

Implementacija Sustava upravljanja sigurnošću (Safety Management System - SMS)

Naredba o zrakoplovnoj sigurnosti ASO-2010-004

Broj revizije: 4 / 25.11.2016.

Pokretač: Hrvatska agencija za civilno zrakoplovstvo (u daljnjem tekstu: HACZ)

Područje primjene:

Ova Naredba o zrakoplovnoj sigurnosti (u daljnjem tekstu: Naredba) primjenjuje se na one pružatelje usluga za koje primjenjivim EU uredbama nije propisana obveza uspostave Sustava upravljanja sigurnošću (u daljnjem tekstu: SMS).

U smislu ove Naredbe pojam „pružatelj usluga“ označava bilo koju organizaciju koja pruža usluge u zračnom prometu, a navedena je u Dodatku 3 ove Naredbe.

Do stupanja na snagu EU zahtjeva koji definiraju obvezu uspostave i održavanja SMS, smatra se da je obveza uspostave SMS za sljedeće pružatelje usluga definirana ovom Naredbom:

- a) Operatori certificiranih aerodroma;
- b) Operatori zrakoplova koji izvode komercijalne operacije koje nisu komercijalni zračni prijevoz (CAT);
- c) Operator zrakoplova koji izvode CAT operacije avionima klase performanse B ili nekompleksnim helikopterima, koje započinju i završavaju na istom aerodromu/istoj operativnoj površini;
- d) Part M G (CAMO) organizacije koji su ovlaštene za vođenje kontinuirane plovidbenosti kompleksnih zrakoplova na motorni pogon (CMPA);
- e) Organizacije odobrene u skladu sa Part 145 koje pružaju usluge operatorima zrakoplova koji se koriste u CAT operacijama.

HACZ je nadležna za prihvaćanje i nadzor SMS-a pružatelja usluga.

Part M i Part 145 koje nisu obuhvaćene ovom Naredbom pozvane su da na dobrovoljnoj osnovi, a u cilju podizanja razine sigurnosti implementiraju primjenjive SMS zahtjeve.

Implementation of Safety Management Systems (SMS)

Air Safety Order ASO-2010-004

Revision No. 4 / 25.11.2016.

Initiated by: Croatian Civil Aviation Agency (hereinafter: CCAA)

Applicability:

This Air Safety Order (hereinafter: Order) is applicable those service providers for which obligation to establish an Safety Management System (hereinafter: SMS) is not defined in applicable EU regulations.

Within the context of this Order the term “service provider” refers to any organization providing aviation services listed in Appendix 3 of this Order.

Until the entry into force of the EU requirements that define the obligation of establishing and maintaining SMS, it is considered that the obligation to establish an SMS to the following service providers is defined by this Order:

- a) Operators of certified aerodromes;
- b) Operators of aircraft used in commercial operations other than commercial air transport (CAT);
- c) Operators engaged in CAT operations starting and ending at the same aerodrome/operating site with Performance class B aeroplanes or non-complex helicopters;
- d) Part M G (CAMO) organizations managing the continuing airworthiness of complex motor-powered aircraft (CMPA);
- e) Part 145 organization providing services to operators of aircraft engaged CAT operations.

The CCAA is competent for the acceptance and oversight of the service provider's SMS.

Part M and Part 145 not covered with this Order are invited to implement applicable SMS requirements on a voluntary basis, in order to raise the level of safety of their operations.

Referentni propisi:

Zakon o zračnom prometu (Narodne novine, broj 69/09, 84/11, 54/13, 127/13 i 92/14), članci 56. & 57.;

Provedbena Uredba Komisije (EU) 1035/2011 o utvrđivanju zajedničkih zahtjeva za pružanje usluga u zračnoj plovidbi;

Uredba Komisije (EU) 1178/2011 o utvrđivanju tehničkih zahtjeva i administrativnih postupaka vezano za članove posade zrakoplova u civilnom zrakoplovstvu;

Uredba Komisije (EU) 965/2012 o utvrđivanju tehničkih zahtjeva i upravnih postupaka u vezi s letačkim operacijama;

Uredba Komisije (EU) 139/2014 o utvrđivanju zahtjeva i administrativnih postupaka u vezi s aerodromima;

Uredba Komisije (EU) 2015/340 o utvrđivanju tehničkih zahtjeva i administrativnih postupaka koji se odnose na dozvole i certifikate kontrolora zračnog prometa.

Uključenje SMS zahtjeva u europski zrakoplovni sustav je u tijeku. Ova Naredba uzima u obzir EU zahtjeve za Sustav upravljanja sigurnošću koji su trenutno objavljeni ili u izradi.

Referentni ICAO standardi i smjernice:

ICAO Aneks 19 – Upravljanje sigurnošću

ICAO Doc 9859, Sustav upravljanja sigurnošću (SMM)

Svrha:

Svrha ove Naredbe je pružateljima usluga dati okvir za implementaciju SMS-a koji mora biti primjeren veličini, prirodi i kompleksnosti operacija/aktivnosti koje su ovlaštene provoditi u sklopu svoga certifikata, kao i opasnostima i rizicima sigurnosti vezanim uz operacije/aktivnosti svoje organizacije. Naredba je definirana na način da osigura temeljne informacije o konceptu SMS-a i uspostavi politike i procese upravljanja.

Uvod

Formalna uspostava SMS-a je jasno definirana ICAO standardima i europskim uredbama. Odredbe Zakona o zračnom prometu definiraju SMS kao temelj politike

Regulation Reference:

Air Traffic Act (Official Gazette, No. 69/09, 84/11, 54/13, 127/13 and 92/14), Articles 56. & 57.

Commission Implementing Regulation (EU) No 1035/2011 laying down common requirements for the provision of air navigation services;

Commission Regulation (EU) 1178/2011 laying down technical requirements and administrative procedures related to civil aviation aircrew;

Commission Regulation (EU) 965/2012 laying down technical requirements and administrative procedures related to air operations;

Commission Regulation (EU) No 139/2014 laying down requirements and administrative procedures related to aerodromes;

Commission Regulation (EU) 2015/340 laying down technical requirements and administrative procedures relating to air traffic controllers licences and certificates.

The inclusion of SMS requirements in the European aviation system is still in process. This Order takes into account published and developing EU Implementing Rules (IR) on Management Systems.

ICAO Reference:

ICAO Annex 19 – Safety Management

ICAO Doc 9859, Safety Management Manual (SMM)

Purpose:

The purpose of this Order is to provide framework for service providers on implementation of SMS that is appropriate to the size, nature and complexity of the operations/activities authorized to be conducted under its certificate and the safety hazards and risks related to the operations. The Order is designed to give the reader basic information on SMS concepts and the development of management policies and processes.

Introduction

Formal introduction of SMS is clearly found in the ICAO standards and EU regulations. Provisions of Air Traffic Act

zrakoplovne sigurnosti, a SMS sustav se dodatno razrađuje ovom naredbom.

Ova Naredba daje svim uključenim strankama temeljna načela i pojašnjenja SMS plana implementacije. Svrha Naredbe nije detaljno razložiti svaku stavku SMS-a, već dati opći pregled postojećih zahtjeva, predstaviti pristup implementaciji SMS-a i objasniti neke osnovne obvezne korake. Dodatne informacije, specifične za pojedine djelatnosti, osigurati će se kada se za to ukaže potreba.

Opće smjernice

SMS je organizirani pristup upravljanja sigurnošću koji uključuje odgovarajuću organizacijsku strukturu, sustav odgovornosti, politiku i procedure.

Važno je prepoznati da je SMS sustav koji se uspostavlja „od vrha prema dolje“, što znači da je rukovoditelj organizacije odgovoran za implementaciju i kontinuirano udovoljavanje zahtjevima SMS-a. SMS neće biti efektivan bez pune potpore odgovornog rukovoditelja.

Ne postoji jedan SMS model koji pristaje svim tipovima i veličinama organizacija pružatelja usluga. Složeni SMS sustavi u većini slučajeva nisu odgovarajući za male pružatelje usluga, te bi takve organizacije trebale prilagoditi SMS veličini, prirodi i kompleksnosti svojih aktivnosti i u skladu s tim osigurati potrebne resurse.

SMS okvir

ICAO je dokumentom ICAO Doc 9859 – Sustav upravljanja sigurnošću definirao okvir za uspostavu SMS pružatelja usluga koji uključuje 4 komponente (12 elemenata) navedenih u daljnjem tekstu:

1. Politika i ciljevi sigurnosti
 - 1.1 Opredijeljenost rukovodstva
 - 1.2 Odgovornost i krajnja odgovornost za sigurnost
 - 1.3 Imenovanje ključnog osoblja za sigurnost
 - 1.4 Koordinacija planiranja postupaka u slučaju opasnosti
 - 1.5 SMS dokumentacija
2. Upravljanje rizicima sigurnosti
 - 2.1 Identifikacija opasnosti
 - 2.2 Procjena i ublažavanje rizika sigurnosti
3. Osiguranje sigurnosti
 - 3.1 Praćenje i mjerenje performansi sigurnosti
 - 3.2 Upravljanje promjenama

declares SMS as a cornerstone of the aviation safety policy which is further elaborated by this Order.

This Order is intended to provide all affected parties with an initial background and understanding of the SMS implementation plan. It is not intended to provide all details for SMS implementation, but rather a general overview of the requirements, approach to be taken and some basic mandatory actions. Further, domain specific, information and guidance will be provided as the need arises.

General Considerations

A SMS is an organized approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

It is important to recognise that SMS is a top down driven systems, which means that the Accountable Manager of the organisation is responsible for the implementation and continuing compliance with the SMS. Without the full support of the Accountable Manager SMS will not be effective.

There is no ‘one size fits all’ model of SMS that will cater to all types and size of service providers. Complex SMS systems are likely to be inappropriate for small service providers. Therefore, such organizations should tailor their SMS to suit the size, nature and complexity of their activities and allocate resources accordingly.

SMS Framework

In ICAO Doc. 9859 - Safety Management Manual ICAO has established that the framework of service provider SMS should include the following 4 components (12 elements):

1. Safety policy and objectives
 - 1.1 Management commitment
 - 1.2 Safety accountability and responsibilities
 - 1.3 Appointment of key safety personnel
 - 1.4 Coordination of emergency response planning
 - 1.5 SMS Documentation
2. Safety risk management
 - 2.1 Hazard identification
 - 2.2 Safety risk assessment and mitigation
3. Safety assurance
 - 3.1 Safety performance monitoring and measurement
 - 3.2 The management of change

<p>3.3 Kontinuirano unaprjeđenje SMS</p> <p>4. Promocija sigurnosti</p> <p>4.1 Osposobljavanje</p> <p>4.2 Komunikacija</p> <p>Prošireno pojašnjenje svakoga gore spomenutog elementa dano je u Dodatku 1 ove Naredbe.</p> <p>Proces implementacije</p> <p>SMS je sustav upravljanja koji mora biti u potpunosti integriran u svakodnevne aktivnosti organizacije. Iz toga proizlazi da se SMS ne odobrava od strane regulatora (HACZ) kao samostalni proces, već se prihvaća kroz proces certificiranja / kontinuiranog nadzora organizacije (npr. kroz proces izdavanja AOC, Part 145 , certifikaciju aerodroma itd.).</p> <p>Pružatelj usluga prije implementaciji SMS-a treba definirati plan u kojem će razraditi implementaciju SMS-a.</p> <p>Fazni pristup koji je opisan u ICAO Doc 9859, poglavlje 5.5. omogućava pružateljima usluga sistematski pristup, postepenu implementaciju SMS-a, te bolje planiranje i korištenje postojećih resursa.</p> <p>Naputak za pružatelje usluga za uspostavu SMS plana implementacije je definiran u ICAO Doc 9859, Dodatak 7 na Poglavlje 5.</p> <p>Sustav upravljanja</p> <p>Pružatelj usluga je dužan uspostaviti i održavati sustav upravljanja koji uključuje sustav upravljanja sigurnošću. Sustav upravljanja treba odgovarati veličini, prirodi i kompleksnosti organizacije, te treba u obzir uzeti sve opasnosti i rizike koje se vežu uz aktivnosti te organizacije.</p> <p>Dodaci ovoj naredbi</p> <p>Dodatak 1 - Elementi SMS okvira</p> <p>Dodatak 2 - Naputak za ICAO SMS analizu razlika</p> <p>Dodatak 3 - Pregled pružatelja usluga i referentni međunarodni standardi i propisi</p>	<p>3.3 Continuous improvement of the SMS</p> <p>4. Safety promotion</p> <p>4.1 Training and education</p> <p>4.2 Safety communication</p> <p>Further explanation of each of the above mentioned elements is found in Annex 1 to this Order.</p> <p>Implementation Process</p> <p>The SMS is a management system which needs to be fully incorporated (or integrated) in the daily business of the organization. Therefore, it follows that the SMS is not “approved” by the regulator (CCAA) as a stand-alone process, but rather accepted as an essential part of the certification / surveillance process for an organizational approval (such as an AOC, Part 145 certification, aerodrome certification, etc).</p> <p>Service providers shall develop a plan to facilitate SMS implementation</p> <p>A phased approach described in ICAO Doc 9859, Chapter 5.5. allows service providers systematic approach, gradual implementation of SMS and better planning and use of existing resources.</p> <p>Guidance on the development of an SMS Implementation Plan for service providers is provided in ICAO Doc 9859, Appendix 7 of Chapter 5.</p> <p>Management Systems</p> <p>The service provider shall implement and maintain a management system integrating a safety management system. Management System should correspond to the size, nature and complexity of the organisation and take account of all of the hazards and risks associated with its activities.</p> <p>Annexes to this Order</p> <p>Annex 1 SMS Framework Elements</p> <p>Annex 2 ICAO SMS Gap Analysis guidance</p> <p>Annex 3 List of service providers and applicable international standards and requirements</p>
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Dodatne informacije	Further Information
<p>Dokumentacija relevantna za proces implementacije SMS – a može se naći na ICAO web stranici:</p> <p>ICAO – Safety Management (http://www.icao.int/anb/safetymanagement/Documents.html)</p> <p>Safety Management International Collaboration Group (SM ICG) http://www.skybrary.aero/index.php/Safety_Management_International_Collaboration_Group_(SM_ICG)</p> <p>ESSI - European Strategic Safety Initiative</p> <p>Dodatno, HACZ će koristiti svoju web stranicu (www.ccaa.hr) za objavu dodatnih informacija o implementaciji SMS.</p>	<p>Relevant documentation in regards to SMS implementation that can be found on ICAO web site provide:</p> <p>ICAO – Safety Management (http://www.icao.int/anb/safetymanagement/Documents.html)</p> <p>Safety Management International Collaboration Group (SM ICG) http://www.skybrary.aero/index.php/Safety_Management_International_Collaboration_Group_(SM_ICG)</p> <p>ESSI - European Strategic Safety Initiative</p> <p>In addition, the CCAA will use its website (www.ccaa.hr) to provide further general information for SMS implementation.</p>

U Zagrebu, 25.11.2016.

Za Hrvatsku Agenciju za civilno zrakoplovstvo

For Croatian Civil Aviation Agency



Ante Lažeta, dipl.ing.

Direktor

DODATAK 1 - ELEMENTI SMS OKVIRA

1. POLITIKA I CILJEVI SIGURNOSTI

1.1 Opredijeljenost i odgovornosti rukovodstva

Pružatelj usluga mora definirati politiku sigurnosti organizacije u skladu s međunarodnim i nacionalnim zahtjevima, koja mora biti potpisana od strane odgovornog rukovoditelja organizacije. Politika sigurnosti mora odražavati opredijeljenost organizacije za sigurnost, mora uključiti jasni stav (izjavu) o osiguranju neophodnih ljudskih i finansijskih sredstava za implementaciju politike, te mora, uz vidljivu potporu, biti priopćena cijeloj organizaciji.

Politika sigurnosti mora, između ostalog, uključiti sljedeće ciljeve:

- a) Opredijeljenost za implementaciju SMS-a;
- b) Opredijeljenost za kontinuirano unaprjeđenje razine sigurnosti;
- c) Opredijeljenost za upravljanje rizicima sigurnosti;
- d) Opredijeljenost za poticanje zaposlenika na izvješćivanje o pitanjima/problemima sigurnosti;
- e) Uspostava jasnih standarda o prihvatljivom ponašanju; i
- f) Identifikacija odgovornosti rukovodstva i zaposlenika s obzirom na performanse sigurnosti.

Politika sigurnosti mora biti periodički ponovno pregledana kako bi ostala relevantna i adekvatna (odgovarajuća) za organizaciju.

1.2 Krajnja odgovornost za sigurnost

Pružatelj usluga mora imenovati odgovornog rukovoditelja, koji bez obzira na ostale funkcije, ima krajnju odgovornost i nadležnost za implementaciju i održavanje SMS-a. Pružatelj usluga, također, mora identificirati odgovornosti svih članova višeg rukovodnog osoblja za pitanja sigurnosti, bez obzira na njihove druge funkcije. Odgovornosti za sigurnost i ovlasti moraju biti dokumentirane i priopćene cijeloj organizaciji.

ANNEX 1 - SMS FRAMEWORK ELEMENTS

1. SAFETY POLICY AND OBJECTIVES

1.1 Management commitment and responsibility

The service provider shall define the organization's safety policy in accordance with international and national requirements, and shall be signed by the accountable executive of the organization. The safety policy shall reflect organizational commitments regarding safety; include a clear statement about the provision of the necessary human and financial resources for its implementation; and be communicated, with visible endorsement, throughout the organization.

The safety policy shall, inter alia, include the following objectives:

- a) Commitment to implement an SMS;
- b) Commitment to continual improvement in the level of safety;
- c) Commitment to the management of safety risks;
- d) Commitment to encourage employees to report safety issues;
- e) Establishment of clear standards for acceptable behaviour; and
- f) Identification of responsibilities of management and Employees with respect to safety performance.

The safety policy shall be periodically reviewed to ensure it remains relevant and appropriate to the organization.

1.2 Safety accountabilities

The service provider shall identify the accountable executive who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the service provider, for the implementation and maintenance of the SMS. The service provider shall also identify the safety accountabilities of all members of senior management, irrespective of other functions. Safety accountabilities and authorities shall be documented and communicated throughout the organization.

1.3 Imenovanje ključnog osoblja za sigurnost

Pružatelj usluga mora imenovati Voditelja za sigurnosti, koji je nadležan za poslove uspostave i održavanja efektivnog SMS-a.

Voditelj za sigurnost mora biti imenovan od strane višeg (senior) rukovodnog osoblja kako bi se toj osobi dodijelila neophodna razina ovlasti za postupanja po pitanjima/problemima sigurnosti. Voditelj za sigurnost direktno odgovara rukovoditelju organizacije.

Voditelj za sigurnost mora imati:

- Upravljačko iskustvo u području sigurnosti/kvalitete;
- Operativno iskustvo;
- Tehničko obrazovanje za razumijevanje sustava organizacije;
- Vještinu ophođenja s ljudima;
- Analitičke vještine i vještine za rješavanje problema;
- Vještine upravljanje projektima; i
- Umijeće pismenog i usmenog komuniciranja.

Važno je istaknuti da krajnja odgovornost za SMS leži na odgovornom rukovoditelju, a ne na Voditelju za sigurnost.

Funkcije Voditelja za sigurnost:

- Upravljanje SMS planom implementacije u ime odgovornog rukovoditelja;
- Omogućavanje i pomaganje u provedbi procesa upravljanja rizicima koji mora uključiti identifikaciju opasnosti, procjenu rizika i ublažavanje rizika;
- Praćenje korektivnih akcija i evaluiranje njihovih rezultata;
- Pripremanje periodičkih izvješća o performansama sigurnosti;
- Održavanje zapisa i dokumentacije o sigurnosti;
- Planiranje i organiziranje osposobljavanja zaposlenika o sigurnosti;
- Nadgledanje sustava identifikacije opasnosti;
- Davanje neovisnih savjeta o pitanjima iz područja sigurnosti;
- Praćenje sigurnosnih problema u zrakoplovnoj industriji i njihov percipirani utjecaj na operacije organizacije;
- Koordinacija i komunikacija (u ime rukovoditelja) sa zrakoplovnim vlastima o pitanjima vezanim za sigurnost.

1.3 Appointment of key safety personnel

The service provider shall appoint a Safety Manager to be the responsible for the implementation and maintenance of an effective SMS.

The Safety Manager must be appointed by Senior Management in order to provide the necessary degree of authority when dealing with safety matters, and should report directly to the Accountable Manager of the organisation.

The Safety Manager should possess:

- Safety/quality management experience;
- Operational experience;
- Technical background to understand the systems that Support the organisation;
- People skills;
- Analytical and problem solving skills;
- Project management skills; and
- Oral and written communication skills.

It is important to note that accountability for the SMS lies with the Accountable Manager and not the Safety Manager.

The Safety Manager shall carry out the following functions:

- Manage the SMS implementation plan on behalf of the Accountable Manager;
- Facilitate the risk management process that should include hazard identification, risk assessment and risk mitigation;
- Monitor any corrective action and evaluate their results;
- Provide periodic reports on safety performance;
- Maintain records and safety documentation;
- Plan and facilitate staff safety training;
- Oversee hazard identification systems;
- Provide independent advice on safety matters;
- Monitoring safety concerns in aviation industry and their perceived impact on organisation's operations;
- Coordination and communication (on behalf of accountable executive) with aviation authority on issues relating to safety.

1.4 Koordinacija planiranja postupaka u slučaju opasnosti (ERP)

Pružatelj usluga mora razviti, koordinirati i održavati plan postupanja u slučaju opasnosti (u daljnjem tekstu: ERP) koji osigurava uređen i efikasan prijelaz iz normalnih operacija u operacije u slučaju opasnosti, te povratak normalnim operacijama. ERP bi trebao biti integriran u SMS, te prilagođen veličini, prirodi i kompleksnosti aktivnosti relevantne organizacije.

ERP mora osigurati:

- Pravovremen, uređen i efikasan prijelaz iz normalnih operacija u operacije u slučaju opasnosti;
- Određivanje nadležnosti u slučaju opasnosti;
- Određivanje odgovornosti u slučaju opasnosti;
- Ovlasti ključnog osoblja za provedbu radnji sadržanih u planu;
- Koordinaciju aktivnosti u cilju uklanjanja opasnosti;
- Siguran nastavak operacija ili povratak na normalne operacije, što je prije moguće.

ERP treba definirati odgovornosti, uloge i akcije (radnje) različitih tijela i osoba uključenih u postupke u slučaju opasnosti.

1.5 SMS dokumentacija

Pružatelj usluga mora uspostaviti i održavati SMS dokumentaciju koja opisuje politiku sigurnosti i ciljeve, SMS zahtjeve, SMS procedure i procese, odgovornosti, nadležnosti i ovlasti za provedbu procedura i procesa i izlazne SMS podatke.

Pružatelj usluga mora kao dio SMS dokumentacije, razviti i održavati Priručnik sustava upravljanja sigurnošću (SMM), putem kojeg priopćava svoj pristup sigurnosti cijeloj organizaciji.

Napomena: SMM može biti samostalni dokument ili može biti dio već postojeće dokumentacije, kao na primjer poglavlje Operativnog priručnika zračnog prijevoznika.

SMS dokumentacija definira sve SMS elemente i procese:

- Upravljanje dokumentacijom i zapisima;
- Regulatorni SMS zahtjevi;
- Okvir i područje primjene SMS-a;
- Politika i ciljevi sigurnosti;
- Odgovornosti za sigurnost i ključno osoblje;

1.4 Coordination of emergency response planning (ERP)

The service provider shall develop, coordinate and maintain an emergency response plan (hereinafter: ERP) which ensures orderly and efficient transition from normal to emergency operations, and return to normal operations. The ERP should be integrated into the SMS and reflect the size, nature and complexity of the activities performed by the organisation.

The ERP should ensure:

- An orderly and efficient transition from normal to emergency operations;
- Designation of emergency authority;
- Assignment of emergency responsibilities;
- Authorisation by key personnel for actions contained in the plan;
- Coordination of efforts to resolve the emergency;
- Safe continuation of operations or return to normal operations as soon as practicable.

The ERP should set out the responsibilities, roles and actions for the various bodies and personnel involved in dealing with emergencies.

1.5 SMS Documentation

The service provider shall develop and maintain SMS documentation to describe the safety policy and objectives, the SMS requirements, SMS procedures and processes, accountabilities, responsibilities and authorities for procedures and processes, and the SMS outputs.

As part of the SMS documentation, the service provider shall develop and maintain a safety management manual (SMM), to communicate its approach to safety throughout the organization.

Note. – The SMM may be a stand-alone document, or may be included as part of existing documentation, for example, as a chapter or division of an air operator's Operations Manual

The SMS documentation covers all elements and process of the SMS:

- Document and records management
- Regulatory SMS requirements
- Framework and scope of SMS

- f) Sustav izvješćivanja;
- g) Procesi identifikacije opasnosti i upravljanje rizicima;
- h) Indikatori performanse sigurnosti;
- i) Osposobljavanje i komunikacija vezana uz sigurnost;
- j) Upravljanje promjenama;
- k) Kontinuirano poboljšanje i auditiranje sigurnosti;
- l) Planiranje postupka u slučaju opasnosti i
- m) Promocija sigurnosti.

2. UPRAVLJANJE RIZICIMA SIGURNOSTI

Sigurnost je stanje u kojem je rizik od nanošenja štete osobama ili imovini ograničen i održavan na prihvatljivoj razini, kroz kontinuirani postupak identifikacije opasnosti i upravljanja rizikom. Proces koji vodi od identifikacije opasnosti prema procjeni rizika i ublažavanju rizika je proces upravljanja rizicima.

2.1 Identifikacija opasnosti

Opasnost je bilo koja situacija ili uvjet koji potencijalno može uzrokovati negativne posljedice. Pružatelj usluga mora razviti, uspostaviti i održavati formalni proces za efektivno prikupljanje, zapisivanje, obradu i pružanje povratnih informacija o opasnostima u operacijama, prikupljenih na temelju reaktivnih, proaktivnih i prediktivnih metoda prikupljanja podataka o sigurnosti. Reaktivne metode (sheme) uključuju podatke o nesrećama i nezgodama. Proaktivna metoda uključuje izvješćivanje o događajima koji ugrožavaju sigurnost, praćenje podataka o letu, dobrovoljni sustav izvješćivanja, analize (istrage) sigurnosti, auditiranje operativne sigurnosti i procjene sigurnosti.

Prediktivne metode prikupljanja podataka o sigurnosti se temelje na direktnim opažanjima operativnog osoblja tijekom normalnih operacija.

2.2 Procjena i ublažavanje rizika

Rizik je mogućnost negativnih posljedica opasnosti, iskazan kroz termine ozbiljnosti i vjerojatnosti.

Pružatelj usluga mora razviti, uspostaviti i održavati formalni proces upravljanja rizicima koji osigurava analizu (u smislu vjerojatnosti i ozbiljnosti događaja), procjenu (u

- d) Safety policy and objectives;
- e) Safety accountabilities and key safety personnel;
- f) Reporting system;
- g) Hazard identification and risk management process;
- h) Safety performance indicators;
- i) Safety training and communication;
- j) Management of change;
- k) Continuous improvement and safety auditing;
- l) Emergency response planning; and
- m) Safety promotion.

2 SAFETY RISK MANAGEMENT

Safety is a state in which the possibility of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and safety risk management. The process of moving from hazard identification to risk assessment and risk mitigation is a risk management process.

2.1 Hazard identification

A hazard is any situation or condition that has the potential to cause adverse consequences. The service provider shall develop and maintain a formal process for effectively collecting, recording, acting on and generating feedback about hazards in operations, based on a combination of reactive, proactive and predictive methods of safety data collection.

Reactive methods (shemes) include data from accidents and incidents. Proactive methods include occurrences reporting, flight data monitoring, voluntary reporting schemes, safety surveys, operational safety audits and safety assessments.

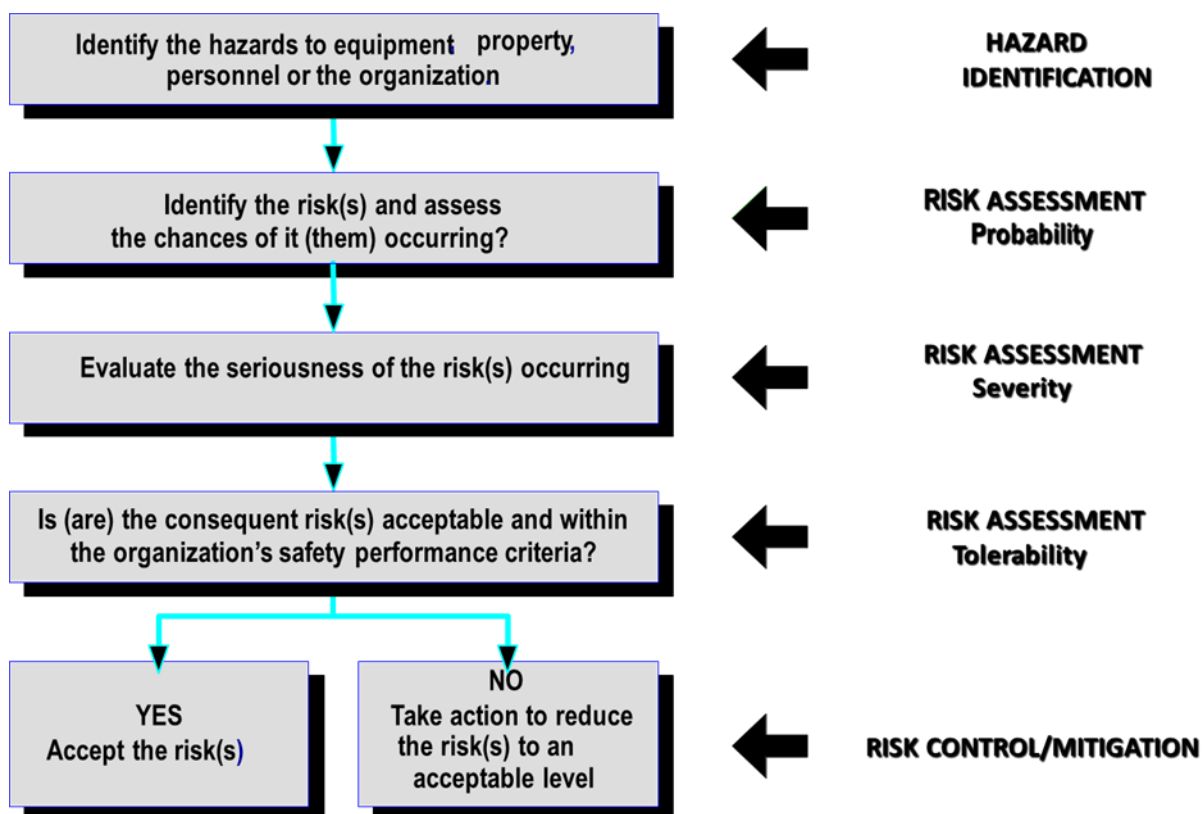
Predictive safety data collection methods are based on direct observation of operational personnel during normal operations.

2.2 Risk assessment and mitigation

Risks are the potential adverse consequences of a hazard, and are assessed in terms of their severity and likelihood.

The service provider shall develop and maintain a formal risk management process that ensures analysis (in terms of probability and severity of occurrence), assessment (in

<p>smislu prihvatljivosti / tolerantnosti) i kontrolu (u smislu ublažavanja) rizika na prihvatljivoj razini.</p> <p>Pružatelj usluga mora također definirati one razine rukovodstva koje imaju ovlasti za donošenje odluka o prihvatljivosti rizika sigurnosti.</p> <p>Dijagram procesa analize opasnosti i procjene rizika je prikazan na slici dolje:</p>	<p>terms of tolerability) and control (in terms of mitigation) of risks to an acceptable level.</p> <p>The service provider shall also define those levels of management with authority to make decisions regarding safety risks tolerability.</p> <p>A diagram showing the hazard analysis and risk assessment process is shown below:</p>
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<p><i>Procjena rizika</i> u obzir uzima vjerojatnost i ozbiljnost bilo koje negativne posljedice koja može biti rezultat identificirane opasnosti.</p> <p>Matrica rizika je koristan alat za procjenu opasnosti. Dok se ozbiljnost posljedica nekoga događaja može dosta lako identificirati, procjena vjerojatnosti događaja podliježe subjektivnosti.</p>	<p><i>Risk Assessment</i> involves taking into account the probability and severity of any adverse consequences resulting from an identified hazard.</p> <p>A Risk Matrix is a useful tool for hazard assessment. While the severity of the consequences can be defined, the probability of occurrence may be more subjective.</p>
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Primjer Matrice procjene rizika:
Example Risk Assessment Matrix:

Vjerojatnost / *Probability*

5 Učestalo <i>Frequent</i>	5A	5B	5C	5D	5E
4 Povremeno <i>Occasional</i>	4A	4B	4C	4D	4E
3 Rijetko <i>Remote</i>	3A	3B	3C	3D	3E
2 Nazatno <i>Improbable</i>	2A	2B	2C	2D	2E
1 Izuzetno neznatno <i>Extremely imp</i>	1A	1B	1C	1D	1E
	A Katastrofalna <i>Catastrophic</i>	B Opasna <i>Hazardous</i>	C Znatna <i>Major</i>	D Mala <i>Minor</i>	E Neznatna <i>Negligible</i>

Ozbiljnost / *Severity*

Rizik = Ozbiljnost x Vjerojatnost

Risk = Severity x Probability;

Neprihvatljivo područje – neprihvatljivo prema postojećim uvjetima
Intorelable region – unexeptable under existing circumstances

Područje koje se tolerira - prihvatljivo na temelju procjene rizika i ublažavanja (ukoliko se procjeni neophodnim). Može zahtijevati odluku rukovodstva
Tolerable region – Acceptable based on risk assesment and mitigation (if necessary). It may require management decision.

Prihvatljivo područje
Acceptable region

Ublažavanje rizika: Rizicima treba upravljati kako bi ih se zadržalo na što prihvatljivijoj razini. Rizicima treba upravljati na način da se balansira između vremena, troškova i teškoće provođenja mjera u cilju smanjenja ili eliminiranja rizika. Razina rizika se može smanjiti umanjujući ozbiljnost događaja ili umanjujući izloženost riziku. Korektivne akcije moraju u obzir uzeti bilo koje

Risk mitigation: Risks should be managed to be as low as reasonably practicable. Risk must be balanced against the time, cost and difficulty of taking measures to reduce or eliminate the risk. The level of risk can be lowered by reducing the severity of the potential consequences, reducing the probability of occurrence or by reducing exposure to that risk. Corrective action will take into

elemente postojeće obrane, kao i nemogućnost te obrane da održi prihvatljivu razinu sigurnosti. Korektivne mjere trebaju biti predmet daljnjih postupaka procjene rizika, kako bi bili u mogućnosti odrediti da je rizik sada na prihvatljivoj razini, te da se u operacijama nisu pojavili dodatni rizici.

Interno istraživanje problema sigurnosti: Pružatelj usluga mora, kao dio SMS sustava, razviti, uspostaviti i održavati formalni proces internih istraga događaja koji ugrožavaju sigurnost.

OSIGURANJE SIGURNOSTI

3.1 Praćenje i mjerenje performansi sigurnosti

Pružatelj usluga mora razviti, uspostaviti i održavati načine utvrđivanja (verifikacije) performanse sigurnosti prema ciljevima i politici sigurnosti organizacije, te validirati efektivnost metode kontrole rizika sigurnosti. Procedure izvješćivanja vezane uz performanse sigurnosti i praćenje moraju jasno definirati vrste prihvatljivog ili neprihvatljivog operativnog ponašanja, te jasno naznačiti uvjet pod kojima se osigurava imunitet od disciplinskih mjera.

Proces praćenja i mjerenja performansi sigurnosti bi trebao uključiti:

- a) Izvješćivanje o sigurnosti;
- b) Studije o sigurnosti;
- c) Procjena stanja sigurnosti i praćenje trenda;
- d) Auditi sigurnosti; i
- e) Istrage (analize).

3.2 Upravljanje promjenama

Pružatelj usluga mora razviti, uspostaviti i održavati formalni proces za identifikaciju promjena unutar organizacije koje mogu utjecati na uspostavljene procese i usluge. Proces mora definirati dogovore oko osiguranja performanse sigurnosti prije implementacije promjena i eliminirati ili modificirati metode kontrole rizika sigurnosti koje više nisu potrebne ili nisu efektivne zbog promjena u operativnom okruženju.

3.3 Kontinuirano unaprjeđenje SMS-a

Pružatelj usluga mora pratiti i procjenjivati efektivnost uspostavljenih SMS procesa kako bi se osiguralo kontinuirano unaprjeđenje sveukupnih performansa SMS sustava.

account any existing defences and their inability to maintain an acceptable level of risk. Corrective action should be subject to further risk assessment, in order to determine that the risk is now acceptable and that no further risk has been introduced into operational activities.

Internal safety investigations: Service provider shall, as part of the SMS, develop and maintain formal processes for the internal investigation of occurrences.

3. SAFETY ASSURANCE

3.1 Safety performance monitoring and measurement

The service provider shall develop and maintain the means to verify the safety performance of the organization compared to the safety policy and objectives, and to validate the effectiveness of safety risks controls. The safety reporting procedures related to safety performance and monitoring shall clearly indicate which types of operational behaviours are acceptable or unacceptable, and include the conditions under which immunity from disciplinary action would be considered.

Safety performance monitoring and measurement process should include:

- a) Safety reporting;
- b) Safety studies;
- c) Safety reviews including trending of data;
- d) Safety audits; and
- e) Surveys.

3.2 The management of change

The service provider shall develop and maintain a formal process to identify changes within the organization which may affect established processes and services; to describe the arrangements to ensure safety performance before implementing changes; and to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

3.3 Continuous improvement of the SMS

The service provider shall monitor and assess the effectiveness of its SMS processes to enable continuous improvement of the overall performance of the SMS.

<p>Kontinuirano unaprjeđenje mora:</p> <p>utvrditi neposredne uzroke zbog kojih su performanse ispod definiranih standarda i njihove implikacije na operacije SMS-a i popraviti situaciju u kojoj su performanse ispod definiranih standarda identificiranu kroz aktivnosti osiguranja sigurnosti.</p> <p>Kontinuirano unaprjeđenje bi se trebalo postići putem:</p> <ol style="list-style-type: none"> evaluacije objekata, opreme, dokumentacije i procedura putem audita sigurnosti i istraga; evaluacije rada zaposlenika kako bi se utvrdila provedba njihovih odgovornosti; praćenja efektivnosti sustava kontrole i umanjenja rizika; praćenja organizacijskih promjena kako bi se utvrdilo da su te promjene efektivne itd. <p>4. PROMOCIJA SIGURNOSTI</p> <p>4.1 Osposobljavanje</p> <p>Pružatelj usluga mora razviti, uspostaviti i održavati program osposobljavanja za područje sigurnosti kojim osigurava da je osoblje osposobljeno i kompetentno za SMS dužnosti. Pružatelj usluga mora definirati standarde za inicijalnu obuku i obuku obnove znanja.</p> <p>Opseg obuke za područje sigurnosti ovisiti će o uključenosti pojedinca u SMS.</p> <p>Operativno osoblje – Obuka operativnog osoblja za područje sigurnosti treba uputiti na odgovornosti za sigurnost, sve operativne procedure i procedure sigurnosti, te značaj prepoznavanja i izvješćivanja o opasnostima. Ciljevi obuke trebaju biti poznavanje politike sigurnosti organizacije i osnova SMS.</p> <p>Rukovodioci i nadzornici – Rukovodioci i nadzornici trebaju poznavati i razumjeti procese sigurnosti, identifikaciju opasnosti, upravljanje i ublažavanje rizika i upravljanje promjenama. Uz sadržaj specificiran za operativno osoblje, sadržaj obuke za rukovoditelje i nadzornike treba uključiti i analizu podataka o sigurnosti.</p> <p>Više rukovodno osoblje – Obuka višeg rukovodnog osoblja za područje sigurnosti treba uključiti odgovornosti za sigurnost, usklađenost s regulatornim zahtjevima sigurnosti, osiguranje resursa, osiguranje efektivne</p>	<p>Continuous Improvement shell:</p> <p>determine the immediate causes of below-standard performance and their implications in the operation of the SMS and rectify situations involving below-standard performance identified through safety assurance activities.</p> <p>Continuous Improvement should be achieved through:</p> <ol style="list-style-type: none"> evaluation of facilities, equipment, documentation and procedures through safety audits and surveys; evaluation of an individual's performance to verify the fulfilment of their safety responsibilities; monitoring of effectiveness of the system for control and mitigation of risk; tracking organisational changes to ensure that they are effective etc. <p>4. SAFETY PROMOTION</p> <p>4.1 Training and education</p> <p>The service provider shall develop and maintain a safety training program which ensures that personnel are trained and competent to perform the SMS duties. The service provider should specify initial and recurrent safety training standards</p> <p>The scope of the safety training shall be appropriate to each individual's involvement in the SMS.</p> <p>Operational Staff - Safety training for operational personnel should address safety responsibilities, including following all operating and safety procedures, and recognizing and reporting hazards. The training objectives should include the organization's safety policy and SMS fundamentals.</p> <p>Managers and Supervisors - Managers and supervisors should understand the safety process, hazard identification, risk management and mitigation and the management of change. In addition to the contents specified for operational personnel, the training contents for supervisors and managers should include safety data analysis.</p> <p>Senior Managers - Safety training for senior managers should include safety responsibilities, compliance with regulatory safety requirements, allocation of resources, ensuring effective inter-departmental safety communication and active promotion of the SMS. In</p>
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među-odjelske komunikacije i aktivna promocija SMS-a. Uz sadržaj specificiran za prethodne dvije grupe, sadržaj obuke za više rukovodno osoblje treba uključiti i osiguranje sigurnosti, dužnosti i odgovornosti u području sigurnosti i uspostavu prihvatljivih razina sigurnosti.

Odgovorni rukovoditelj - Odgovorni rukovoditelj treba biti upoznat sa svojom ulogom i odgovornostima u SMS -u, politikom sigurnosti, SMS standardima i osiguranjem sigurnosti.

4.2 Komunikacija o sigurnosti

Pružatelj usluga mora razviti, uspostaviti i održavati formalni način komuniciranja o pitanjima sigurnosti kojim se osigurava da je svo osoblje u potpunosti upoznato sa SMS-om, kojim pružatelj usluga prikuplja kritične informacije o sigurnosti i objašnjava zbog čega su poduzete aktivnosti iz područja sigurnosti, kao i zbog čega su donesene ili izmijenjene procedure o sigurnosti.

Komunikacija o sigurnosti je temelj za razvoj i održavanje adekvatne kulture sigurnosti. Modeli komuniciranja uključuju distribuciju informacija putem:

- a) SMS priručnika;
- b) Promocije Politike sigurnosti;
- c) Infolistova, informacija o sigurnosti i biltena;
- d) web stranice, elektronske pošte itd.

addition to the objectives of the two previous employee groups, safety training for senior managers should include safety assurance, safety roles and responsibilities, and establishing acceptable levels of safety

Accountable Manager - The Accountable Manager should have an awareness of SMS roles and responsibilities, safety policy, SMS standards and safety assurance.

4.2 Safety communication

The service provider shall develop and maintain formal means for safety communication which ensures that all personnel are fully aware of the SMS, conveys safety critical information; and explains why particular safety actions are taken and why safety procedures are introduced or changed.

Safety communication is an essential foundation for the development and maintenance of an adequate safety culture. The modes of communication may include:

- a) Dissemination of SMS manual;
- b) Promonition of Safety policy;
- c) Newsletters, safety notices and bulletins;
- d) Websites and email etc.

DODATAK 2

SMS - ANALIZA RAZLIKA

Naputak za pružatelje usluga za provedbu SMS analize razlika je definiran u ICAO Doc 9859, Dodatak 7 Poglavlja 5.

Uvod

U skladu sa standardima i preporučenom praksom (SARPs) sadržanim u ICAO Aneks 19 – Upravljanje sigurnošću, pružatelji usluga odgovorni su za implementaciju SMS-a.

Analiza razlika

Implementacija SMS-a od strane pružatelja usluga zahtijeva provedbu analize svog sustava kako bi utvrdio komponente i elemente SMS – a koji već postoje u organizaciji, a koje komponente i elementi moraju biti dodani ili izmijenjeni kako bi se ispunili implementacijski zahtjevi. Ova analiza, poznata kao analiza razlika, podrazumijeva usporedbu SMS zahtijeva sa postojećim resursima pružatelja usluga.

Nakon provedbe i dokumentiranja, analiza razlika predstavlja osnovu za definiranje SMS plana implementacije.

Predložak za provedbu analize razlika sadržan je u ovom Dodatku. Svako pitanje je dizajnirano za odgovor „Da“, „Ne“ ili „Djelomično“ koji ukazuje na sljedeće:

- 1) „Da“ - pružatelj usluga već ima u svom sustavu implementirane komponente i elemente ICAO SMS okvira opisane u ICAO Doc 9859, Poglavlju 5, te isti ili udovoljavaju ili premašuju postavljene zahtjeve.
- 2) „Ne“ - postojanje znatnih razlika između komponenti/elemeanta ICAO SMS okvira i sustava pružatelja usluga.
- 3) „Djelomično“ – potrebna su dodatna poboljšanja u postojećim procesima kako bi se ispunile obveze.

ANNEX 2

SMS - GAP ANALYSIS

Guidance on the development of an SMS gap analysis for service providers is provided in ICAO Doc 9859, Appendix 7 of Chapter 5.

Introduction

In accordance with the Standards and Recommended Practices (SARPs) contained in ICAO Annex 19 – Safety Management service providers are responsible for the implementation of SMS.

Gap analysis

The implementation of an SMS requires a service provider to conduct an analysis of its system to determine which components and elements of an SMS are currently in place and which components and elements must be added or modified to meet the implementation requirements. This analysis is known as gap analysis, and it involves comparing the SMS requirements against the existing resources in the service provider.

Once the gap analysis is complete and documented, it will form one basis of the SMS implementation plan.

The gap analysis template is included in this Appendix. Each question is designed for a “Yes”, “No” or „Partial” response which indicate the following:

- 1) “Yes” - the service provider already has the component or element of the ICAO SMS framework as defined in ICAO Doc 9859, Chapter 5 incorporated into its system and that it either matches or exceeds the requirement.
- 2) “No” - a substantial gap exists between the component/element of the ICAO SMS framework and the system of the service provider.
- 3) “Partial” - further enhancement or development work is required to an existing process in order to meet obligations.

GAP ANALYSIS CHECKLIST

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
Component 1 — SAFETY POLICY AND OBJECTIVES			
Element 1.1 — Management commitment and responsibility			
1.1-1	Is there a safety policy in place? [5.3.7 to 5.3.15; 5.5.3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-2	Does the safety policy reflect senior management's commitment regarding safety management? [5.3.7 to 5.3.15]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-3	Is the safety policy appropriate to the size, nature and complexity of the organisation? [5.3.7 to 5.3.15]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-4	Is the safety policy relevant to aviation safety? [5.3.7 to 5.3.15]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-5	Has the safety policy been signed by the accountable executive? [5.3.7 to 5.3.15; 5.5.3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-6	Has the safety policy been communicated, with visible endorsement, throughout the organisation? [5.5.3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.1-7	Is the safety policy being periodically reviewed to ensure that it remains relevant and appropriate to the [organisation]? [5.5.3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 1.2 — Safety accountabilities			
1.2-1	Has [organisation] identified an accountable executive, who irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of [organisation], for the implementation and maintenance of SMS? [5.3.16 to 5.3.26; 5.5.2]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
1.2-2	Does the accountable executive have full control of the financial and human resources required for the operations authorised to be conducted under the operations certificate? [5.3.16 to 5.3.26]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-3	Does the accountable executive have final authority over all aviation activities of his organisation? [5.3.16 to 5.3.26]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-4	Has [organisation] identified and documented safety accountabilities of management as well as operational personnel, with respect to the SMS? [5.3.16 to 5.3.26]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-5	Is there a safety committee or review board for the purpose of reviewing SMS and safety performance? [5.3.27 to 5.3.33; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-6	Is the safety committee or review board being chaired by the accountable executive or by an appropriately assigned deputy, duly substantiated in the SMS manual? [5.3.27 to 5.3.33; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-7	Does the safety committee include relevant operational or departmental heads, as applicable? [5.3.27 to 5.3.33; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.2-8	Are there safety action groups that work in conjunction with the safety committee (especially for large/complex organisations)? [5.3.27 to 5.3.33; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 1.3 — Appointment of key safety personnel			
1.3-1	Has [organisation] appointed qualified person to manage and oversee the day-to-day operations of SMS? [5.3.27 to 5.3.33; 5.5.2; Appendix 2]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.3-2	Does the qualified person have a direct access or reporting to the accountable executive concerning the implementation and operation of SMS? [5.3.27 to 5.3.33; 5.5.2; Appendix 2, 6.1]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.3-3	Does the manager responsible for administering the SMS hold other responsibilities that may conflict or impair his role as SMS manager? [Appendix 2, 6.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
1.3-4	Is the SMS manager's position as senior management not lower or subservient to other operational or production positions? [Appendix 2, 6.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 1.4 — Coordination of emergency response planning			
1.4-1	Does [organisation] have an emergency response/contingency plan appropriate to the size, nature and complexity of the organisation? [Appendix 3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-2	Does the emergency/contingency plan address all possible or likely emergencies/crisis scenarios relating to the organisation's aviation product or service deliveries? [Appendix 3, 4 f)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-3	Does the ERP include procedures for the continuing safety production, delivery or support of its aviation products or services during such emergencies or contingencies? [Appendix 3, 4 e)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-4	Is there a plan and record for drills or exercises with respect to the ERP? [Appendix 3, 5 c)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-5	Does the ERP address the necessary coordination of its emergency response/contingency procedures with the emergency/response contingency procedures of other organisations where applicable? [Appendix 3, 4 d)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-6	Does [organisation] have a process to distribute and communicate the ERP to all relevant personnel, including relevant external organisations? [Appendix 3, 5 d)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.4-7	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness? [Appendix 3, 5 f)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 1.4 — Coordination of emergency response planning			
1.5-1	Is there a top-level SMS document or exposition document which is approved by the accountable manager and accepted by the CAA? [5.3.36 to 5.3.38]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
1.5-2	Does the SMS documentation address the organisation's SMS and its associated components and elements? [5.3.36 to 5.3.38; 5.4.1; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.5-3	Is [organisation] SMS framework in alignment with the regulatory SMS framework? [5.3.36 to 5.3.38; 5.4.1; Appendix 4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.5-4	Does [organisation] maintain a record of relevant supporting documentation pertinent to the implementation and operation of SMS? [5.3.36 to 5.3.38; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.5-5	Does [organisation] have an SMS implementation plan to establish its SMS implementation process, including specific tasks and their relevant implementation milestones? [5.4.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.5-6	Does the SMS implementation plan address the coordination between service provider's SMS and the SMS of external organisations, where applicable? [5.4.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
1.5-7	Has the SMS implementation plan been endorsed by the accountable executive? [5.4.4; 5.5.2]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Component 2 — SAFETY RISK MANAGEMENT			
Element 2.1 — Hazard identification			
2.1-1	Is there a process for the reporting of voluntary hazards/threats by all employees? [5.3.42 to 5.3.52; 5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.1-2	Is the process of reporting voluntary hazards/threats simple, available to all personnel involved in safety-related duties and commensurate with the size of the service provider? [5.3.42 to 5.3.52]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.1-3	Does [organisation] SDCPS include procedure for incident/accident reporting by operational or production personnel? [5.3.42 to 5.3.52; 5.5.4; Chapter 4, Appendix 3]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.1-4	Is the accident/incident reporting simple, accessible to all personnel involved in safety-related duties and commensurate with the size of the service provider? [5.3.42 to 5.3.52; 5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
2.1-5	Does [organisation] have procedures for investigation of all reported incidents/accidents? [5.3.42 to 5.3.52; 5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.1-6	Are there procedures to ensure that hazards/threats identified or uncovered during incident/accident investigation processes are appropriately accounted for and integrated into the organisation's hazard collection and risk mitigation procedure? [2.13.9; 5.3.50 f); 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.1-7	Are there procedures to review hazards/threats from relevant industry reports, for follow-up actions or risk evaluation where applicable? [5.3.5.1]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 2.2 — Safety risk assessment and mitigation			
2.2-1	Is there a documented hazard identification and risk mitigation (HIRM) procedure involving the use of objective risk analysis tools? [2.13; 2.14; 5.3.53 to 5.3.61]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.2-2	Are the risk assessment reports approved by departmental managers or at a higher level, where applicable? [2.15.5; 5.3.53 to 5.3.61]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.2-3	Is there a procedure for periodic review of existing risk mitigation records? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.2-4	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
2.2-5	Is there a procedure to prioritize identified hazards for risk mitigation actions? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
2.2-6	Is there a programme for systematic and progressive review of all aviation safety-related operations, processes, facilities and equipment, subject to the HIRM process as identified by the organisation? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Component 3 — SAFETY ASSURANCE			
Element 3.1 — Safety performance monitoring and measurement			
3.1-1	Are there identified safety performance indicators for measuring and monitoring the safety performance of the organisation's aviation activities? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-2	Are the safety performance indicators relevant to the organisation's safety policy as well as management's high- level safety objectives/goals? [5.3.66 to 5.3.73; 5.4.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-3	Do the safety performance indicators include alert/target settings to define unacceptable performance regions and planned improvement goals? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-4	Is the setting of alerts or out-of-control criteria based on objective safety metrics principles? [5.3.66 to 5.3.73; 5.4.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-5	Do the safety performance indicators include quantitative monitoring of high-consequence safety outcomes (e.g. accident and incident rates) as well as lower-consequence events (e.g.) rate of non-compliance, deviations? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-6	Are safety performance indicators and their associated performance settings developed in consultation with, and subject to, the Civil Aviation Authority's agreement? [5.3.66 to 5.3.73; 5.4.5.2; 5.5.4; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-7	Is there a procedure for corrective or follow-up action to be taken when targets are not achieved and alert levels are exceeded/breached? [5.4.5; Appendix 6, Table 5-A6-5 b)]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.1-8	Are the safety performance indicators being periodically reviewed? [5.4.5; Appendix 6]	<ul style="list-style-type: none"> • Yes • No • Partial 	

Element 3.2 — The management of change			
No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
3.2-1	Is there a procedure for the review of relevant existing aviation safety-related facilities and equipment (including HIRM records) whenever there are pertinent changes to those facilities or equipment? [5.3.74 to 5.3.77; 5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.2-2	Is there a procedure for review of relevant existing aviation safety-related operations and processes (including any HIRM records) whenever there are pertinent changes to these operations or processes? [5.3.74 to 5.3.77; 5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.2-3	Is there a procedure for review of new aviation safety-related operations and processes for hazards/risks before they are commissioned? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.2-4	Is there a procedure for review of relevant existing facilities, equipment, operations or processes (including HIRM records) whenever there are pertinent changes external to the organization such as regulatory/industry standards, best practices or technology? [5.5.4]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 3.3 — Continuous improvement of the SMS			
3.3-1	Is there a procedure for periodic internal audit/assessment of the SMS? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.3-2	Is there a current internal SMS audit/assessment plan? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.3-3	Does the SMS audit plan include the sampling of completed/existing safety risk assessments? [5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.3-4	Does the SMS audit plan include the sampling of safety performance indicators for data currency and their target/alert settings performance? [5.4.5; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
3.3-5	Does the SMS audit plan cover the SMS interface with subcontractors or customers where applicable? [5.4.1; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
3.3-6	Is there a process for SMS audit/assessment reports to be submitted or highlighted for the accountable manager's attention where appropriate? [5.3.80; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Component 4 — SAFETY PROMOTION			
Element 4.1 — Training and education			
4.1-1	Is there a programme to provide SMS training/familiarisation to personnel involved in the implementation or operation of the SMS? [5.3.86 to 5.3.91; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
4.1-2	Has the accountable executive undergone appropriate SMS familiarisation, briefing or training? [5.3.86 to 5.3.91; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
4.1-3	Are personnel involved in conducting risk mitigation provided with appropriate risk management training/familiarisation? [5.3.86 to 5.3.91; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
4.1-4	Is there evidence of organisation-wide SMS education or awareness efforts? [5.3.86 to 5.3.91; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
Element 4.2 — Safety communication			
4.2-1	Does [organisation] participate in sharing safety information with relevant external industry product and service providers or organisations, including the relevant aviation regulatory organisations? [5.3.92; 5.3.93; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
4.2-2	Is there evidence of a safety (SMS) publication, circular or channel for communicating safety information (SMS) matters to employees? [5.3.92; 5.3.93; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	
4.2-3	Is [organisation] SMS manual and related guidance material accessible or disseminated to all relevant personnel? [5.3.92; 5.3.93; 5.5.5]	<ul style="list-style-type: none"> • Yes • No • Partial 	

DODATAK 3 Pregled pružatelja usluga i referentni zahtjevi

Pružatelji usluga	Primjenjivi međunarodni standardi i propisi		
	Referentni ICAO standard koji sadrži zahtjev za SMS	Referentni EU zahtjevi	Status EU zahtjeva (*)
ANSP	Annex 19	Uredba 1035/2011	Na snazi
Operatori aerodroma	Annex 19	Uredba 139/2014	Primjena od 31.12.2017.
Operatori aviona i helikoptera koji se koriste u CAT operacijama	Annex 19	Uredba 965/2012 ORO.GEN.200	Na snazi
Operatori složenih zrakoplova na motorni pogon	Annex 19	Uredba 965/2012 PART NCC	Na snazi
Operatori zrakoplova u komercijalnim operacijama		Uredba 965/2012 PART SPO	Primjena od 21.4.2017.
Part M G organizacije u sklopu CAT operatora	Annex 19	tbd EASA RMT.0251 (EASA MDM.055)	Na snazi kroz primjenu Uredba 965/2012, ORO.GEN.200
Part M G organizacije koje nisu u sklopu CAT operatora	n/a	tbd EASA RMT.0251 (EASA MDM.055)	tbd
Organizacije za održavanje odobrene u skladu sa Part 145	Annex 19	tbd EASA RMT.0251 (EASA MDM.055)	tbd
Zrakoplovni medicinski centar (AeMC)	n/a	Uredba 1178/2011 Uredba 290/2011	Na snazi

Pružatelji usluga		Primjenjivi međunarodni standardi i propisi		
		Referentni ICAO standard koji sadrži zahtjev za SMS	Referentni EU zahtjevi	Status EU zahtjeva (*)
Organizacije za osposobljavanje	Pilota aviona Pilota helikoptera	Annex 19	Uredba 1178/2011 Uredba 290/2011	Na snazi, osim za PPL RF za koje zahtjevi stupaju na snagu 08.04.2018.
	Pilota balona Pilota jedrilica			Primjena od 8.4.2018.
Organizacije za osposobljavanje kontrola leta - ATCO		Annex 19	Uredba 2015/340	Primjena od 1.1.2017
Part 147 organizacije		Annex 19	tbd EASA RMT.0251 (EASA MDM.055)	tbd
Part 21 DOA & POA		Annex 19	tbd EASA MDM.060	tbd

(*) Uredba predviđa mogućnost odgode primjene propisa ili nekih dijelova (opt-out), kako bi postojećim organizacijama omogućila period za prilagodbu i implementaciju novim zahtjevima. HACZ će o odgodi primjene pravovremeno izvijestiti na svojim web stranicama.