYS.007.2, Management of change as part of safety management*)
- shortcomings in reporting on local conditions. Related to this scenario, a new Global Reporting Format (GRF) for runway surface condition assessment and reporting has been implemented in Europe on 12 August 2021. This must be taken into consideration when reporting on local conditions.

Action:

As part of their safety management, airport operators must address the above key scenarios identified at the national level and threats that they have identified

themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level.

Traficom includes the identified key scenarios in its oversight plan as one of the oversight priorities.

Objective of the action:

Implementing Finnish aviation safety risk management in the ADR domain by ensuring that the risks related to the threat scenarios described above are maintained at an acceptable level.

Stakeholder responsible for implementation:

**Airport operators  
Traficom**

Timetable

2022–2023

Deliverable

The action described above has been addressed in organisations' safety management and the results have been processed in connection with Traficom's oversight.

Status

Implementation is ongoing with regard to oversight. Traficom, in cooperation with Finavia and Fintraffic ANS, has also updated the Winter Operations Bulletin for airlines flying into the airports of Northern Finland. [The bulletin has been published in Finnish and English](#). The English version has been distributed through several different channels and can also be found on the IFALPA Safety bulletin website.

### **3.3.3 Safety of flight training**

#### **SYS.ATO.001, Safety of flight training**

At the operational level, shortcomings in airspace observation remain the key scenario of the national safety risk picture in the flight training domain (ATO). These shortcomings may lead to a risk of collision (MAC), especially during solo flights to/from uncontrolled aerodromes.



At the systemic level, negative training, and in regard to this especially shortcomings in taking the defects of FSTDs into account, was identified as the key scenario.

Action:

As part of their safety management, flight training organisations must address the above key scenarios identified at the national level and threats that they have identified themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level.

Traficom includes the identified key scenarios in its oversight plan as one of the oversight priorities.

Objective of the action:

Implementing Finnish aviation safety risk management in the ATO domain by ensuring that the risks associated with the threat scenario described above are maintained at an acceptable level.

Stakeholder responsible for implementation:

**Flight training organisations**

## Traficom

Timetable  
2022–2023

### Deliverable

The action described above has been addressed in organisations' safety management and the results have been processed in connection with Traficom's oversight.

### Status

Implementation underway

### **3.3.4 Safety of commercial air transport**

#### **SYS.CAT.001, Safety of commercial air transport**

At the operational level of the commercial air transport domain (AOC), the key scenario identified in the national risk picture is still the impacts of cabin baggage volumes on evacuation, obstructing/slowing down evacuation. The reason for this was that actions to highlight the issue at the national and European level are still underway.



At the systemic level, the following key scenarios were identified:

- development of organisations' threat identification and risk management
- shortcomings in regard to organisations' management of change (MoC) processes acknowledging rapid changes and multiple changes occurring at the same time, including threat management in regard to changes to organisations' business environment (for example pandemics and conflict zone situations)
- shortcomings in organisations' determination and utilisation of a fatigue risk management system (FRMS)
- shortcomings in occurrence reporting (commercial hot air balloon operations).

#### Action:

As part of their safety management, commercial air transport organisations must address the above scenarios identified at the national level and threats that they have identified themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level. Once they have introduced fatigue risk management systems (FRMS), organisations must assess how efficient and effective they are.

Traficom includes the scenarios in organisations' risk-based oversight. Traficom develops methods to assess the performance of fatigue risk management systems (FRMS); for more information, see action *SYS.009.5, Fatigue Risk Management System (FRMS) utilisation and competence as part of risk management*.

Organisations' ability to adapt their operations and manage the risk level of their operations in prevailing conditions and implement possible changes while making genuine and efficient use of management of change (MoC) and risk management processes is ensured in organisation oversight. Shortcomings in the management of change are also connected to the system-level action *SYS.007.2, Management of change as part of safety management*, which is obligatory to all aviation organisations that are required to implement an SMS.

Objective of the action:

Implementing Finnish aviation safety risk management in the commercial air transport domain by ensuring that the risks related to the threat scenarios described above are maintained at an acceptable level.

Stakeholder responsible for implementation:

**AOC operators (aeroplanes)**  
**Commercial hot air balloon operators**  
**Traficom**

Timetable

2022–2023

Deliverable

The action described above has been addressed in commercial air transport organisations' safety management and the results have been processed in connection with Traficom's oversight.

Status

Implementation underway

**SYS.CAT.002. Flight Data Monitoring (FDM)**

**SYS.CAT.002.1, National FDM forum**

*EPAS reference: MST.0003: Member States should maintain a regular dialogue with their national aircraft operators on flight data monitoring (FDM) programmes*

Action:

Traficom organises regular meetings with operators producing FDM data (*national FDM forum*).

Objective of the action:

Supporting stakeholders in using FDM systems as part of their safety management, raising awareness of best practices and safety benefits, enabling confidential dialogue and sharing of safety information between industry stakeholders and Traficom, and encouraging FDM operators to use the guidance material produced by European cooperation forums or other existing useful material. [Guidance material is available on EASA's website.](#)

Stakeholder responsible for implementation:

**Traficom:** organisation of the national FDM forum  
**Operators producing FDM data:** participating in the FDM forum and promoting best practices in aviation safety work regarding FDM systems and their use

Timetable

Continuous

Deliverable

Efficient use of FDM systems in safety work.

Status

The national FDM forum is organised 1–2 times a year.

### 3.3.5 Safety of non-commercial operations with complex motor-powered aircraft (NCC)

#### **NEW ACTION: SYS.NCC.001, Safety of non-commercial operations with complex motor-powered aircraft**

At the systemic level, the following key scenarios in the national risk picture were identified in the domain of non-commercial operations with complex motor-powered aircraft (NCC):

- development of organisations' threat identification and risk management
- shortcomings in regard to organisations' management of change (MoC) processes acknowledging rapid changes and multiple changes occurring at the same time (including the post-COVID-19 restart/recovery phase)
- shortcomings in the organisation's own compliance monitoring

#### Action:

As part of their safety management, NCC operators must address the above scenarios identified at the national level and threats that they have identified themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level.

Traficom includes the scenarios in organisations' risk-based oversight.

Shortcomings in the management of change are also connected to the system-level action SYS.007.2, *Management of change as part of safety management*, which is obligatory to all aviation organisations that are required to implement an SMS.

#### Objective of the action:

Implementing Finnish aviation safety risk management in the NCC domain by ensuring that the risks associated with the threat scenario described above are maintained at an acceptable level.

#### Stakeholder responsible for implementation:

**NCC operators (aeroplanes)**

**Traficom**

#### Timetable

2022–2025

#### Deliverable

The action described above has been addressed in NCC operator safety management and the results have been processed in connection with Traficom's oversight.

#### Status

Implementation underway

### 3.3.6 Ground handling safety

#### **SYS.GH.001, Ground handling safety**

The following were identified as key scenarios in the national safety risk picture in the ground handling (GH) domain:

- correct procedure is not followed while fuelling when passengers are on board/boarding/disembarking
- incorrect or deficient loading of the aircraft



- shortcomings in immediate information provision when a ground handling vehicle collides with an aircraft (including immediately informing the crew and technical staff and occurrence reporting)
- scenarios where the mass/centre of gravity of the aircraft has been incorrectly calculated
- shortcomings in guiding and supervising passengers on the apron.

At the systemic level, the following key scenarios were identified:

- a subcontractor operates incorrectly, but the organisation procuring the service does not have the capability to ensure safe operation in direct subcontracting and especially in subcontracting chains
- due to shortcomings in SMS performance, the system does not identify safety threats and/or is incapable of managing safety risks
- due to tight schedules, ground handling functions are performed incorrectly or neglected
- shortcomings in the management of change (MoC) in regard to changes occurring in the GH operating environment

Action:

As part of their safety management, organisations must address the above key scenarios in ground handling identified at the national level and ground handling threats that they have identified themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level.

Traficom monitors the number and risk level of events related to ground handling and ground operations, defines the required actions as part of Finnish aviation safety risk management and assesses how the stakeholders have addressed and processed threats related to ground handling and ground operations. Traficom participates in ground handling safety work in EASA's GH-CAG group.

Objective of the action:

Implementing Finnish aviation safety risk management in the GH domain by ensuring that the risks related to the threat scenarios described above are maintained at an acceptable level.

Stakeholder responsible for implementation:

**GH organisations**  
**AOC organisations**  
**Traficom**

Timetable  
2022–2023

Deliverable

The action described above has been addressed in the safety management of ground handling organisations and in the safety management of the organisations using ground handling services. Traficom includes the identified key scenarios in its oversight plan as one of the oversight priorities.

Status

Ongoing.

### 3.3.7 Airworthiness and maintenance safety



#### **SYS.AIR.001, Airworthiness and maintenance safety**

Two scenarios at the systemic level were identified as key scenarios in the national safety risk picture in the airworthiness and maintenance (AIR) domain:

- A mistake is made in airworthiness management, causing a maintenance task or AD to be neglected.
- Maintenance staff carry out their work incorrectly, leading to an aircraft being released to service even though it is not airworthy.

#### Action:

As part of their safety management system or in the absence of SMS, in their operations, continuing airworthiness management organisations (CAMO), maintenance organisations (AMO) and combined airworthiness organisations (CAO) must process the above key scenarios identified at the national level and threats that they have identified themselves in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level.

Traficom includes the scenarios in its oversight plan as one of the oversight priorities.

#### Objective of the action:

Implementing Finnish aviation safety risk management in the AIR domain by ensuring that the risks related to the threat scenarios described above are maintained at an acceptable level.

#### Stakeholder responsible for implementation:

**CAMO, AMO and CAO organisations**  
**Traficom**

#### Timetable

CAMO 2022–

AMO 2022–2024

CAO Recommendation

#### Deliverable

The threat scenarios described above have been addressed in the organisations' safety management and the results have been processed in connection with Traficom's oversight.

#### Status

Implementation underway

### 3.3.8 General aviation safety

General aviation refers to all other manned aviation apart from commercial air transport and aerial work. At the European level, the key risk areas (KRA) for actions to improve safety are KRA 1) **control of aircraft** (*preventing loss of control, or LOC-I events*), KRA 2) **preventing controlled flight into terrain** (*CFIT events*) and KRA 3) **preventing mid-air collisions** (*MAC*). In addition to these, key risk areas have been identified in specific domains of general and recreational aviation (*see the European Safety Risk Portfolios EPAS 2022–2026, volume 3*). EPAS actions strengthen protection measures for reducing systemic risks related to **taking into**



**account meteorological conditions, controlling of aircraft and managing the flight**, among others.

Traficom works on the safety of general and recreational aviation as set out in **Finland's operating model for recreational aviation safety work** developed in a [recreational aviation safety project in 2015](#) (in Finnish, with links to documents in English). In addition to Traficom, Finavia, Fintraffic ANS, the Finnish Meteorological Institute, the Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL) are committed to the operating model.

In the operating model, the stakeholders committed to complying with the model discuss the safety situation annually and specify priorities for safety work and needs for action during the year. These needs and priorities are also used as themes of the Lento! seminar that those stakeholders organise together each year.

### **OPER.GA.001, Airspace infringements**

*EPAS reference: MST.0028: Member States to establish and maintain a State Plan for Aviation Safety*

Information on airspace infringements and the safety situation in regard to them is available on [Traficom's Liikenne fakta website](#).

#### Action:

Airspace infringements (AI) do not currently emerge as a key threat in general and recreational aviation in Finland, but several actions have been implemented over a number of years to mitigate the risks associated with them. AI events and their risk levels are monitored as part of Finnish aviation safety risk management. Should any needs for additional actions be identified, the operating model of Finnish recreational aviation safety work will be used. As regards the background factors affecting airspace infringements, threats caused by airspace complexity are also addressed with action SYS.GA.003 *Identification of the safety aspects of airspace complexity and changes therein and the utilisation of air traffic control in general aviation*.

#### Objective of the action:

Reducing AI and MAC risks

#### Stakeholder responsible for implementation:

**Stakeholders committed to the operating model for Finnish recreational aviation safety work: Traficom, Finavia, Fintraffic ANS, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)**

#### Timetable

Continuous

#### Deliverable

AI and MAC risks in control

#### Status

Progressing as planned. In addition, in 2018, Finland as a member of the SPN network participated in a [safety campaign on preventing MAC/AI events in general and recreational aviation](#) (EPAS 2018–2022, action SPT.089).

## **SYS.GA.002, Safety promotion in GA**

*EPAS reference: MST.0025: Improve the dissemination of safety messages*

### Action:

Key elements of safety promotion associated with the Finnish operating model for recreational aviation safety work include the **annual Lentoon! seminar** and **effective safety promotion and sharing of best practices** using different communication channels. The cooperation described above continues within the framework of the operating model. Stakeholders meet annually before the beginning of the flying season to discuss and make decisions on essential topical themes for safety promotion.

**The key themes chosen for 2022 are flight planning, joint operations on uncontrolled aerodromes, and air navigation.** The cooperation group for the operating model identified the fact that the last two years have been exceptional because of the decline in number of flights due to the COVID-19 pandemic. It was also noted that flight planning is particularly important due to recent low levels of flight experience. Due to the increase in powered flight operations on uncontrolled aerodromes, it is also necessary to highlight the significance of coordination between different forms of aviation. Due to the increase in challenges concerning GPS navigation devices in recreational aviation, it was seen necessary to highlight the basics of air navigation and preparedness for disturbances in GPS navigation.

### Objective of the action:

Improving safety promotion as an essential systemic safety factor, thus improving general aviation safety.

### Stakeholder responsible for implementation:

**Stakeholders committed to the operating model for Finnish recreational aviation safety work: Traficom, Finavia, Fintraffic ANS, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)**

### Timetable

Continuous

### Deliverable

Effective, risk-based safety promotion

### Status

Progressing as planned. The [2021 Lentoon! seminar](#) covering the key themes described above was organised on 10 April as a webinar due to the COVID-19 pandemic. The 2022 Lentoon! seminar will be organised on 25 May. In spring 2022, a safety bulletin with the themes for 2022 will also be published.

In regard to last years priorities concerning reporting and just culture, a [website for cultural elements](#) (in Finnish) with plenty of material was published on 15 April 2021.

A webinar concerning safety culture supporting SMS work called "*Turvallisuuskulttuuri SMS-työn tukena-mitä se on?*" was organised on 26 January 2022 for aviation organisations and professionals. A [recording of the event is available on Traficom's website](#), and it can be utilised also in the recreational aviation community.

**SYS.GA.003 Identification of the safety aspects of airspace complexity and changes therein and the utilisation of air traffic control in general aviation**

*MST.0038 Airspace complexity and traffic congestion*

**Action:**

Traficom ensures that the safety impacts of airspace complexity and airspace changes have been identified, that the risks associated with them have been assessed and that the required actions have been taken in accordance with organisations' risk management processes. In addition to this, Traficom ensures that the issue has also been taken into consideration in the national aviation risk picture.

Traficom participates in developing best practices for preventing mid-air collisions (MAC) and airspace infringements (AI) through EASA's GA TeB (*General Aviation Technical Advisory Body*).

In the cooperation group on the *Operating model for Finnish recreational aviation safety work*, Traficom seeks to identify ways to reduce MAC and AI risks, including best practices for encouraging pilots in general and recreational aviation to use the air traffic control service in the event of occurrences and incidents and, in particular, to proactively prevent occurrences and incidents.

**Objective of the action:**

Reducing MAC and AI risks

**Stakeholder responsible for implementation:**

**Traficom**

**Cooperation group on the Operating model of Finnish recreational aviation safety work**

**Timetable**

Continuous

**Deliverable**

Assessment of the safety impacts of airspace complexity and airspace changes and the management of associated risks;

The appropriate use of air traffic control services in general and recreational aviation

**Status**

Traficom oversees the organisation responsible for airspace complexity in a performance- and risk-based manner (*see FASP section 3*). Traficom maintains the national risk picture (*see FASP section 2.6*).

The GA TeB group started operating in 2016. Traficom's representative is the chair of the group.

The cooperation group on the Operating model of Finnish recreational aviation safety work has highlighted an urgent need for a functional tool with the help of which dynamic airspace changes could be communicated in real-time. Fintraffic ANS has a project in progress in relation to this.

### **3.3.9 Safety of unmanned aviation (Drones)**

*No EPAS reference: EPAS has no actions directly assigned to the Member States. The actions listed below were defined on the basis of nationally identified needs for actions.*



Background:

Unmanned aviation is a growing domain of aviation that is transforming rapidly in terms of legislation. There is currently a transition underway from national regulation to developing EU legislation.

Coordinating the growing volume of unmanned aviation with traditional, manned aviation requires new ways of thinking and assessing risks and actions for mitigating risks. The robotisation of air transport or the digitalisation of transport in general also introduces new needs in terms of traffic control and coordinating traditional and roboticised transport. The transition to EU regulation provides new tools for risk management. However, the Drone Regulation (*implementing regulation (EU) 2019/947*) includes a transition period that will last until the start of 2023, and before that the situation is subject to rapid changes.

The EU regulation of drones has been constructed to use a risk-based approach. It includes stakeholders' personal responsibility for risk management; stakeholders assess the risks of their operations and plan the measures required to keep these under control. As regards higher risk level operations, Traficom addresses these risk assessments and oversees the stakeholders using a risk-based approach.

After the transition period, only drones with CE markings according to regulation (EU) 2019/945 can be placed on the market. These drones will include harmonised geospatial tracking, which will mitigate various airspace-related risks (such as airspace infringements) and mid-air collision risks.

As a new element for increasing safety, the U-space regulation (EU) 2021/664 has been published at the European level. This will enable a traffic control system for unmanned flights and better coordination of manned and unmanned aviation. The first date of application of the regulation is 26 January 2023.

**SYS.DRONE.001, Risk management**

As part of national risk management, Traficom also produces and maintains a national UAS/RPAS/drone risk picture. The key scenarios identified in the national risk picture have changed significantly in some respects as a result of the EU Drone Regulation becoming applicable. The risk picture is currently being updated to correspond to the new situation following the comprehensive transformation of the industry as a result of EU legislation becoming applicable. The current identified and updated key risk scenarios at the systemic level are:

- lack of knowledge of regulations and the obligations thereof regarding safe operations, encompassing
  - o operators who are not aware that they should be aware of the obligations related to drone operations
  - o operators who do not understand the content of the obligations
- incorrect attitudes, encompassing
  - o operators who, for whatever reason, do not operate in compliance with regulatory obligations
  - o operators who knowingly operate in violation of obligations and regulations
- difficulties in coordinating manned and unmanned aviation and making them visible to each other.

In terms of this point, one of the key problems is making manned aviation visible to unmanned aviation in uncontrolled airspaces via digital means, as the so-called see-

and-avoid principle used in manned aviation when operating under visual flight rules (VFR) is an inadequate concept for coordinating manned and unmanned aviation in the same airspace. Instead, possible solutions need to be sought from the realms of digitalisation and robotisation.

Action:

Traficom strives to reduce the risks of unmanned aviation related to the risk scenarios described above by the following means:

- EU regulation has been constructed to use a risk-based approach. It includes stakeholders' personal responsibility for risk management; stakeholders assess the risks of their operations and plan the measures required to keep these under control. As regards higher risk level operations, Traficom addresses these risk assessments and oversees the stakeholders using a risk-based approach.
- Traficom engages in cooperation with the police and promotes the making of identified and required legislative changes.
- Traficom participates in the definition of the Counter UAS (C-UAS) concept and promotes the making of identified and required legislative changes.
- Decisions or regulations issued by Traficom can be used to establish prohibited, restricted and allowed UAS geographical zones, which serve in their part to mitigate the risk of mid-air collisions between unmanned and manned aircraft either via restrictions or by increasing awareness of flight zones.
- Traficom prepares general level cybersecurity guidelines for unmanned aviation hobbyists and stakeholders. Traficom investigates the possibility of also awarding the Cybersecurity Label by The National Cyber Security Centre Finland (NCSC-FI) at Traficom to unmanned aircraft meant for consumer usage.
- Traficom promotes the safety of drone activities and improves stakeholders' knowledge of regulation and safe operation by the means described in action *SYS.DRONE.002, Safety promotion*.

Objective of the action:

Reducing risks in unmanned aviation

Stakeholder responsible for implementation:

**Operators using remotely piloted aircraft**

**Traficom**

Timetable

2021–2023

Deliverable

Threat scenarios have been addressed to a sufficient degree in safety assessments of operators using remotely piloted aircraft. The risk level of unmanned aviation is maintained at an acceptable level with Traficom's and stakeholders' actions.

Status

Actions in accordance with EU regulation have been implemented as of 1 January 2021.

### **SYS.DRONE.002, Safety promotion**

#### Action:

Traficom uses a number of channels to communicate information about safe operation to professionals and hobbyists. Traficom also updates and maintains the website [droneinfo.fi](http://droneinfo.fi) for drone operators to support safety promotion and the safe operation of drones and monitors the numbers of visitors of the website. Traficom publishes bulletins and newsletters for drone operators and, if necessary, organises events for drone operators. *The National Transport Safety Strategy* is being prepared at the Ministry of Transport and Communications. During the preparations, the aviation working group has also been addressing themes related to unmanned aviation and lack of knowledge of aviation regulations.

In its own role, Traficom also promotes U-space development in Finland and influences international regulatory work in accordance with action *SYS.DRONE.003, Influencing in international aviation*. Traficom participates in the EASA SPN working group, and coordinates associated European actions for promoting the safe operation of drones at the national level.

#### Objective of the action:

Reducing risks in unmanned aviation

#### Stakeholder responsible for implementation:

**Traficom**

#### Timetable

Continuous

#### Deliverable

Communications targeting customers on several platforms ([droneinfo.fi](http://droneinfo.fi), social media, bulletins, newsletters). Communications efforts have a strong emphasis on social media for the purpose of reaching young drone operators.

#### Status

Actions are progressing as planned

### **SYS.DRONE.003, Influencing in international aviation**

#### Action:

Traficom will exert influence on all key international forums that seek to develop the regulation on and safe operation of drones, including ICAO, EASA and the European Commission task forces.

#### Objective of the action:

Reducing the risks of unmanned aviation and streamlining international regulation

#### Stakeholder responsible for implementation:

**Traficom**

#### Timetable

2020–2023

#### Deliverable

Traficom will continue and maintain its position as an important and active influential participant on all the aforementioned forums.

Status

Traficom has a representative on the ICAO RPAS panel and in Europe for example in the NAARIC group (*National Aviation Authority Regulation Implementation Coordination*).

## Annex: List of actions by stakeholder groups

### Measures only assigned to Traficom (indirect impacts on aviation organisations)

- **NEW ACTION:** SYS.004.2, Aviation safety, security and cybersecurity occurrence reporting coordination mechanisms
- SYS.005.1, Safety promotion in relation to safety management systems (SMS)
- **NEW ACTION:** SYS.005.4, Safety promotion during recovery from the COVID-19 pandemic
- SYS.007.1, Assessment of safety management system (SMS) performance
- SYS.FOT.009.2, Resources and competence
- SYS.009.3, Cooperative oversight
- SYS.009.4, Performance- and risk-based operations management
- SYS.009.5, Fatigue Risk Management System (FRMS) utilisation and FRMS competence as part of risk management
- SYS.009.6, Strengthening competence in taking human factors and human performance into account in regulatory work
- SYS.009.7, PPL/LAPL learning objectives in the Meteorological Information part of the PPL/LAPL syllabus
- OPER.MAC.005.2, Loss of separation between civil and military aircraft (MAC)
- SYS.HECO.001, Collaboration forums for helicopter safety
- SYS.DRONE.002, Safety promotion
- SYS.DRONE.003, Influencing in international aviation

### Actions assigned to all stakeholders and Traficom:

- SYS.001.1, Finnish Aviation Safety Programme
- SYS.002.1, Finnish Plan for Aviation Safety
- SYS.003.1, Finnish aviation safety performance targets and indicators
- SYS.004.1, Finnish aviation safety risk management
- SYS.007.2, Management of change as part of safety management
- SYS.007.3, New business models
- SYS.008.1, Cybersecurity in aviation
- SYS.HECO.003, Development of a network of low-level IFR routes  
(implementation assigned to 'The operators using the network, procedure design organisations, air navigation service providers and Traficom, each from the perspective of their respective roles')

### Actions assigned to individual groups of aviation organisations and Traficom:

#### Language proficiency examiners

- SYS.005.2, Promoting safety through proficiency in and use of English in aviation
- SYS.005.3, Promoting safety through proficiency in and use of English in aviation

#### AIR organisations

- OPER.FIRE.007.1, Fire, smoke and fumes
- SYS.AIR.001, Airworthiness and maintenance safety (CAMO, AMO and CAO organisations)
- SYS.009.1, The oversight of Part-147 organisations (Part 147 organisations)

#### ATO organisations (aeroplanes and helicopters)

- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.CFIT.006.1, Controlled flight into terrain (CFIT)
- SYS.ATO.001, Safety of flight training

#### ATO organisations (aeroplanes)

- OPER.RE.002.1, Runway excursions (RE)
- OPER.RI.004.1, Runway incursions (RI)

#### ATO organisations (helicopters)

- SYS.HECO.002, Helicopter safety

#### ANS organisations

- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.RE.002.1, Runway excursions (RE)
- OPER.RWY.003.1, Local runway safety teams (LRST)
- OPER.RWY.003.2, Solutions to improve runway safety
- OPER.RI.004.1, Runway incursions (RI)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.MAC.005.3, Mid-air collisions (MAC) and SESAR solutions
- OPER.CFIT.006.1, Controlled flight into terrain (CFIT)

ADR organisations

- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.RE.002.1, Runway excursions (RE)
- OPER.RWY.003.1, Local runway safety teams (LRST)
- OPER.RWY.003.2, Solutions to improve runway safety
- OPER.RI.004.1, Runway incursions (RI)
- OPER.FIRE.007.1, Fire, smoke and fumes
- SYS.ADR.001, Airport safety

AOC organisations (aeroplanes and helicopters)

- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.CFIT.006.1, Controlled flight into terrain (CFIT)
- OPER.FIRE.007.1, Fire, smoke and fumes
- SYS.002.1, National FDM forum (operators producing FDM data)
- SYS.GH.001, Ground handling safety

AOC organisations (aeroplanes)

- OPER.RE.002.1, Runway excursions (RE)
- OPER.RI.004.1, Runway incursions (RI)
- SYS.CAT.001, Safety of commercial air transport

Commercial hot air balloon operators

- SYS.CAT.001, Safety of commercial air transport
- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.CFIT.006.1, Controlled flight into terrain (CFIT)
- OPER.FIRE.007.1, Fire, smoke and fumes

AOC organisations (helicopters)

- SYS.HECO.002, Helicopter safety

SPO organisations (aeroplanes and helicopters)

- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.CFIT.006.1, Controlled flight into terrain (CFIT)

SPO organisations (aeroplanes)

- OPER.RE.002.1, Runway excursions (RE)
- OPER.RI.004.1, Runway incursions (RI)

SPO organisations (helicopters)

- SYS.HECO.002, Helicopter safety

NCC organisations (aeroplanes)

- **NEW ACTION:** SYS.NCC.001, Safety of non-commercial operations with complex motor-powered aircraft
- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.RE.002.1, Runway excursions (RE)
- OPER.RI.004.1, Runway incursions (RI)
- OPER.MAC.005.1, Mid-air collisions (MAC)

GH organisations

- SYS.GH.001, Ground handling safety

RPAS organisations

- OPER.MAC.005.1, Mid-air collisions (MAC)
- SYS.DRONE.001, Risk management

Actions to be implemented collaboratively in the framework of the operating model of Finnish recreational aviation safety work by the stakeholders committed to the model: Traficom, Finavia, Fintraffic ANS, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)

- SYS.006.1, Just culture
- OPER.GA.001, Airspace infringements
- SYS.GA.002, Safety promotion in GA
- SYS.GA.003, Identification of the safety aspects of airspace complexity and changes therein and the utilisation of air traffic control in general aviation

Deleted actions

- OPER.RI.004.2, Runway incursions (RI) and EAPPRI

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