

Guidance Material Initial Management System Assessment (IMSA)

CAAT-GM-OPS-IMSA Issue: 01 Revision: 00

Date: 24 JAN 2024

Approved by Appro

The Civil Aviation Authority of Thailand



0. Administration

0.1 Foreword

In accordance with Article 5 of CAAT Requirement No. 26 concerning the "Air Operator Certificate," it stipulates the following:

"An entity eligible to apply for an Air Operator Certificate shall be a legally recognised Thai organisation holding an Air Operator License for conducting commercial air transport services. If such an entity, eligible for an Air Operator Certificate, has previously applied for authorisation to conduct an Air Operator License (AOL) and now seeks an Air Operator Certificate (AOC), the Director-General may authorise the early submission of the Air Operator Certificate application.

Such authorisation is contingent upon the applicant establishing a management system (MS) that demonstrates preparedness to comply with safety management standards applicable to commercial air transport. This management system (MS) should encompass both a safety management system (SMS) and a compliance and monitoring system (CMS) to ensure alignment with relevant regulations and requirements.

This provision is formulated to ascertain the preparedness of the organisation's management system (MS), an essential component guiding the organisation through a successful Air Operator Certification process. Its objective is to facilitate an efficient certification procedure and foster effective collaboration between the applicant and the Civil Aviation Authority of Thailand (CAAT).





0.2 Table of Contents

0.	Adn	ninistration	. 0-1
	0.1	Foreword	. 0-1
	0.2	Table of Contents	. 0-3
	0.3	List of Effective Pages	. 0-5
	0.4	Records of Revision	. 0-7
	0.5	Revision of Highlights	. 0-9
	0.6	Distribution List	0-11
	0.7	Administration	0-13
		0.7.1 Control of Manual	0-13
		0.7.2 Amendment and Revision	0-13
		0.7.3 Users feedback	0-13
	0.8	List of Associated Documents	0-15
	0.9	Definitions and Acronyms	0-17
		0.9.1 Definition	0-17
		0.9.2 Acronyms and Abbreviations	0-18
1.	Intr	oduction	. 1-1
	1.1	Objective	. 1-1
	1.2	Applicability	. 1-1
	1.3	CAAT Assessment Process and Procedures	. 1-1
	1.4	Desktop Assessment	. 1-2
		1.4.1 Interviews with Key Personnel	. 1-2
		1.4.2 Facility Visiting (As applicable)	. 1-3
		1.4.3 Evaluation of the Management System and Report Conclusion	. 1-3
	1.5	Acceptance Letter to the Applicant	. 1-3
	1.6	Refusal of the Application	. 1-3
	1.7	List of Assessment Tools	. 1-4
		1.7.1 Desktop Assessment	. 1-4
		1.7.2 Interviews with Key Personnel	. 1-4
2.	Mar	nagement System Assessment Tool Guidance	. 2-1
	2.1	Detail to Record	. 2-1
	2.2	Addressing Deficiencies and Observations	. 2-1
	2.3	Structure of Management System Assessment Tool	. 2-1
		2.3.1 The Compliance Monitoring System (CMS)	. 2-1
		2.3.2 The Safety Management System (SMS)	. 2-1
		2.3.3 Management Personnel Assessment	. 2-1
3.	Арр	endix A: Compliance Monitoring System (CMS)	. 3-1
4.	Арр	endix B: Safety Management System (SMS)	. 4-1
	4.1	Guidance for Establishing SMS Implementation Plan	. 4-5
	4.2	Example of SMS implementation plan	. 4-6
5.	Арр	endix C: Management Personnel Assessment	. 5-1





0.3 List of Effective Pages

Pages	lssue	Revision	Effective Date			
0. Administration						
0-1	01	00	24 Jan 2024			
0-2	01	00	24 Jan 2024			
0-3	01	00	24 Jan 2024			
0-4	01	00	24 Jan 2024			
0-5	01	00	24 Jan 2024			
0-6	01	00	24 Jan 2024			
0-7	01	00	24 Jan 2024			
0-8	01	00	24 Jan 2024			
0-9	01	00	24 Jan 2024			
0-10	01	00	24 Jan 2024			
0-11	01	00	24 Jan 2024			
0-12	01	00	24 Jan 2024			
0-13	01	00	24 Jan 2024			
0-14	01	00	24 Jan 2024			
0-15	01	00	24 Jan 2024			
0-16	01	00	24 Jan 2024			
0-17	01	00	24 Jan 2024			
0-18	01	00	24 Jan 2024			
1. Ir	ntroduction					
1-1	01	00	24 Jan 2024			
1-2	01	00	24 Jan 2024			

Pages	lssue	Revision	Effective Date	
1-3	01	00	24 Jan 2024	
1-4	01	00	24 Jan 2024	
	lanagemen uidance	t System	Assessment Tol	
2-1	01	00	24 Jan 2024	
2-2	01	00	24 Jan 2024	
	ppendix	-	ance Monitoring	
3-1	01	00	24 Jan 2024	
3-2	01	00	24 Jan 2024	
3-3	01	00	24 Jan 2024	
3-4	01	00	24 Jan 2024	
	ppendix B SMS)	Safety Mar	nagement System	
4-1	01	00	24 Jan 2024	
4-2	01	00	24 Jan 2024	
4-3	01	00	24 Jan 2024	
4-4	01	00	24 Jan 2024	
4-5	01	00	24 Jan 2024	
4-6	01	00	24 Jan 2024	
4-7	01	00	24 Jan 2024	
4-8	01	00	24 Jan 2024	
4-9	01	00	24 Jan 2024	
4-10	01	00	24 Jan 2024	



Pages	Issue	Revision	Effective Date
4-11	01	00	24 Jan 2024
4-12	01	00	24 Jan 2024
4-13	01	00	24 Jan 2024
4-14	01	00	24 Jan 2024
4-15	01	00	24 Jan 2024
4-16	01	00	24 Jan 2024
	ppendix (ssessment	C Manage	ment Personnel
5-1	01	00	24 Jan 2024
5-2	01	00	24 Jan 2024
5-3	01	00	24 Jan 2024
5-4	01	00	24 Jan 2024



0.4 Records of Revision

This version of the Guidance Material of Initial Management System Assessment (IMSA) is issue no. 01, revision no. 00. The valid pages are listed in the List of Effective Pages distributed with every revision.

Issue	Revision	Effective Date	Revised By





0.5 Revision of Highlights

Area of Changed	Amendment Summary
New Issue	Entire Manual





0.6 Distribution List

Type of Document	Distributed To
Electronic Document	Air Operator by CAAT Website





0.7 Administration

0.7.1 Control of Manual

The Guidance Material of Initial Management System Assessment (IMSA) is produced to represent the standards and recommended practices for the AOC Applicant to proceed with the applicable procedure in order to comply with Article 5 of RCAAT No. 26.

0.7.2 Amendment and Revision

Whenever there is a significant change, a new procedure issuance is required. Minor amendments shall be issued in the form of revisions, with effective pages being reviewed no later than the effective date. A vertical black line is required on the left-hand side of the page to identify the change of this revision.

Significant changes are extensive revisions necessitating a complete re-issuance when involving significant changes in organization, responsibility, guidelines, policy or procedures including substantial format change. **Minor changes** are affected some contents in provision, the revision can be made to the corresponding page.

Manual custodian shall record the details of revision and indicate their name with initial last name in the Records of Revision.

0.7.3 Users feedback

If there is any recommendation for improvement with this guidance material, your valuable feedback should be provided to the Operations Management Inspection Division (OM) by sending an email to ops_om@caat.or.th





0.8 List of Associated Documents

Document Reference	Name of Document
EASA	EASA Management System Assessment Tool (EASA MSAT)





0.9 Definitions and Acronyms

0.9.1 Definition

Definition	Meaning
N/A	N/A



0.9.2 Acronyms and Abbreviations

Acronyms and Abbreviations	Meaning
AOC	air operator certificate
CMS	compliance monitoring system
СММ	compliance monitoring manager
ERP	emergency response plan
GM	guidance material
ICAO	International Civil Aviation Organisation
ICAO SARPs	ICAO Standards and Recommended Practices
MS	management System
SMM	safety manager
SMS	safety management system
SPI	safety performance indicator
SSP	state safety programme
QMS	quality management system



1. Introduction

To conduct Commercial Air Transport Operations under the Civil Aviation Authority of Thailand (CAAT) Regulations and Requirements, every commercial air transport operator is responsible for conducting air transport in the public interest with the highest possible level of safety.

The CAAT's certification process is designed to ensure that prospective Air Operator Certificate (AOC) holders understand this duty and are able to fulfil it. When satisfactorily completed, the certification process should ensure that the operator is able to take responsibility for managing all essential processes to ensure safe and efficient commercial air transport.

A certified operator shall also be able to comply with all applicable regulation requirements, e.g. CAAT Regulation No. 26, CAAT Regulation No.27, TCAR OPS and international standards for the operation of aircraft as published in the relevant ANNEX to the Convention of the International Civil Aviation Organisation (ICAO).

Obtaining an Air Operator Certificate (AOC) and Air Operator License (AOL) is time-consuming and extensive work. The CAAT will certify an operator in accordance with section 15/10 paragraph 2, section 41/112, and section 41/117 of the Air Navigation Act, 14th Amendment B.E.2562 and all applicable regulations, requirements, and standards. All application forms shall be duly signed.

1.1 Objective

The Management System Assessment Tool is designed to be used by both CAAT and organisations with the purpose on assessment and the continual improvement of the Management System (MS). The Civil Aviation Authority of Thailand (CAAT) will use as a tool for initial approval for the applicant or organisation who intends to apply for the AOC Initial Certification Process after submit the application for AOL and still being waiting for the approval. The resulting evaluation could be presented to CAAT to demonstrate their capability to establish the Management System (MS) so this can be used as the applicant's self-evaluation.

Furthermore, organisations could use the tool as a management system gap analysis tool and develop an informed, forward-looking plan for further implementation.

1.2 Applicability

The applicant has already applied for an Air Operator License (AOL) and would like to apply for an Air Operator Certificate (AOC) simultaneously.

1.3 CAAT Assessment Process and Procedures

Prior to the initial AOC Certification of the organisation process, it is imperative to comprehend the criteria and the process for evaluating the Management System (MS) of applicants to demonstrate readiness before advancing to the Air Operator Certificate (AOC) Certification Process, conducted in parallel with the Air Operator License (AOL) approval process.

The CAAT will ensure that all requisite enablers for a functioning MS are in place at the commencement of operations. During this assessment prior to proceed to the AOC certification process, the initial evaluation of the MS assessment tool can be conducted through a desktop review of relevant MS documentation. This provides an opportunity for the evaluator to advise and guide the organisation on its MS implementation and supports a standardised implementation.



1.4 Desktop Assessment

Assessing essential Management System (MS) documentation, such as OM-A, SMM, CMS, etc., is carried out through the utilisation of the management system assessment tool during desktop assessment. The details and evidence, including any identified deficiency, shall be recorded in the management system assessment tool.

The Principal Operations Inspector (POI) is responsible for assigning the relevant inspectors (e.g., FOI, OMI, CSI, DGI, and SMO-AG) to carry out the desktop assessment process. Therefore, a pre-assessment meeting should be arranged among inspectors to facilitate this initiative.

<u>Note</u>:

- (a) The CAAT oversight computerised system (EMPIC) will be used as the retention location of any relevant document which is not limited to the recording of relevant evidence observed.
- (b) The Management System Assessment Tool is available on the CAAT Website.
- 1.4.1 Interviews with Key Personnel

The CAAT should conduct interviews with key personnel within the organisation after the desktop assessment result is satisfied. This is performed to evaluate their understanding and compliance with the procedures associated with the Management System, as delineated in ORO.GEN.200 and ORO.AOC.135. Key areas of focus during these interviews may include:

(a) Role and Functioning of the Management System:

Evaluation of the understanding and capability of key personnel to fulfill the role and responsibility relevant to the Management System.

(1) Accountable Manager

The person has the ultimate responsibility to ensure sufficiency of required resources is available for the safe operations and compliance with applicable regulatory requirements.

(2) Safety Manager

The key person is responsible for monitoring and managing of safety management system within the organisation.

(3) Compliance Monitoring Manager

The key person is responsible for monitoring and managing compliance with applicable regulatory requirements of organisation.

(b) Compliance with Management System Elements:

Evaluation of the degree to which key personnel comply with and incorporate essential elements of the Management System into their operational duties. These interviews provide a deeper insight into the organisation's leadership's commitment to and understanding of the MS, ensuring that key personnel play an integral role in fostering a culture of safety and compliance within operations.

Note:

The CAAT oversight computerised system (EMPIC) will be used as the retention location of any relevant document which is not limited to the recording of relevant evidence observed.



1.4.2 Facility Visiting (As applicable)

The CAAT recognising that not all elements can be thoroughly addressed prior to the commencement of operations, such as the identification of safety issues and the establishment of safety objectives, the assessment of the organisation's premises provides an opportunity for assessors from the CAAT to provide guidance and advice on the implementation of the Management System in accordance with the requirements in ORO.GEN.215 and ORO.AOC.140.

1.4.3 Evaluation of the Management System and Report Conclusion

The acceptability of the organisation's management system is contingent upon the results of the prescribed Assessment Process and Procedures.

The CAAT Inspector Team, under the direction of the Principal Operations Inspector (POI), is required to hold a meeting following the assessment process to compile and produce a summary report encompassing the overall evaluation results. The Management System Assessment Tool and evidence from the evaluation should be recorded in the report.

<u>Note</u>:

- (a) In instances where deficiencies are identified during the assessment, the CAAT should document these in the report as evidence to substantiate the applicant's readiness to accept this application.
- (b) The summary report should be retained in the CAAT oversight computerised system (EMPIC) as evidence of the acceptance prior proceed to the pre-application phase.

1.5 Acceptance Letter to the Applicant

After the CAAT Inspector Team, under the responsibility of the Principal Operations Inspector (POI), has completed the MS assessment process and detailed summary report, the outcome of the evaluation, indicating the readiness of the organisation's Management System, should be communicated to the applicant.

If the result aligns with the criteria specified and is deemed satisfactory, an "**Official Acceptance Letter**" will be issued to inform the applicant to commence the AOC certification process.

<u>Note:</u>

If the applicant has obtained the AOL during this evaluation process, the applicant shall immediately commence the AOC Certification.

1.6 Refusal of the Application

The CAAT reserves the right to refuse an application if the applicant cannot demonstrate the overall management system in a standardised and reflects the level of progress achieved by the organisation.

In the process of correcting assessments or providing additional documentation, the applicant is permitted for propose the correction for 2 times. Each correction period should not exceed 5 working days after date of notified. If the applicant is unable to fulfill the assessment within defined timeframe, the application shall be rejected. The subsequent application request can be submitted at least 20 working days after the last unsuccessful assessment.

<u>Note:</u>

This process is applicable exclusively to applicants intending to initiate the AOC certification process before obtaining approval for the Air Operator's License (AOL).



1.7 List of Assessment Tools

- 1.7.1 Desktop Assessment
 - (a) CAAT-OPS-TCFM-108: Management System Assessment for Compliance Monitoring System (CMS)
 - (b) CAAT-OPS-TCFM-109: Management System Assessment for Safety management System (SMS)
- 1.7.2 Interviews with Key Personnel
 - (a) CAAT-OPS-TCFM-110: Management Personnel Assessment



2. Management System Assessment Tool Guidance

The document assesses the compliance of the management system through a series of features based on ICAO Annex 19 and TCAR OPS management system requirements for organisations.

This Management System Tool is developed to assess the readiness of the entity's management system (MS) requirements to ensure that the essential foundation has been adequately prepared before being authorised by the Director-General for the early submission of the Air Operator Certificate application.

2.1 Detail to Record

It is crucial to utilise the Management System Assessment Tool to record evidence of the assessment. Evidence encompasses documentation, reports, records of interviews, and discussions. For instance, for an item to be considered, the evidence is likely to be documented only, whereas assessing whether it may involve scrutinising records and engaging in face-to-face discussions with personnel within an organisation.

2.2 Addressing Deficiencies and Observations

In cases where deficiencies are identified during the assessment, the CAAT has the option to document these in the report as evidence justifying the readiness for acceptance of the application. Furthermore, the observations can be used to identify areas for continuous improvement and encourage a positive management system in the organisation.

2.3 Structure of Management System Assessment Tool

The tool focuses on three elements of a management System (MS) within the context:

2.3.1 The Compliance Monitoring System (CMS)

The compliance monitoring system, as described in the TCAR OPS, is a function to check compliance with the relevant Thai requirements. It is complemented by the evaluation of interface management, as this is an essential element for the safety of operations. CAAT will utilise CAAT-OPS-TCFM-108: Management System Assessment for Compliance Monitoring System (CMS) for evaluation. An example of the CMS assessment tool can be found in Appendix A.

2.3.2 The Safety Management System (SMS)

The safety management system (SMS) elements refer to ICAO Annex 19 and follow its ICAO framework as per the traditional four pillars of an SMS: safety policy and objectives, safety risk management, safety assurance, and safety promotion. CAAT will utilise CAAT-OPS-TCFM-109: Management System Assessment for Safety Management System (SMS) for evaluation. An example of the SMS assessment tool can be found in Appendix B.

2.3.3 Management Personnel Assessment

The evaluation focuses on assessing the degree to which the key personnel adhere to and integrate crucial elements of the management system into their operational responsibilities. CAAT will utilise CAAT-OPS-TCFM-110: Management Personnel Assessment for evaluation. An example of the form can be found in Appendix C.



<u>Note:</u>

References and materials related to the Regulation of TCAR OPS are made where appropriate. The language has also been adapted to the CAAT context when relevant. For instance, whereas ICAO uses the term "Service Provider", this document prefers to use "Organisation", or "Applicant."



3. Appendix A: Compliance Monitoring System (CMS)

Instruction

Reviewing each item in the assessment tool enables the applicant to evaluate their readiness to implement CMS. In addition, it allows the entity to identify any additional actions required to meet the necessary elements that may be insufficient.

The organisation's CMS acceptability during this phase will be granted when the applicant responds with "YES (Y)" to all items. The applicant should be able to demonstrate the availability of each item in accordance with their responses.

If the answer is **"NO (N)"** for any items, the applicant is required to provide further actions and implement them until the necessary achievements are reached within the agreed and specified timeframe.

If the applicant is unable to achieve the required item within the specified timeframe, the request to proceed with the AOC certification process will be terminated.

No.	Subject	Reference	Y	N	Comment
1	Responsibilities and Accountability for ensu	ring Compliance			
1.1	Applicable requirements are clearly identified and properly transcribed into organisation manuals and procedures.	ORO.GEN.210 (b)			
1.2	Responsibilities and accountabilities for compliance are defined for all staff involved in safety activities.	ORO.GEN.210 (b)			
2	Responsibilities and Accountability for Compliance Monitoring				
2.1	There is a person or group of persons with responsibilities for compliance monitoring, including the person acting as compliance monitoring manager with direct access to the accountable manager is documented.	AMC1 ORO.GEN.200(a)(2) point (c)			
2.2	The accountable manager's accountability and responsibilities for compliance monitoring is documented.	AMC1 ORO.GEN.200(a)(2) point (c)			
3	Compliance Monitoring Programme				
3.1	The organisation has a compliance monitoring programme including details of the schedule of monitoring activities and	AMC1 ORO.GEN.200(a)(2) point (d)(2)(vi)			



No.	Subject	Reference	Y	N	Comment
	procedures for audits and inspections, reporting, follow up and records.	GM2 ORO.GEN.200(a)(2) – [complex operators] GM1 ORO.GEN.200(b) – [non- complex operators]			
3.2	The method for achieving independence in compliance monitoring is clearly identified in the documentation.	AMC1 ORO.GEN.200(a)(2) point (d)(2)(vi) GM2 ORO.GEN.200(a)(2) - [complex operators] GM1 ORO.GEN.200(b) - [non- complex operators]			
4	Compliance Monitoring Outcomes			I	
4.1	The organisation has documented procedures for the identification and follow-up of corrective actions and preventive actions.	ORO.GEN.200 point (a)(1)(vi)			
4.2	There is a defined process for communicating audit results to the accountable manager and senior management.				
4.3	The interface between compliance monitoring and the safety risk management processes is described.	ORO.GEN.200 point (a)(1)(vi)			

Y= Yes

N= No

Comment= Description the detail or other information about further actions required.



Summary Comment

Organisation or Applicant Name:					
CAAT Use Only:					
Summary Comments: Con					
1 st Submission Date:		2 nd Submission Date:			
Application No.:		Application No.:			
Results of	Assessments	Results of Assessments			
ACCEPTED	REJECTED	ACCEPTED	REJECTED		
CAAT Inspector (N	ame – Surname)	CAAT Inspector (Name – Surname)			
Authorisation Scope and Department		Authorisation Scope and Department			
Date of Assessment (DD/MMM/YYYY)		Date of Assessment (DD/MMM/YYYY)			



Resulted for CMS Assessment:					
Validated and reviewed by		Approved by			
The Principal Operations Inspector (POI)		Flight Operations Standards Manager (OPS)			
Name - Surname		Name - Surname			
Date		Date			



4. Appendix B: Safety Management System (SMS)

Instruction

There are 9 elements comprised in the checklist. The applicant should be sure that all elements are available in the organisation.

Following each item in the assessment will allow the applicant to know how much you are ready to implement SMS, contrariwise, the entity will be able to be aware of further actions to achieve the required elements that are still missing.

The acceptability of the organisation's SMS during this phase will be granted when the applicant completes "YES (Y)" to all items and the applicant can demonstrate the availability of each item regarding their answers.

If the answer is **"NO (N)"** for any items, the applicant is required to provide further actions and implement them until the necessary achievements are reached within the agreed and specified timeframe.

If the applicant is unable to achieve the required item within the specified timeframe, the request to proceed with the AOC certification process will be terminated.

No.	Subject	Reference	Y	N	Comment
1.	There is evidence that the implementation plan has been developed in consultation with the Accountable Manager and individuals who are responsible for functions within the organisation.				
2.	A gap analysis has been started and the outcome documented, to compare the organisation's current state with the SMS regulations and required elements.				
3.	The task identified from the gap analysis has been used to provide input for development of the implementation plan.				
4.	There is evidence that the completed gap analysis and identified tasks have been used to provide input for development of the implementation plan.				
5.	The implementation plan includes realistic timelines and milestones for each task or group of tasks from the planning stage to the entire implementation of the SMS.				



No.	Subject	Reference	Y	N	Comment
6.	The coordination of integrating safety related third party contractors and suppliers without an SMS, into the scope of the organisation's SMS, are included in the implementation plan.				
7.	A process is described whereby the status and performance of the SMS implementation plan is regularly monitored, and steps taken to mitigate substandard performance.				
8.	The organisation has appointed a qualified person to oversee organisation safety management system.				
9.	The final authority over all aviation activities is designated to the authorised person.				

Y= Yes

N= No

Comment= Description the detail or other information about further actions required.



Summary Comment

Organisation or Applicant Name:					
CAAT Use Only:					
Summary Comments: Safety Management System (SMS)					
1 st Submission Date:		2 nd Submission Date:			
Application No.:		Application No.:			
Results of	Assessments	Results of Assessments			
ACCEPTED	REJECTED	ACCEPTED	REJECTED		
CAAT Inspector (N	ame – Surname)	CAAT Inspector (Name – Surname)			
Authorisation Scope and Department		Authorisation Scope and Department			
Date of Assessment (DD/MMM/YYYY)		Date of Assessme	ent (DD/MMM/YYYY)		



Resulted for SMS Assessment:					
Validated and reviewed by			Approved by		
		Aviatio	on Safety Management and		
The Principal Operations Inspector (POI)		Standards Assurance Office Manager (SMO)			
Name - Surname		Name - Surname			
Date		Date			



4.1 Guidance for Establishing SMS Implementation Plan

The implementation plan is a roadmap describing how the organisation intends to implement processes that meet the requirements of ORO.GEN.200 and associated AOC certification rules. Therefore, the implementation plan should be a strategy for managing SMS implementation including adequate resourcing and realistic timeline. Like any business change, SMS implementation will require some level of investment to address training, documentation changes, development time and possibly system tools to manage data streams and assist with analysis. The changes that are necessary to implement SMS should be managed in a structured way to ensure that there is an awareness of impacts and potential consequences, and that these are managed appropriately.

The implementation plan need not be complex. However, there should be sufficient detail to ensure that the organisation has identified how it will meet the overall objective of successfully implementing a SMS. (*This means that each element is present and suitable in the context of the activities the organisation undertakes.*)

The implementation plan should be developed in consultation with the chief executive and individuals who are responsible for functions within the organization, includes a declaration by the chief executive that the plan is appropriate, achievable, and adequately resourced in addition to a proposed date for implementation.

The implementation plan should be documented in a format that is appropriate to the content and complexity and should address the following.

- a) the tasks identified during the gap analysis process, consistent with the requirements of the size of the organisation and the complexity of its products or services.
- b) timelines and milestones for each task or group of tasks from the planning stage to the entire implementation of SMS.
- c) for a phased implementation approach (e.g. ICAO Doc. 9859, Chapter 5 Phased Implementation Approach), the tasks are sorted according to the phase allocation of their related elements.
- d) information as to who is responsible for completion of the identified task or group of tasks, including overall governance for the implementation plan.
- e) a process identified whereby the status and performance of the SMS implementation plan is regularly monitored, and steps taken to mitigate substandard performance.
- f) information showing how coordination of integrating safety related third party contractors and suppliers without an SMS, into the scope of the organisation's SMS.
- g) resource requirements.
- h) risk management associated with implementation of SMS.



4.2 Example of SMS implementation plan

The initial gap analysis checklist in Table 1 can be used as a template to conduct the first step of an SMS gap analysis. This format with its overall "Yes/No/Partial" responses will provide an initial indication of the broad scope of gaps and hence overall workload to be expected. The questionnaire may be adjusted to suit the needs of the organisation and the nature of the product or service provided. This initial information should be useful to senior management in anticipating the scale of the SMS implementation effort and hence the resources to be provided. This initial checklist would need to be followed up by an appropriate implementation plan as per Tables 2 and 3.

A "Yes" answer indicates that the organisation meets or exceeds the expectation of the question concerned. A "No" answer indicates a substantial gap in the existing system with respect to the question's expectation. A "Partial" answer indicates that further enhancement or development work is required to an existing process in order to meet the question's expectations.

No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation			
•	Component 1 — SAFETY POLICY AND OBJECTIVES Element 1.1 — Management commitment							
1.1-1	Is there a safety policy in place?			□ Yes □ No □ Partial				
1.1-2	Does the safety policy reflect senior management's commitment regarding safety management?			□ Yes □ No □ Partial				
1.1-3	Is the safety policy appropriate to the size, nature and complexity of the organisation?			□ Yes □ No □ Partial				
1.1-4	Is the safety policy relevant to aviation safety?			□ Yes □ No □ Partial				
1.1-5	Is the safety policy signed by the Accountable Manager?			□ Yes □ No □ Partial				
1.1-6	Is the safety policy communicated, with visible endorsement, throughout the [Organisation]?			□ Yes □ No □ Partial				

Table 1: Gap analysis checklist



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
1.1-7	Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the [Organisation]?			□ Yes □ No □ Partial	
Elemen	t 1.2 — Safety accountability and responsib	ilities	ī.	I	
1.2-1	Has [Organisation] identified an Accountable Manager who, irrespective of other functions, shall have ultimate accountability, on behalf of the [Organisation], for the implementation and maintenance of an effective SMS?			□ Yes □ No □ Partial	
1.2-2	Does the Accountable Manager have full control of the financial and human resources required for the operations authorized to be conducted under the operations certificate?			□ Yes □ No □ Partial	
1.2-3	Does the Accountable Manager have final authority over all aviation activities of his organisation?			□ Yes □ No □ Partial	
1.2-4	Has [Organisation] identified and documented the safety accountabilities of management as well as operational personnel, with respect to the SMS?			□ Yes □ No □ Partial	
1.2-5	Is there a safety committee or review board for the purpose of reviewing SMS and safety performance?			□ Yes □ No □ Partial	
1.2-6	Is the safety committee chaired by the Accountable Manager or by an appropriately assigned deputy, duly substantiated in the SMS manual?			□ Yes □ No □ Partial	
1.2-7	Does the safety committee include relevant operational or departmental heads as applicable?			□ Yes □ No □ Partial	
1.2-8	Are there safety action groups that work in conjunction with the safety committee (especially for large/complex organisations)?			□ Yes □ No □ Partial	



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
Elemen	t 1.3 — Appointment of key safety personne	el			
1.3-1	Has [Organisation] appointed a qualified person to manage and oversee the day-to- day operation of the SMS?			□ Yes □ No □ Partial	
1.3-2	Does the qualified person have direct access or reporting to the Accountable Manager concerning the implementation and operation of the SMS?			□ 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?			□ Yes □ No □ Partial	
1.3-4	Is the SMS manager's position a senior management position not lower than or subservient to other operational or production positions?			□ Yes □ No □ Partial	
Elemen	t 1.4 — Coordination of emergency response	e planning			
1.4-1	Does [Organisation] have an emergency response/contingency plan appropriate to the size, nature and complexity of the organisation?			□ Yes □ No □ Partial	
1.4-2	Does the emergency/contingency plan address all possible or likely emergency/crisis scenarios relating to the organisation's aviation product or service deliveries?			□ Yes □ No □ Partial	
1.4-3	Does the ERP include procedures for the continuing safe production, delivery or support of its aviation products or services during such emergencies or contingencies?			□ Yes □ No □ Partial	
1.4-4	Is there a plan and record for drills or exercises with respect to the ERP?			□ Yes □ No □ Partial	
1.4-5	Does the ERP address the necessary coordination of its emergency response/contingency procedures with the emergency/response contingency			□ Yes □ No □ Partial	



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
	procedures of other organisations where applicable?				
1.4-6	Does [Organisation] have a process to distribute and communicate the ERP to all relevant personnel, including relevant external organisations?			□ Yes □ No □ Partial	
1.4-7	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness?			□ Yes □ No □ Partial	
Elemen	t 1.5 — SMS documentation	L		L	1
1.5-1	Is there a top-level SMS summary or exposition document which is approved by the Accountable Manager and accepted by the CAA? [5.3.36 to 5.3.38]			□ Yes □ No □ Partial	
1.5-2	Does the SMS documentation address the organisation's SMS and its associated components and elements?			□ Yes □ No □ Partial	
1.5-3	Is [Organisation] SMS framework in alignment with the regulatory SMS framework?			□ Yes □ No □ Partial	
1.5-4	Does [Organisation] maintain a record of relevant supporting documentation pertinent to the implementation and operation of the SMS?			□ 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?			□ Yes □ No □ Partial	
1.5-6	Does the SMS implementation plan address the coordination between the service provider's SMS and the SMS of external organisations where applicable?			□ Yes □ No □ Partial	
1.5-7	Is the SMS implementation plan endorsed by the Accountable Manager?			□ Yes □ No □ Partial	



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation				
Component 2 — SAFETY RISK MANAGEMENT									
	t 2.1 — Hazard identification								
2.1-1	Is there a process for voluntary hazards/threats reporting by all employees?			□ Yes □ No □ Partial					
2.1-2	Is the voluntary hazard/threats reporting simple, available to all personnel involved in safety-related duties and commensurate with the size of the service provider?			□ Yes □ No □ Partial					
2.1-3	Does [Organisation] SDCPS include procedures for incident/accident reporting by operational or production personnel?			□ Yes □ No □ Partial					
2.1-4	Is incident/accident reporting simple, accessible to all personnel involved in safety-related duties and commensurate with the size of the service provider?			□ Yes □ No □ Partial					
2.1-5	Does [Organisation] have procedures for investigation of all reported incident/accidents?			□ 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?			□ 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?			□ Yes □ No □ Partial					
Elemen	t 2.2 — Safety risk assessment and mitigation	on							
2.2-1	Is there a documented hazard identification and risk mitigation (HIRM) procedure involving the use of objective risk analysis tools?			□ Yes □ No □ Partial					



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
2.2-2	Is the risk assessment reports approved by departmental managers or at a higher level where appropriate?			□ Yes □ No □ Partial	
2.2-3	Is there a procedure for periodic review of existing risk mitigation records?			□ Yes □ No □ Partial	
2.2-4	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified?			□ Yes □ No □ Partial	
2.2-5	Is there a procedure to prioritize identified hazards for risk mitigation actions?			□ Yes □ No □ Partial	
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?			□ Yes □ No □ Partial	
-	nent 3 — SAFETY ASSURANCE	L	1	L	
Elemen	t 3.1 — Safety performance monitoring and	measureme	nt		
3.1-1	Are there identified safety performance indicators for measuring and monitoring the safety performance of the organisation's aviation activities?			☐ 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?			□ Yes □ No □ Partial	
3.1-3	Do the safety performance indicators include alert/target settings to define unacceptable performance regions and planned improvement goals?			□ Yes □ No □ Partial	
3.1-4	Is the setting of alert levels or out-of- control criteria based on objective safety metrics principles?			□ Yes □ No □ Partial	
3.1-5	Do the safety performance indicators include quantitative monitoring of high- consequence safety outcomes (e.g. accident and serious incident rates) as			□ Yes □ No □ Partial	



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
	well as lower-consequence events (e.g. rate of non-compliance, deviations)?				
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?			□ 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?			□ Yes □ No □ Partial	
3.1-8	Are the safety performance indicators periodically reviewed?			□ Yes □ No □ Partial	
Elemen	t 3.2 — The management of change				-
3.2-1	Is there a procedure for review of relevant existing aviation safety-related facilities and equipment (including HIRM records) whenever there are pertinent changes to those facilities or equipment?			□ 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 those operations or processes?			□ 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?			□ 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 organisation such as regulatory/industry standards, best practices or technology?			☐ Yes ☐ No ☐ Partial	



No.	Aspect to be analysed or question to be answered	SMM 4 th edition reference	State regulations reference	Answer	Status of implementation
Elemen	t 3.3 — Continuous improvement of the SM	S			-
3.3-1	Is there a procedure for periodic internal audit/assessment of the SMS?			□ Yes □ No □ Partial	
3.3-2	Is there a current internal SMS audit/assessment plan?			□ Yes □ No □ Partial	
3.3-3	Does the SMS audit plan include the sampling of completed/existing safety risk assessments?			□ 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?			□ Yes □ No □ Partial	
3.3-5	Does the SMS audit plan cover the SMS interface with subcontractors or customers where applicable?			□ Yes □ No □ Partial	
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?			□ Yes □ No □ Partial	

Note. — The references to the SMM 4^{th} edition in the third column will be provided once the document is finalized and published.

The initial gap analysis checklist in Table 1 should then be followed up by using the detailed "SMS gap analysis and implementation task identification plan" in Table 2. Once completed, Table 2 will provide follow-up analysis on details of the gaps and help translate these into actual required tasks and subtasks in the specific context of the organisation's processes and procedures. Each task will then accordingly be assigned to appropriate individuals or groups for action. It is important that correlation of individual element/task development with their descriptive placeholders in the SMS document be provided for in Table 2 in order to trigger progressive updating of the draft SMS document as each element is implemented or enhanced. (Initial element write-ups in SMS documents tend to be anticipatory rather than declaratory.)

Table 3 will show the milestones (start-end dates) scheduled for each task/action. For a phased implementation approach, these tasks/actions will need to be sorted according to the phase allocation of their related elements. Table 3 can be a separate consolidation of all outstanding actions/tasks or, if preferred, be a continuation of Table 2 in the form of a spreadsheet. Where it is anticipated that the actual number of tasks/actions and their milestones are sufficiently voluminous and complex so as to require utilizing a project management software to manage them, this may be done by using software such as MS project/Gantt chart as appropriate. Table 4 is an illustration of a Gantt chart.



Question Ref #	Gap analysis question	Answer (Yes/No/Partial)	Description of gap	Action/task required to fill the gap	Assigned task group/person	SMS document reference	Status of action/task (Open/WIP/Closed)
1.1-1	Is there a safety policy in place?	Partial	The existing safety policy addresses OSHE only.	 a) enhance the existing safety policy to include aviation SMS objectives and policies or develop a separate aviation safety policy; b) have the safety policy approved and signed by the Accountable Manager. 	Task Group 1	Chapter 1, Section 1.3.	Open
etc.							

Table 2: Example SMS gap analysis and implementation task identification plan



Table 3: Example SMS implementation schedule

		Assigned Status Schedule/timeline								9						
Action/task required to fill the gap	SMS document ref.	group/ of action/	1Q 17	2Q 17	3Q 17	4Q 17	1Q 18	2Q 18	3Q 18	4Q 18	1Q 19	2Q 19	3Q 19	4Q 19	etc.	
1.1-1 a) Enhance the existing safety policy to include aviation SMS objectives and policies or develop a separate aviation safety policy.	Chapter 1, Section 1.3.	Task Group 1	Open													
1.1-1 b) Require the safety policy to be approved and signed by the Accountable Manager.																
etc.																



Table 4: Sample SMS implementation schedule (Gantt chart)

	Task Name	Duration	15, '08 Jul 13, '08 Aug 10, '08 Sep 7, '08 Oct 5, '08 Nov 2, '08 Nov 30, '08 Dec 28, '08 Jan 25, '09 F 26 7 18 29 9 20 31 11 22 3 14 25 5 16 27 8 19 30 10 21 1 12 '
1	SMS Implementation Plan	1225 days	
2	Phase 1 - Planning SMS implementation	157 days	
3	Management commitment	81 days	
4	Accountable Executive and SMS Planning group	6 days	
5	identify the Accountable Executive	1 day	h
6	select person / planning group for SMS implementation plan	5 days	
7	System Description and Gap Analysis	35 days	
8	perform system description	15 days	
9	perform gap analysis	20 days	
10	Safety Policy and Objectives	12 days	
11	develop safety policy	5 days	the second secon
12	safety policy signed by accountable executive	0 days	safety policy signed by accountable executive
13	develop safety objectives for the SMS	5 days	
14	safety objectives for the SMS established	2 days	Tal
15	establish SMS requirements for sub contractors	5 days	
16	Safety accountabilities and appointment of key safety personne	35 days	
17	develop SMS organizational stucture	10 days	
18	establish the Safety Service Office (SSO)	3 days	*
19	select the Safety Manager	10 days	
20	establish Safety Review Board (SRB)	3 days	b
21	establish Safety Action Group(s) (SAGs)	7 days	
22	lines of safety accountability established	2 days	
23	SMS organizational structure in place	0 days	SMS organizational structure in place
24	Coordination of the emergency response planning (ERP)	46 days	
25	Internal coordination	20 days	
26	review ERP delegation of authority and emergency responsibil	5 days	
27	develop coordination procedures for key personnel	15 days	
28	External coordination	26 days	
29	identify external entities with interaction during emergencies	5 days	
30	access and assessment of their ERP	20 days	
31	establish coordination between different ERPs	1 day	
32	SMS Documentation	105 days	
33	SMS bocumentation plan	65 days	
34	develop an SMS implementation plan draft proposal	40 days	
35	identify potential challenges in the SMS implementation plan	7 days	
36	develop provisions to address identified challenges	8 days	
37	draft budget for SMS implementation	5 days	
38	initial budget for SMS implementation approved	5 days	
39	SMS implementation plan approved	0 days	SMS implementation plan approved
10	Safety Management Systems Manual (SMSM)	40 days	
11	develop draft of SMSM	40 days	
12	Initial draft of SMSM published	0 days	◆ Initial draft of 5
13	Safety training	51 days	
14	Safety training Training requirements	19 days	
15		7 days	
16	develop a documented process to identify training requiremen develop a validation process to measure effectiveness of trair	7 days 7 days	······································
17		Charles and the second s	
18	Identify costs associated for training	5 days	
19	Training programme	37 days	
50	develop initial (general safety) job-specific	10 days	
	indoctrination/initial on SMS, human factors and organizations	20 days	
51	develop recurrent training syllabus	7 days	
52	schedule initial (general safety) training job-wise for all staff	2 days	6 <u>1</u>
53	deliver initial (general safety) training	20 days	
54	training on SMS planning phase delivered	0 days	◆ training o
55	Safety Promotion-Communication	75 days	
56	safety policy communicated with visible endorsement to all staff	0 days	safety policy communicated with visible endorsement to all staff
57	identify and develop means to convey safety related issues	15 days	
58	convey to all staff information related to SMS organizational structu	2 days	1 III
59	means to communicate safety issues established	0 days	means to communicate safety



5. Appendix C: Management Personnel Assessment

Part A: For Applicant								
Management Perso	onnel Assessme	nt For:	Choose an i	tem.				
Name of Organisation			Business Address					
Contact Perso	on: Name - Surn	ame	Ph	one No		Email		
Management Personnel								
Title	Choose an iten	Choose an item.						
Name - Surname								
Phone No								
Email								
CV Enclosed	□ Y€	25		C		No*		
*If the response is '	"No," please pro	vide a desc	ription of the	e qualificatior	n and	work experience details.		
Qualification								
Date, Pe	riod	Traiı	ning Organisa	ation		Certificate		



Work Experience	
Date, Period	Employment, Position
Signature	
The undersigned persons confirm that the enc	losed information is complete and true.
Managemen	t Person: Name - Surname
Signature	Date (DD/MM/YYY)
Accountable	Manager: Name - Surname
Signature	Date (DD/MM/YYY)



Part B : CAAT Use Only					
Summary Comments: Management Personnel Assessment					
1 st Submission Date:			2 nd Submission Date:		
Application No.:			Application No.:		
Results of Assessments			Results of Assessments		
)	REJECTED)	REJECTED
CAAT Inspector (Name – Surname)			CAAT Inspector (Name – Surname)		
Authorisation Scope and Department			Authorisation Scope and Department		
Date of Assessment (DD/MMM/YYYY)			Date of Assessment (DD/MMM/YYYY)		
Resulted for Management Personnel Assessment:					
Validated and reviewed by			Approved by		
The Principal Operations Inspector (POI)			Flight Operations Standards Manager (OPS)		
Name - Surname			Name - Surname		
Date			Date		



Intentionally Left Blank