



STATE SAFETY PROGRAMME (SSP)



EU-Africa Safety in Aviation (EU-ASA) project

Supporting SSP implementation
Virtual Workshop from 16th to 20th December 2024





STATE SAFETY PROGRAMME (SSP)



Oversight and Safety Promotion in a Safety Management Environment

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SSP Coordinator &
Flt. OPS Inspector



OUTLINE



- **National Legislation on Safety Management**
- **SMS Assessment Tools**
- **Competencies of inspectors to perform SMS Assessments**
- **Risk Profiling of Service Providers**
- **Safety Promotion in nurturing a Positive Safety Culture**
- **Challenges**
- **The Way Forward**



National Legislation on Safety Management



Ghana Civil Aviation Act, 2024 (Act 1120)



Functions of Ghana CAA include -

- Implement safety management.
- **Regulate safety management system implementation by service providers.**
- State Entity responsible for coordinating the implementation of the State Safety Programme (SSP).
- Designates the Director General of the Ghana CAA as the Accountable Executive of the SSP and the Chairperson of the National Aviation Safety Coordination Group (NASCG).

Act 1120



THE ONE THOUSAND ONE HUNDRED AND TWENTIETH

ACT

OF THE PARLIAMENT OF THE REPUBLIC OF GHANA
ENTITLED

GHANA CIVIL AVIATION ACT, 2024

AN ACT to consolidate the laws relating to civil aviation, establish the Ghana Civil Aviation Authority to regulate aviation safety, training and security and provide for related matters.

DATE OF ASSENT: 31st July, 2024.

PASSED by Parliament and assented to by the President

Ghana Civil Aviation Authority

Establishment of the Ghana Civil Aviation Authority

1. (1) There is established by this Act, the Ghana Civil Aviation Authority as a body corporate.

(2) For the performance of the functions of the Authority, the Authority may acquire and hold property, dispose of property and enter into a contract or any other related transaction.

(3) Where there is a hindrance to the acquisition of land, the land may be acquired for the Authority under the Land Act, 2020 (Act 1036) and the cost shall be borne by the Authority.



AIB Ghana Act (Act 1028)



Functions of AIB Ghana include –

- Establishes the AIB Ghana as a independent body responsible for the conduct of aircraft accident and incident investigation in Ghana.
- Implement safety management as part of investigation processes.
- Collaborate with the GCAA and other State Entities involved in the SSP Implementation.



Act 1028

THE ONE THOUSAND AND TWENTY-EIGHTTH

ACT

OF THE PARLIAMENT OF THE REPUBLIC OF GHANA
ENTITLED

**AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION
AND PREVENTION BUREAU ACT, 2020**

AN ACT to establish the Aircraft Accident and Incident Investigation and Prevention Bureau to investigate, prevent, regulate and oversee the management of aircraft accidents and incidents that occur in Ghana; and to provide for related matters.

DATE OF ASSENT: 6th October, 2020.

PASSED by Parliament and assented to by the President

Preliminary Provisions

Application of this Act

1. This Act applies to
 - (a) aircraft accidents or incidents that occur
 - (i) in or over the territorial airspace of Ghana; and
 - (ii) within the oceanic airspace in the Accra Flight Information Region;
 - (b) aircraft accidents or incidents that occur in or over any place, where
 - (i) Ghana is requested to assist in investigating the aircraft accident or incident;

3



Ghana Civil Aviation (SMS) Directives

Part 36



- Specific requirements for SMS implementation by service providers, including:
 - ✓ SMS Applicability.
 - ✓ Requirements for establishing an SMS.
 - ✓ Requirements for application for initial and final acceptance of an SMS.
 - ✓ List of minimum documents for initial acceptance.
 - ✓ Requirements for SMS surveillance (full scope, limited scope, etc.)
 - ✓ Occurrence Reporting Requirements and timelines.
 - ✓ Hazard assessment reporting requirements.
 - ✓ Internal safety investigation reporting requirements.



SMS Assessment Tools



Initial SMS Acceptance



- Service Provider applies for initial acceptance -
 - As part of Certification; or
 - Existing service provider
- In addition to the required minimum documents, the Applicant completes SMS Manual Contents Compliance & Evaluation Checklist.
- Job Aid SSP-003 is used to make assessment of the SMS of a service provider, counting the number of "Y" and "N" under three levels of categories.

GHANA CIVIL AVIATION AUTHORITY

Job Aid SSP-008
SMS Manual Contents Compliance & Evaluation Checklist

Please complete this form in BLOCK LETTERS .	For GCAA Use Only
	File Ref:
	Date:

Section I: General Information

Name of Operator/Service Provider:	AOC/ROC/ATO/AMO/Number:
	Other [Indicate type of entity and certificate number]:

A. Abbreviations:

HIRM	Hazard Identification and Risk Management
ISO	International Standards Organisation
OM	Operations Manual
SEMS	Safety and Environmental Management System
SMM	Safety Management Manual
SMS	Safety Management System
SPI	Safety Performance Indicators

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GHANA CIVIL AVIATION AUTHORITY
AVIATION SAFETY INSPECTOR CHECKLIST

Job Aid SSP-003
Safety Management System (SMS) Assessment – Initial Acceptance

Date		Control #	
Action #		Record ID#	
Inspector (s) Name & ASI #		Org Identifier	
Location		Project #	
Action Taken		Mgmt Rep	

ASSESSMENT RESULT (% OF YES):

LEVEL 1 CATEGORY

PLEASE ANNOTATE THE APPROPRIATE BOX FOR THE FOLLOWING; YES (Y), NO (N) AND NOT APPLICABLE (N/A). INDICATE REGULATORY OR OTHER REFERENCE(S) FOR NOT SATISFACTORY (NS) ITEMS WHERE APPLICABLE. PROVIDE FURTHER DETAILS IN THE REMARKS SECTION IF REQUIRED.						
REFERENCE	CHECKLIST ITEMS			Y	N	N/A
	1	MANAGEMENT COMMITMENT & RESPONSIBILITIES				
	1.1	There is a documented Safety Policy statement.				
	1.2	The Safety Policy is relevant to aviation safety.				
	1.3	The Safety Policy is relevant to the scope and complexity of the organization's operations.				

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Tool for Monitoring SMS Implementation



STATE											
SMS Status of Implementation											
Reference Number	Name of the Service Provider (SP)	Type of Service Provider	Section/Department Responsible	SMS requirement Mandate	SMS Status	SMS Initial Review Date	Gap-Analysis Complete	Implementation Plan Accept	SMS Manual Ref/Nar	SMSM Date of Ed/Rev	SMS Initial Acceptance Date
1	MCDAN Aviation	AOC	OPS	Yes	Accepted	7th August 2023	No	No			
2	ECOALPHA	AOC	OPS	Yes	Accepted	18th August 2023	No	No			
3	AVIANCE CO LTD	Ground Handling Operator	ASAS	Yes	Accepted	8th November 2023	No	No			
4	PASSION AIR	AOC	OPS	Yes	Accepted	18th July 2022	Yes	Yes			
5	AIR GHANA	AOC	OPS	Yes	Initially Reviewed	7th June 2022	No	No			
6	AFRICAN WORLD AIRLINES	AOC	OPS	Yes	Accepted	3rd September 2024	Yes	Yes			
7	CENTURY AVIATION	AOC	ASAS	Yes	Initially Reviewed	21st March 2023	No	No			
8	GIAN AIR	AOC	OPS	Yes	Initially Reviewed	21st June 2022	No	No			
9	RUDAN	RPAS operator	RPAS	Yes	Initially Reviewed	19th July 2022	No	No			
10	VRA	AOC	OPS	Yes	Initially Reviewed	21st March 2024	No	No			
11	ZIPLINE	RPAS operator	RPAS	Yes	Initially Reviewed	10th June 2022	No	No			
12	SWISSPORT	Ground Handling Operator	ASAS	Yes	Initially Reviewed	10th June 2022	No	No			
13	AVIATION HANDLING SERVICES	Ground Handling Operator	ASAS	Yes	Initially Reviewed	31st January 2023	No	No			
14	ROCKETMINE	RPAS operator	RPAS	Yes	Initially Reviewed	21st May 2024	No	No			
15	RELAX AIRLINES	AOC	OPS	Yes	Initially Reviewed	2nd October 2024	No	No			
16	GHANA AIRPORTS COMPANY LIMITED	Airport Operator	ASAS	Yes	Initially Reviewed	7th November 2024	No	No			
17	ANSP - GCAA	ATS provider	ANS	Yes	Initially Reviewed		No	No			
18	ABERDAIR	AOC	OPS	Yes	Not Reviewed		No	No			
19	CTK	ATO		Yes	Initially Reviewed	8th March 2023	No	No			
20	UMAT	RPAS operator	RPAS	Yes	Not Reviewed		No	No			
21											
22											



Final SMS Acceptance



- Requirement for Final SMS Acceptance is not more than one (1) year.
- Period to correct all “N” during the initial assessment into “Y”.
- SMS of Service Provider is allowed to mature to ensure the SMS is working and producing the intended outcomes.
- Service provider is subject to limited or full scope surveillance.



Competencies of inspectors to perform SMS Assessments



Required Inspector Competencies



- **Knowledge:** Understanding of safety management principles, the ICAO SMS Framework, and relevant national regulatory requirements and practices.
- **Skills:** Proficiency in auditing techniques, hazard identification, risk assessment, and effective communication.
- **Attitude:** A commitment to fostering a positive safety culture, openness to continuous learning, and the ability to engage constructively with service providers.



SMS Training for Inspectors



Inspectors involved in SMS assessment have undergone the following training courses:

- ICAO Safety Management Online Course
- Safety Management for Practitioners (SMxP) Course
- ICAO State Safety Programme
- SMS implementation Course
- Auditing Techniques; and
- Various SSP/SMS promotional activities locally and internationally.

Note:

SSP Training Manual and Needs Assessment undergoing development.



Risk Profiling of Service Providers



Consideration factors



- the financial health of the organization;
- number of years in operation;
- turnover rate of the key personnel such as the accountable executive and safety manager;
- competence and performance of the accountable executive;
- competence and performance of the safety manager;
- results of previous audits;
- timely and effective resolution of previous findings
- measures of relative level of activity (exposure to safety risk);
- indicators of the relative scope and complexity of the activities being performed;
- maturity of the hazard identification and safety risk assessment process; and
- measures of safety performance from State safety data analysis and performance monitoring activities.



Risk Profiling Methodology



- **Define evaluation criteria and elements**
 - Risk Value Score
E.g. Compliance, Organisation, Safety Management, etc.
 - Operational Complexity Score
E.g. Number of certificates, Number of domestic bases, Number of aircraft types, Types of operations, etc.
- **Define a set a numeric value for each risk level**
 - 1 – Low ; 2 – Moderate; 3 – High
- **For each operator, assign a value to each evaluation criteria element.**
- **Calculate the total score for each operator.**
- **Define the range of score values to be used to determine Surveillance/Safety Audit cycles.**
- **Determine the Surveillance/Safety Audit Cycle for each operator.**

Safety Audit Cycle	Risk Score Value
Every 6 months	
Every 12 months	
Every 18 months	

Operator	Safety Audit Cycle
Operator A	
Operator B	
Operator C	
Operator D	

Customization of tools to fit Ghana's regulatory environment (ICAO and SMICG's evaluation frameworks.



Typical Profiling of a Service Provider



Size and Complexity			
Criteria	Parameters	Weight	Value
Number of certificates	1 certificate	1	
	2 certificate	2	
	3+ certificate	3	
Number of employees	1-10 employees	1	
	11-50 employees	2	
	51 employees or more	3	
Number of domestic bases	2 bases or less	1	
	3-10 bases	2	
	11 bases or more	3	
Number of aircraft types	3 aircrafts or less	1	
	4-10 aircraft	2	
	More than 10 aircrafts	3	
Nombre de types d'aéronefs	1 or less	1	
	2-5 types of aircrafts	2	
	More than 5 Types	3	
Types of operations	Domestic only	1	
	Domestic and International	3	

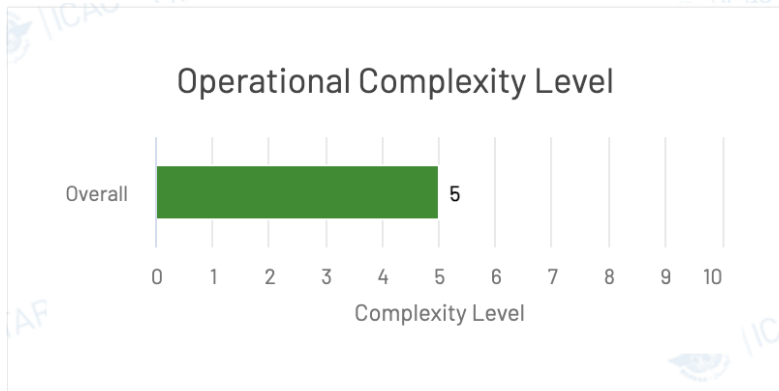
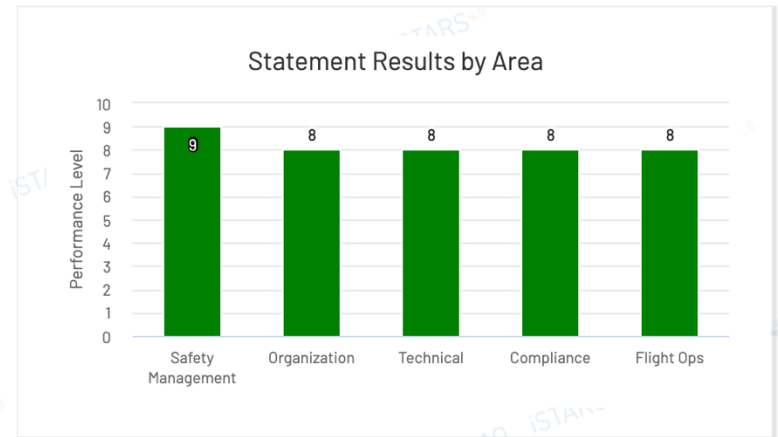
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Large Size	[>12
ModerateSize	[6; 12[
Small Size	(0;6[



Safety Risk of a Ghanaian Operator using ICAO ISTARs



Safety Performance



Surveillance Intensity



The surveillance intensity is based on a combination of the organization's performance and complexity. Based in the data provided, the surveillance intensity established is :





Inspection Frequency (Based on Data on ICAO iSTARs)



Schedule



The schedule is defining a sample size for each inspection type based on the actual number of elements to be inspected.

	Aircraft	Stations	Check Pilots
Population Size	<input type="text" value="0-1"/>	<input type="text" value="0-1"/>	<input type="text" value="0-1"/>

The sample size is defined using the ISO sampling model. The base inspection is unique and its period only depends on the intensity.

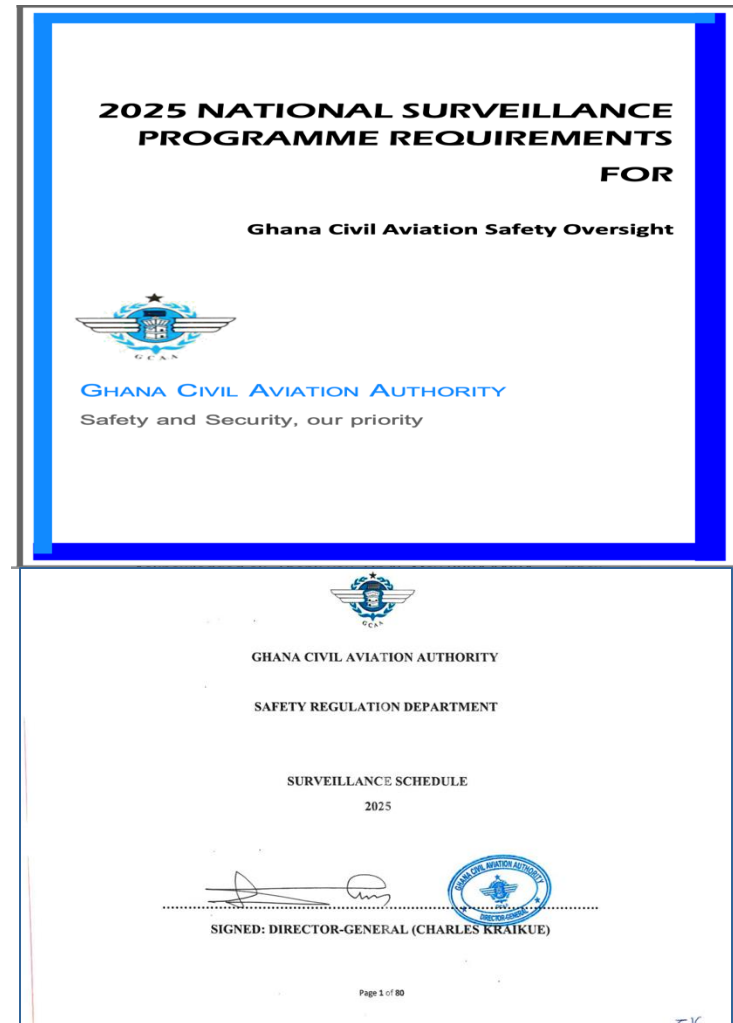
Activity Type	Related Population	Minimum Activities	Periodicity
Route Inspection - Cabin	Stations	1	12 months
Route Inspection - Flight Deck	Stations	1	12 months
Ramp Inspections	Aircraft	1	12 months
Station Inspections	Stations	1	12 months
Check Pilot Inspections	Check Pilots	1	12 months
Base inspection	-	1	24 months



National Surveillance Programme Requirements



- Surveillance cycle is quarterly-based.
- **Efforts are in place to move to risk-based surveillance.**
- SSP Office is developing tools to support effective risk-based surveillance by 2026.
- Surveillance activities are conducted on both manned and unmanned aircraft.





Enforcement Policy



- Current Enforcement Policy within the SMS Environment allows service providers to deal with some deviations internally within the context of their SMS.
- Process in place to change it to Surveillance Policy and incorporated in the Act.



Republic of Ghana



Ghana Civil Aviation Authority

GHANA STATE SAFETY PROGRAMME (SSP)

ENFORCEMENT POLICY

1. PURPOSE

- 1.1 The Ghana State Safety Programme Enforcement Policy is aimed at promoting compliance with aviation safety regulations and requirements through enforcement functions in an equitable manner.
- 1.2 The implementation of Safety Management Systems (SMS) requires the GCAA to have an equitable and discretionary enforcement approach to support the SSP-SMS framework.
- 1.3 The enforcement policies and procedures will allow service providers to deal with, and resolve, certain events involving safety deviations, internally, within the context of the service provider's SMS, and to the satisfaction of the Authority. Intentional contraventions of the Ghana Civil Aviation Act, 2004 Act 678 and the Ghana Civil Aviation Directives (GCADs) will be investigated and may be subject to conventional enforcement action where appropriate. There should be clear provisions in the enforcement framework for due consideration to distinguish between premeditated violations and unintentional errors or deviations.

This Enforcement Policy and associated enforcement procedures shall apply to the following service providers required by the GCADs Part 36 subparagraph 36.3 to implement a Safety Management System (SMS):

- (1) An ATO in accordance with Part 3 of the Flight Standards Directives, that is exposed to safety risks related to aircraft operations during the provision of its services;
- (2) An AOC holder authorized to conduct commercial air transport in accordance with Parts 8 and 9 the Flight Standards Directives;
- (3) An AMO providing services to operators of aeroplanes or helicopters engaged in commercial air transport in accordance with Part 6 of the Flight Standards Directives;
- (4) The Air Traffic Services (ATS) provider.



Safety Promotion in nurturing a Positive Safety Culture



Training and Education



- Establishment of the Ghana Civil Aviation Training Academy (GATA).
- Courses offered on SMS fundamentals and advanced safety management as well as ICAO Global Aviation Training (GAT) courses.
- Collaboration with international bodies for specialized training programs (FAA, BAGASOO, Singapore Aviation Academy (SAA), etc).

- Regular development and dissemination of technical guidance materials in the form of advisory circulars, newsletters, etc.
- Workshops for internal and external stakeholders to share best practices and experiences.
- Participation in Regional and global Safety Programs.

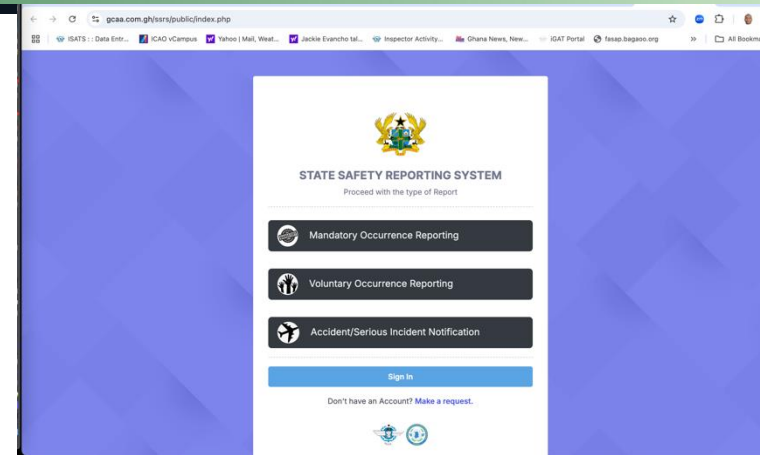




Safety Culture Enhancement



- Initiatives to encourage reporting of safety occurrences at the State level.
- Programs aimed at building trust and openness among aviation personnel.
- Protection principles of Safety Data and Safety Information.
- Provide feedback on reported safety occurrences.





Challenges



- **Low Safety Reporting:** Accurate risk profiling requires comprehensive and reliable data. Challenges include low or inconsistent reporting and limited access to high-quality data, hindering effective risk assessment.
- **Training gaps.** Ongoing training is essential to keep inspectors updated on evolving SMS practices and international standards.
- **Data Management:** Challenges in collecting, analyzing, and managing safety data can impede effective SMS assessments.



The Way Forward



- Encourage continuous collaboration and proactive engagement in safety promotion activities.
- Continue to build capacity in SMS principles, SMS assessment tools and safety risk profiling for service providers.
- Strengthen internal and external collaboration to enhance oversight capabilities in risk-based surveillance.
- Strengthen and promote safety culture from prescriptive to performance based.



Thank You