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

Finnish Plan for Aviation Safety 2020–2024

Finnish Aviation Safety Programme Annex 1

Traficom Publications

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Contents

Foreword

Safety and passenger confidence in the air transport system are key objectives in **Finnish aviation safety policy.**[1] The aviation safety programme, plan for aviation safety and safety performance indicators and targets are advanced safety management mechanisms at the national level. They help us respond to the challenges of the diverse aviation system and ensure that we can retain our high level of safety.

New technologies and operating and business models have many benefits, but they also bring new challenges and safety threats. Cybersecurity, drones, extreme weather events and numerous other themes within and outside the aviation system challenge the traditional approaches to ensuring safe operations. **Advanced safety management** requires **interaction and cooperation** among stakeholders, national authorities and EASA.[2] In this interaction, particular emphasis is placed on safety information, risk-based approaches, faster responses to identified safety threats and the strengths of the aviation system, which must be understood and safeguarded. Alongside regulation and oversight, it is also important to strengthen the tools of *safety promotion*.

This document is the **Finnish Plan for Aviation Safety**[3]. It describes the actions that Traficom and aviation stakeholders are required to take as part of national risk management efforts, the parties responsible for the actions and the timeframes for their implementation in 2020–2024.

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[1] The safety policy is discussed in chapter 1 of the Finnish Aviation Safety Programme (FASP).
[2] European Aviation Safety Agency EASA
[3] Finnish Aviation Safety Programme Annex 1

Finnish Plan for Aviation Safety, document version history

Date issued	Date valid	Valid
23.4.2020	23.4.2020	until further notice

Underlying international standards, recommendations and other documents:

Aviation Act 864/2014

Convention on International Civil Aviation, Annex 19 (Safety Management),

Global Aviation Safety Plan GASP 2020-2022 (ICAO Doc 10004)

EASA Regulation (EU) 2018/1139

The European Aviation Safety Programme

The European Plan for Aviation Safety (EPAS) 2020-2024

COM(2011) 144 White Paper – Roadmap to a Single European Transport Area

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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19/02/2018	4.0	Annual update based on EPAS 2018-2022 and Finnish Aviation Safety Risk Management
20/03/2019	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

Acronyms

EASA	European 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	Fatique Risk Management System
GASP	Global Aviation Safety Plan
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Air Line Pilots' Associations
JARUS	the Joint Authorities for Rulemaking on Unmanned Systems
RPAS	Remotely Piloted Aircraft System
SMICG	Safety Management International Collaboration Group
SMS	Safety Management System
SPAS	State Plan for Aviation Safety
SPI	Safety Performance Indicator
SPT	Safety Performance Target
SSP	State Safety Programme
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 forecasted before 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.

A **European Plan for Aviation Safety, EPAS**, has been published since 2011. The revised EASA Regulation (EU) 2018/1139, which entered into force in autumn 2018, contains obligations concerning the European Aviation Safety Programme and Plan as well as national aviation safety programmes and plans. These safety management obligations already apply to states under ICAO Annex 19.

The EPAS 2020-2024, published by EASA on 20 January 2020 is a comprehensive package of the strategic priorities and measures of aviation in Europe. At the same time, it is a review of the performance and future plans of European aviation. The strategic priorities of the EPAS are based on the Commission's Aviation Strategy[4] and the EASA strategic plan. In addition to safety, EPAS also takes into account objectives and measures to increase the environmental sustainability and fluency of air transport. Efforts have been made to harmonise the global work for maintaining and improving the performance of the air transport system. EPAS has strengthened the connection between the *Global Aviation Safety Plan GASP and Global Air Navigation Plan GANP published by ICAO*[5] and has taken into account regional plans and strategic papers, including: *The ATM Master Plan*[6]*, the Report of the Wise Persons Group on the future of the Single European Sky*[7] and the *Airspace Architecture Study — Proposal for the future architecture of the European airspace*[8]*.*

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

The content related to safety in the EPAS is produced as part of the EASA's *Safety Risk Management process (SRM*). Within the framework of its SRM process, the EASA coordinates the identification of key safety risks in European aviation, and the creation and maintenance of the European Safety Risk Portfolio. Through forums of the annual programming cycle, the Member States and aviation stakeholders can participate in and influence safety risk management in European aviation. Themes or measures can also be proposed for the EPAS directly at any time of year using the *Candidate Issue Identification form*[9]. The actions defined as the result of this process

[4] https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1552
[5] https://www4.icao.int/ganpportal
[6] https://www.atmmasterplan.eu/
[7] https://ec.europa.eu/transport/modes/air/news/2019-04-15-recommendations-on-air-traffic-management-in-europe_en
[8] https://www.sesarju.eu/node/3253
[9] https://www.easa.europa.eu/rulemaking-proposal-candidate-issue-identification-form

are published annually in the EPAS and implemented in a coordinated manner at the European level and nationally.

The actions contained in the 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 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 against it and changes in the system and operating environment, and ensure **that these are safety integrated to the aviation system in an anticipatory manner.**

Figure 1: Image by EASA: EPAS priorities and action categories

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.

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 the EASA, the European Commission, the Member States and various networks and teams that participate in the EASA's SRM process as well as various working groups owning the actions.

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

European Aviation Safety Programme and Safety Plan can be accessed at the EASA's safety management website and Traficom's aviation safety management website.

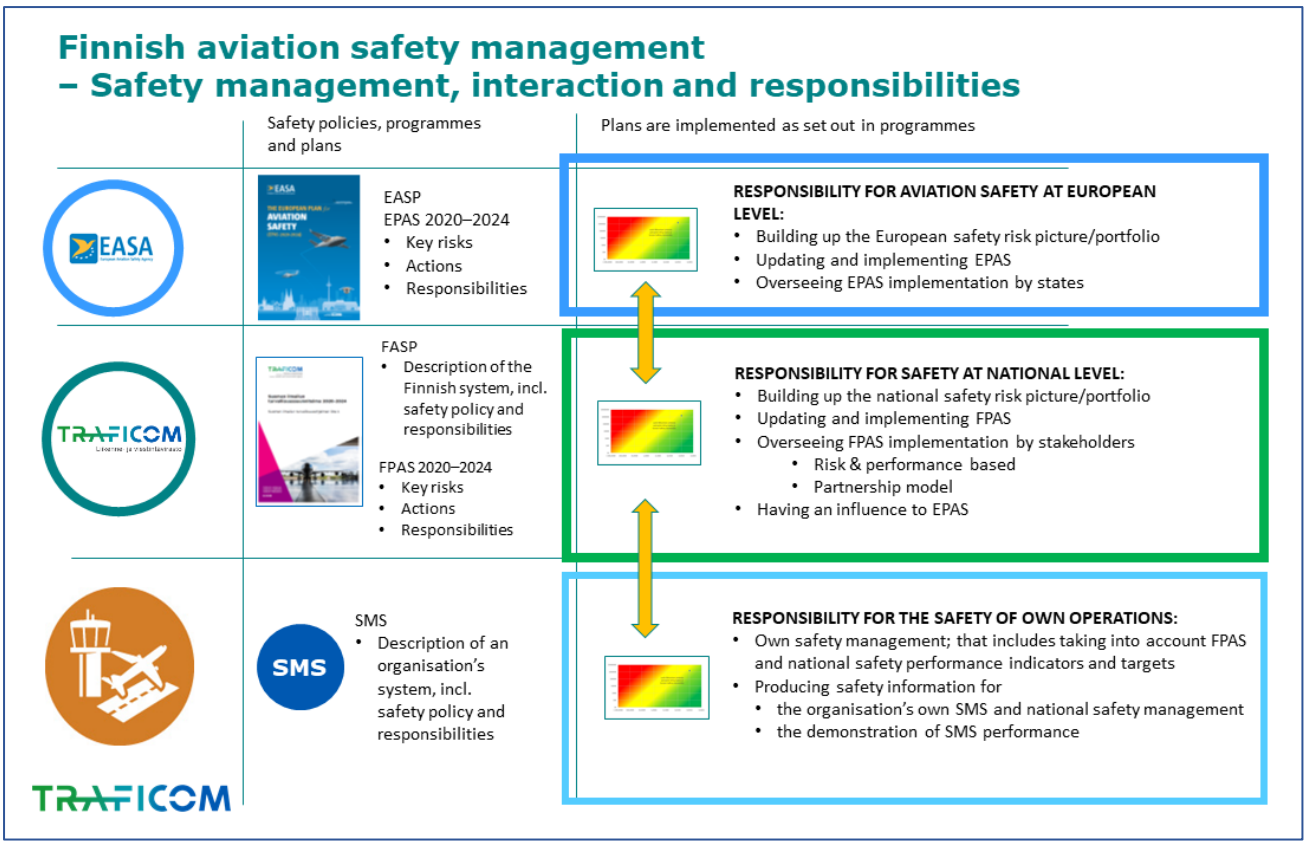


Figure 2: Roles and responsibilities in aviation safety management in Finland.

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.

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 aviation safety programme, taking into account the standards referred to in the Chicago Convention and the European Union Aviation Safety Programme.

Aviation operators shall consider the national aviation safety programme, as well as related objectives and follow-up, in their operations.

Each aviation stakeholder is responsible for the safety of its own operations. Organisations 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 oversight activities, Traficom assesses how organisations have addressed the actions described in FPAS and the threats relevant to them in their safety management.

The effectiveness of FPAS measures will be 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. FPAS can be accessed on Traficom's aviation safety management website.

2.2 Safety Plan structure

Actions described in Chapter 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, the schedule and the 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 the Member States. Some of the EPAS actions assigned to the 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 removed actions have also been included 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 entire aviation system. Systemic actions comprehensively improve the safety level of aviation in Finland. They also maintain and reinforce the actions and competence that have helped us reach the current level of safety.

Systemic themes do not necessarily have a direct, short-term link with individual occurrence, incident or accident. Systemic threats are background factors, either easily identifiable or latent. For example, they may be associated with shortcomings in processes, methods or operating cultures. 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 (see FASP, section 1). Key system-level elements are the state safety programmes (SSPs, including the FASP in Finland) and the organisations' *Safety Management Systems* (*SMS*).

3.1.1 SYS.001. Finnish Aviation Safety Programme

EPAS reference: MST.001: 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 FASP is assessed annually. The next update of the programme will be published during 2020. ICAO reviewed 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. Traficom continuously improves FASP and related national aviation safety work based on development proposals given in the assessment.

3.1.2 SYS.002. Finnish Plan for Aviation Safety

EPAS reference: MST.028: 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: FPAS implementation in their operations

Timetable
Continuous, annual updates

Deliverable
FPAS updated and published, actions implemented in practice

Status
First version was published on 20 December 2013, this document is the latest update. Traficom implements FPAS as described in 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.001: Member States to give priority to the work on SSPs and MST.028 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.

The 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 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: 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 update, version 5.0, was published on 17 October 2018 and became applicable on 1 January 2019. Traficom has been developing BI-based SPI monitoring and will integrate the revised performance indicators in its authority duties.

3.1.4 SYS.004. Finnish aviation safety risk management

EPAS reference: MST.001: Member States to give priority to the work on SSPs and MST.028: 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 the stakeholders. For the division of responsibilities, see FASP section 1.3.

Risk management for Finnish aviation consists of identifying threats and issues to be fostered, maintaining the risk pictures of aviation domains, determining the acceptable risk level, measures taken to maintain risks at an acceptable level and strengthen 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 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 to 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 this information, Traficom will target actions at the organisation. For a description of acceptable levels of safety performance, see FASP sections 3.2 and 3.3.

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 FASP section 2.6
Aviation organisations: Implementing safety risk management relevant to their operations, including the action described above

Timetable
Continuous
2020: Traficom maintains national risk pictures in cooperation with aviation organisations. During 2020, an aim is 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).

Deliverable
Finnish aviation safety risk management process is implemented

Status
The FASP process was introduced in Q3/2016 and has been phased in since then. National aviation risk pictures are created and updated in 14 aviation domains. Aviation organisations have been engaged in this cooperation.

3.1.5 SYS.005. Safety promotion

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

EPAS reference: MST.002: Promotion of SMS

Action:
Traficom raises safety awareness as part of its official 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 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), produced by 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 will also be compiled on the website.

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 FASP section 4.2, External training and sharing of safety information
2020: Compiling safety management instructions useful for the stakeholders on the new Traficom website

Deliverable
Sharing and using best practices

Status
Continuous implementation in line with the principles of FASP section 4.2, *External training and sharing of safety information*

NEW ACTION: SYS.005.2, Promoting safety through proficiency in and use of English in aviation

EPAS reference: SPT.105: 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 on the significance of their work and among organisations and individuals on 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
Annual refresher training sessions. 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
Annual refresher training sessions

NEW ACTION: SYS.005.3, Promoting safety through proficiency in and use of English in aviation

EPAS reference: MST.033 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 on the significance of their work and among organisations and individuals on the significance of language proficiency issues in relation to safety

Stakeholder responsible for implementation:
Traficom and aviation language proficiency examiners where relevant

Timetable
Continuous
Annual refresher training sessions. 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
Annual refresher training sessions

3.1.6 SYS.006. Just Culture

SYS.006.1, Just culture

MST.027: 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 authority.

Finnish Aviation Safety Programme (FASP) section 2.5.3, *Confidentiality of occurrence information and Just 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 sport aviation:
The recreational aviation safety project in 2015 built safety information analyzing cooperation between Traficom, SIL and SMLL on the analysis of . This cooperation has been further developed and is one way to maintain and strengthen a 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 developed. Particular areas of development include the quality and immediacy of feedback on reporting.

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 of Finnish recreational aviation safety work: Traficom, Finavia, ANS Finland, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)**

Timetable
Continuous
2019-2020: guidance material on just culture and safety culture
2020: event/ seminar on just culture - safety culture

Deliverable
Cooperation promoting a good reporting and safety culture

Status
Progressing as planned

3.1.7 SYS.007. Safety management systems (SMS)

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

EPAS reference: MST.026: 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.

Target levels will be 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 will decide on the need for action (e.g. oversight, safety promotion).

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

Objective of the action:
Using the results of and developing performance-based oversight in Traficom and harmonising the assessment criteria for SMS audit practices between Member States

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 the OPS, ATO and GH oversight, and the results of the assessment lay the foundation for the organisation's profile and risk-based oversight. Expanding the use of the tool to also cover the activities of ADR, ANS, AIR, PART and AeMC organisations is 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.

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. As Traficom assessed the impact and effectiveness of the organisations' 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 a change and the associated safety risk management. The organisations must ensure that:

- organisation has an appropriate MoC procedure, including required personnel training
- organisation identifies 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 MoC procedure is subject to an internal audit as part of the SMS system
- the performance of MoC procedure can be verified.

As part of oversight activities, Traficom assess the performance of the organisations' SMS MoC functions and internal audits.

Objective of the action:
Ensuring that aviation organisations 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
2019-2020

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

Deliverable
The organisations have MoC procedures with a high effectiveness, and the effectivity of their procedures 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.019: 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 will also use 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.

Objective of the action:
Identifying threats related to new business models and assessing and reducing their risks.

Stakeholder responsible for implementation:
Traficom
Aviation organisations (AOC, ATO)

Timetable
2019-2023

Deliverable
Oversight action: discussion

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

3.1.8 SYS.008. Cybersecurity in aviation

SYS.008.1, Cybersecurity in aviation

EPAS reference: No EPAS reference. The EPAS reference in the previous version of FPAS, action SPT.071: Strategy for cybersecurity in aviation completed. National action will be continued to maintain and develop cybersecurity in Finnish aviation.

Background:
International cyber regulation in aviation is developed risk and performance based. The management of cyber risks, in the operational environment with aviation safety impact, 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[10] and ESCP strategies[11] as well as Finland's Cyber Security Strategy[12] and fulfils the international and national obligations set for cybersecurity in aviation.

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

Stakeholders must ensure the identification of cybersecurity threats and the management the 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 FASP, Security Programme and risk picture/portfolio in terms of cybersecurity
Continuous: Stakeholders: Identifying cybersecurity threats and managing the risks caused by them

Deliverable
- Cybersecurity included in 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

2020: Finalisation of the Finnish aviation cybersecurity risk picture/portfolio 1.0 launched in 2018 and completed in cooperation with strategic stakeholders, and the implementation of key actions for managing cybersecurity in aviation

Ensuring the management of information security related to aviation by strategic stakeholders

2021-2024: 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

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

[10] https://www.icao.int/cybersecurity/Pages/Cybersecurity-Strategy.aspx
[11] https://www.easa.europa.eu/sites/default/files/dfu/Cybersecurity%20Strategy%20-%20First%20Issue%20-%2010%20September%202019.pdf
[12] https://turvallisuuskomitea.fi/suomen-kyberturvallisuusstrategia-2019/

NEW ACTION: SYS.009.1, The oversight of Part-147 organisations

EPAS reference: MST.035: 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 the Finnish Part 147 organisations. Examinations 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
The stakeholders have a safe, operational and reliable Part 147 examination system

Status
New action

SYS.FOT.009.2, Resources and competence

EPAS reference: MST.032: 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 that the aviation authority has the resources and expertise required for its official duties. This will be supported by continuous training and international cooperation.

Resource needs will be regularly 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.032: 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.032: 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 maintaining and further developing performance- and risk-based operations management based on the principles of continuous improvement.

In 2019-2020:
Traficom will define the objectives, areas and contents of its partnership activities. After this, Traficom will implement the partnership model in its official duties. Traficom will provide aviation stakeholders with information on the partnership model and will develop it further in cooperation with stakeholders.

Traficom will commission a follow-up survey on safety culture (TUKU II). The aim of the survey is to contribute to ensuring that the risk- and performance-based model is efficient and effective. The action concerns all aviation domains that used the RISTO model during the TUKU I survey (OPS, ADR, ANS, ATO and CAMO).

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
2019-2020

Deliverable
Performance and risk-based operations management.

Status
The 2018 actions have been completed and their outcomes are being implemented. The 2019–2020 actions are under way.

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

EPAS reference: MST.034: 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 performance and efficiency of organisations' FRMS systems. Increasing cooperation and harmonisation between EASA Member States with regard to FRMS.

Stakeholder responsible for implementation:
Traficom

Timetable
2020-2022

Deliverable
Creating an EASA-level FRMS tool and including this assessment as part of the organisation's profile.

Status
New action
The pilot version of the FRMS assessment tool is in test use. Further development of the tool to be used as part of the organisations’ management system asessment and its inclusion in the organisation profile is currently ongoing.

3.2 Operational issues

Operational issues, introduction

Operational themes are more directly linked with the actions of an individual person, organisation or operational area or with environmental factors, including for example weather events. At 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 data from flight safety and occurrence 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 seriousness of their consequences.

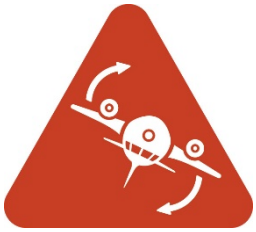
For information on the safety situation of Finnish aviation, see Traficom's Liikennefakta website (in Finnish).

Among other aspects, EPAS requires national safety plans to include threats identified at 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)
- Ground safety
- Controlled flight into terrain (CFIT)(CFIT data on the Liikennefakta website)
- Fire, smoke and fumes
- Airspace infringement (AI) (AI data on the Liikennefakta website)

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

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety



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

Action:
Loss of control in flight (LOC-I) threat and its 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. 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, operators 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 (AOC, SPO, ATO, 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.028: Member States to establish and maintain a State Plan for Aviation Safety

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.

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, operators must
- assess risks in their own operations
- define 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 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), 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.028: 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 airports has been assessed

Status
An LRST is operating at EFHK, other airports have safety and quality groups (TLR) and a safety committee. Traficom is involved in EFHK's LRST and processes subject matter with the stakeholders as part of oversight.

OPER.RWY.003.2, Solutions to improve runway safety

EPAS reference: MST.029: Implementation of SESAR runway safety solutions

Action:
Traficom contacts airport operators and air navigation service providers to assess which runway safety solutions identified in the SESAR project have already been taken in use in Finland. It will also assess 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)

Timetable
2019: First contacts with stakeholders and completing the EAPPRI action (*see OPER.RI.004.2, Runway incursions (RI) and EAPPRI)*
2020: Assessing the scope of implementation and the introduction of the solutions to be implemented

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.028: Member States to establish and maintain a State Plan for Aviation Safety

OPER.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.

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 stakeholders have addressed and processed RI threats.

To process RI threats as part of their safety management, operators 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), 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 operators' safety management

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

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

No separate EPAS reference. In EPAS 2018-2022, the MST.014 action required the following: RIs should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness. MS should implement actions suggested by the European Action Plan for the Prevention of Runway Incursions (EAPPRI)."

Action:
Traficom processes the recommendations of EAPPRI version 3.0 (*European Action Plan for the Prevention of Runway Incursions*)published in November 2017 and implements them in cooperation with aviation industry organisations and service providers.

Objective of the action:
Ensuring that the recommendations of the updated EAPPRI are implemented in Finland as far as possible

Stakeholder responsible for implementation:
Traficom
Aviation organisations (AOC/aeroplanes, ATO/aeroplanes, ANS, ADR)

Timetable
2018-2020

Deliverable
EAPPRI recommendations have been implemented as far as possible.

Status
Actions in previous EAPPRI versions have been addressed and implemented where applicable. A survey related to the addressing of version 3.0 was sent to stakeholders in 2018. The responses obtained from the stakeholders have been reviewed at Traficom and further processing of this matter with the stakeholders is ongoing.

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

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety

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

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

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

To process MAC threats as part of their safety management, operators 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, 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.024: Loss of separation between civil and military aircraft

Action:

In collaboration with ICAO, Finland has convened a working group (*Ad-hoc civil military expert group on flight safety over Baltic sea*). The group includes 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 which may, if necessary, address issues related to the coordination of civil and military aviation in the Baltic Sea region. Finland has announced its readyness to continue organising meetings on this theme, should this be considered necessary.

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 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 readyness to facilitate further work, should the parties see this necessary. Finland actively monitors the coordination of civil and military aviation, 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.030: 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 will also assess 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

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

Status
Ongoing

3.2.6 OPER.006. Ground safety

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety. (EPAS 2018-2022 determined Ground Safety as a theme that must be integrated into the national security programme and defined Ground Safety as follows: "This risk area includes all ground-handling and apron management-related issues (aircraft loading, de-icing, refuelling, ground damage etc.) as well as collision of the aircraft with other aircraft, obstacles or vehicles while the aircraft is moving on the ground, either under its own power or being towed…").

OPER.006.1, Ground safety

Action:
Threats to ground handling and apron management and their identified causal factors have been included in the Finnish aviation safety performance indicators and targets (FASP Annex 2). Stakeholders must address these threats in their safety management and take action to reduce the risk.

Traficom monitors number and risk level of ground safety events, defines required actions as part of the Finnish aviation safety risk management and monitors the way in which stakeholders have addressed and processed the threats related to ground handling and apron management.

To process the ground safety threats as part of their safety management, operators 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 the risks associated with ground safety

Stakeholder responsible for implementation:
Traficom: As regards Finnish aviation safety risk management (FASP 2.6) and oversight (FASP 3.0)
Aviation organisations (AOC, GH, ANS, ADR): Addressing of threats to ground safety in their operations

Timetable
Continuous

Deliverable
Ground handling and apron management threats and the related 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.

3.2.7 OPER.007. Controlled flight into terrain (CFIT)

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety

OPER.CFIT.007.1, Controlled flight into terrain (CFIT)

Action:
Controlled flight into terrain (CFIT) threat and its 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 risk.

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

To process CFIT threats as part of their safety management, operators 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 threat 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

3.2.8 OPER.008. Fire, smoke and fumes

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety

OPER.FIRE.008.1, 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). The

stakeholders must address these threats in their safety management and take action to reduce the risk.

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, operators 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 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): Addressing 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 the EPAS (EPAS reference given) and/or the results of the Finnish aviation safety risk management process. A paragraph 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 safety risk level in a relevant domain of Finnish aviation industry. Results of this assessment do not indicate 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 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.015: 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).

At the European level, Traficom promotes helicopter safety by participating in the activities of the EASAn ESPN-R-(*European Safety Promotion Network – Rotorcraft*). Traficom also participates in the annual EASA Rotorcraft Symposium, is an observer on EASA's R.COM committee, and participates in the EASA Helicopter Expert Group (HEG) activities. Traficom on 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 European level to Finnish helicopter operators.

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 under way

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 (F*ASP 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 priorities of oversight and promotes their use by means of safety promotion (*FASP chapter 4.2*).

Objective of the action:
Implementing the 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 results have been processed in connection with Traficom's oversight. The SOP theme is included as part of safetypromotion.

Status
Implementation under way

NEW ACTION: SYS.HECO.003, Development of a network of low-level IFR routes

EPAS reference: MST.031: Implementation of SESAR solutions aiming to facilitate safe IFR operations (NB: the action has been included in a previous version of EPAS but has now also been included in the FPAS)

Action:
Comprehensive assessment of the prerequisites and need for the implementation of a network of low-level IFR routesin 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 2021

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 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 operational level in the national safety risk picture continue to be as follows:

- runway conditions and maintenance at airports in Northern Finland, especially with 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 systemic level, the key scenarios continue to be as follows:

- shortcomings in airport maintenance`s reporting
- 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 disseminating information about local conditions.

Action:
Airport operators must address the above key scenarios identified at national level 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 audit priorities.

Objective of the action:
Implementing Finnish aviation safety risk management in 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
2019-2021

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

Status
Implementation is ongoing with regard to oversight. Traficom, in cooperation with Finavia and ANS Finland, 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 IFALPA Safety bulletin website.

3.3.3 Safety of flight training

SYS.ATO.001, Safety of flight training

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

Action:
Flight training organisations must address the aforementioned key scenario identified at national level 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 scenario in its oversight plan as one of the audit priorities.

Objective of the action:
Implementing Finnish aviation safety risk management in 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
2019-2021

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

Status
Implementation under way

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 was 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 under way.

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

- shortcomings in organisations' management of change (MoC)
- shortcomings in organisations' determination and utilisation of a fatigue risk management system (FRMS)

Action:
Commercial air transport organisations must address the aforementioned scenarios identified at national level 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 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*.

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 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)
Traficom

Timetable
2019-2021

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

Status
Implementation under way

SYS.CAT.002. Flight data monitoring (FDM)

SYS.CAT.002.1, National FDM forum

EPAS reference: MST.003: 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 the EASA 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 twice a year.

SYS.CAT.002.2, FDM use in performance monitoring

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

Action:
As part of their safety management, operators producing FDM data assess issues indicated by the nationally specified safety performance indicators (SPIs) that can be monitored through FDM system. Traficom ensures the implementation of this action as part of oversight activities. National SPIs monitored using FDM system also form a FDM status report (template) discussed in the national FDM forum.

Objective of the action:
Stakeholders have assessed the suitability of the national SPIs for their operations and included them in their FDM programmes where applicable.

Stakeholder responsible for implementation:
Traficom
Operators producing FDM data

Timetable
Continuous

Deliverable
The SPI data relevant for an operator has been taken into account in FDM system to the extent that this data can be derived from FDM data.

Status
Traficom ensures the implementation of this action as part of oversight activities and takes the issue into consideration in connection with management system auditing.

3.3.5 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 apron.

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

- a subcontractor operates incorrectly but the organisation acquiring the service does not have capability to make sure the safety of 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

Action:
Organisations must process the aforementioned key ground handling scenarios identified at national level 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 specifies a concept for the authorities' work in ground handling, allocates resources and ensures the competence of the resources. 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

Objective of the action:
Implementing Finnish aviation safety risk management in 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
2018-2021

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's oversight concept has been developed and implemented.

Status
A study on ground handling with respect to the authority's obligations laid down in the new Basic Regulation was completed in December 2018. Traficom has determined a concept for the oversight of GH based on the study, and implements oversight based on the concept. Traficom is a member of EASA's GH-CAG.

3.3.6 Airworthiness and maintenance safety

SYS.AIR.001, Airworthiness and maintenance safety

Two scenarios at the systemic level were identified as key scenarios in national safety risk picture in 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:
Continuing airworthiness management organisations (CAMO) and maintenance organisations (AMO) must address the aforementioned key scenarios identified at national level in respect of their own operations, define an acceptable level of safety and, if necessary, take action to reduce risks to an acceptable level. This requirement only concerns the organisations responsible for the maintenance or management of aircraft used in commercial operations (AOC).

Traficom includes the scenarios in oversight plan.

Objective of the action:
Implementing Finnish aviation safety risk management in 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 and AMO organisations responsible for the maintenance or airworthiness of aircraft used in commercial operations
Traficom

Timetable
2019-2021

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

Status
Implementation under way

3.3.7 General aviation safety

General aviation refers to all other manned aviation apart from commercial air transport and aerial work. At the European level, **preventing mid-air collisions** (MAC), **coping with weather, control of aircraft** (preventing loss of control, or LOC-I events) and

managing the flight remained key areas for actions to improve safety.

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 addition to Traficom, Finavia, ANS Finland, 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 Lentoon!* seminar that those stakeholders organise together each year.

OPER.GA.001, Airspace infringements

EPAS reference: MST.028: Member States to establish and maintain a State Plan for Aviation Safety

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.

Objective of the action:
Reducing AI and MAC risks

Stakeholder responsible for implementation:
Stakeholders committed to the operating model of Finnish recreational aviation safety work: Traficom, Finavia, ANS Finland, 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 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.025: 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.

In 2020, key themes continue to include operations at uncontrolled aerodromes and reporting. The operating model has identified that, as the focus in general aviation is shifting towards increasingly diverse uncontrolled aerodromes, it is important to keep highlighting these operations as a theme. The Aviation Regulation OPS M1-6 enables IFR flight operations from uncontrolled airports. The implementation of the regulation will begin in 2020. In terms of reporting, it was also considered necessary to continue with the previous year's theme as the implementation of Club-SMS launched by Finnish Aeronautical Association has just been started. This creates an opportunity to lower the reporting threshold and develop a feedback system covering a large part of Finnish recreational aviation. For more information on the matter, please see action *SYS.006.1*, Just culture, which is a response to EPAS action *MST.027, Develop just culture in GA*. In FPAS, the scope of the action has been extended to cover all aviation domains.

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 of Finnish recreational aviation safety work: Traficom, Finavia, ANS Finland, Finnish Meteorological Institute, Finnish Aeronautical Association (SIL) and AOPA Finland (SMLL)

Timetable
Continuous

Deliverable
Effective, risk-based safety promotion

Status
Progressing as planned.

SYS.GA.003 Using air traffic control services in general aviation

No EPAS reference. Previous EPAS reference for the action: FOT.010: Service provision to GA flights has been removed from the EPAS update. However, the action has been kept in the FPAS based on national assessment.

Action:
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 Operating model co-operation group for Finnish recreational aviation safety work, Traficom seeks to identify ways to reduce MAC and AI risks, including best practices for encouraging operators in general and recreational aviation to use 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 and GA.COM/ TeB
Co-operation group on the Operating model of Finnish recreational aviation safety work

Timetable
Continuous

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

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

Work on the theme has also been started in the co-operation group on the Operating model of Finnish recreational aviation safety work.

3.3.8 Safety of unmanned aviation (Drones)

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

SYS.DRONE.001, Risk management

At operational level, the following have emerged as key scenarios of the national safety risk picture in unmanned aviation (UAS/RPAS/Drones) domain:

- operation close to airports and heliports, and in this context, collisions between unmanned and manned aircraft (as a highly critical area was identified collision between an unmanned aircraft and a helicopter)
- loss of control of an unmanned aircraft, especially above a crowd
- loss of control link of an unmanned aircraft.

For these scenarios, improving the knowledge and skills of the pilots/operators of unmanned aircraft was considered an effective action. At systemic level, the following key scenarios were identified:

- lack of knowledge of regulations
- incoherent operating culture of a new domain
- incorrect attitudes.

An example of the need to provide more information is a complete change in the regulatory basis to EU regulation and a change in the division of operations; for example, aerial work is eliminated as a definition under UAS operations and replaced with categories "open" and "special".

Action:
EU regulation has been constructed to use a risk-based approach. It includes stakeholder's personal responsibility for risk management; stakeholders assess the risks of their operations and plan the measures required to keep these under control. Traficom addresses those risk assessments and oversees the stakeholders using a risk-based approach. 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
2019-2023

Deliverable
Threat scenarios have been addressed to a sufficient degree in safety assessments of operators using remotely piloted aircraft.

Status
Actions are planned in connection with the implementation of EU regulation, and actions in accordance with EU regulation will be implemented as of 1 July 2020.

SYS.DRONE.002, Safety promotion

Action:
Traficom uses a number of channels to communicate information about safe operation to professionals and hobbyists. Traficom also maintains the website droneinfo.fi for drone operators to support safety promotion and the safe operation of drones. Traficom disseminates information on the obligations laid down in the regulation OPS M1-32, produces guidance material and actively participates in different stakeholder events. 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*.

Objective of the action:
Reducing risks of unmanned aviation

Stakeholder responsible for implementation:
Traficom

Timetable
Targeted information through newsletters and events in 2020-2021
Droneinfo: updating the website content in 2020-2021
U-Space: Traficom promotes U-Space development in Finland by supporting GOF U-Space project in 2020

Deliverable
Information provision: Increasing awareness of statutes, regulations and safe operation.
Droneinfo.fi: A channel where stakeholders can access information.
U-Space: GOF U-Space project gives valuable experience to support the development of the system, promote digital transformation in aviation and serve as a basis for international regulation.

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, JARUS, 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 ICAO RPAS panel, JARUS plenary and European Commission task forces, such as U-Space

Annex: List of actions by stakeholder groups

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

- SYS.005.1, Safety promotion in relation to safety management systems (SMS)
- 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
- NEW ACTION: SYS.009.5, Fatigue Risk Management System (FRMS) utilisation and FRMS competence as part of risk management
- 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.008.1, Cybersecurity in aviation
- NEW ACTION: 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 perspective of their respective roles*")

Actions assigned to individual groups of aviation organisation and Traficom:

Language proficiency examiners

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

AIR organisations

- OPER.FIRE.008.1, Fire, smoke and fumes
- SYS.AIR.001, Airworthiness and maintenance safety
- NEW ACTION: SYS.009.1, The oversight of Part-147 organisations

ATO organisations (aeroplanes and helicopters)

- SYS.007.3, New business models
- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.CFIT.007.1, Controlled flight into terrain (CFIT)
- SYS.ATO.001, Safety of flight training

ATO organisations (aeroplanes)

- OPER.RE.002.1, Runway excursions (RE)
- OPER.004.1, Runway incursions (RI)
- OPER.RI.004.2, Runway incursions (RI) and EAPPRI

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.004.1, Runway incursions (RI)
- OPER.RI.004.2, Runway incursions (RI) and EAPPRI
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.MAC.005.3, Mid-air collisions (MAC) and SESAR solutions
- OPER.006.1, Ground safety
- OPER.CFIT.007.1, 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.004.1, Runway incursions (RI)
- OPER.RI.004.2, Runway incursions (RI) and EAPPRI
- OPER.006.1, Ground safety
- SYS.ADR.001, Airport safety

AOC organisations (aeroplanes and helicopters)

- SYS.007.3, New business models
- OPER.LOC.001.1, Loss of control in flight (LOC-I)
- OPER.MAC.005.1, Mid-air collisions (MAC)
- OPER.006.1, Ground safety
- OPER.CFIT.007.1, Controlled flight into terrain (CFIT)
- OPER.FIRE.008.1, Fire, smoke and fumes
- SYS.002.1, National FDM forum (operators producing FDM data)
- SYS.CAT.002.2, FDM use in performance monitoring (operators producing FDM data)
- SYS.GH.001, Ground handling safety

AOC organisations (aeroplanes)

- OPER.RE.002.1, Runway excursions (RE)
- OPER.004.1, Runway incursions (RI)
- OPER.RI.004.2, Runway incursions (RI) and EAPPRI
- SYS.CAT.001, Safety of commercial air transport

AOC & ATO 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.007.1, Controlled flight into terrain (CFIT)

SPO organisations (aeroplanes)

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

SPO organisations (helicopters)

- SYS.HECO.002, Helicopter safety

GH organisations

- OPER.006.1, Ground safety
- 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, ANS Finland, 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, Using air traffic control services in general aviation

Deleted actions

- SYS.NBM.011.2, Safety Culture
- SYS.NPST.011.3, Radar systems