# IOSA Guidance for Safety Monitoring under COVID-19

Edition 3 – 3 August 2020

## DISCLAIMER.

The information contained in this publication is subject to constant review in the light of changing government requirements and regulations.

No subscriber or other reader should act on the basis of any such information without referring to applicable laws and regulations and/or without taking appropriate professional advice.

Although every effort has been made to ensure accuracy, the International Air Transport Association shall not be held responsible for any loss or damage caused by errors, omissions, misprints or misinterpretation of the contents hereof. Furthermore, the International Air Transport Association expressly disclaims any and all liability to any person or entity, whether a purchaser of this publication or not, in respect of anything done or omitted, and the consequences of anything done or omitted, by any such person or entity in reliance on the contents of this publication.



Senior Vice President
Safety and Flight Operations
International Air Transport Association
800 Place Victoria
P.O. Box 113
Montreal, Quebec
CANADA H4Z 1M1

# 1. Table of Contents


Revision Record ..... 4
Revision Table ..... 4
2. Introduction ..... 5
3. Monitoring of Internal Operations and Maintenance Functions ..... 5
3.1 General ..... 5
3.2 Operations under COVID-19 ..... 6
3.2.1. Monitoring Compliance with COVID-19 Relevant Requirements ..... 6
3.2.2 Conventional Onsite Audits ..... 6
3.2.3 Remote Audit ..... 6
3.2.4 Risk Assessment of Active Operations to Ensure Conformity with IOSA Requirements ..... 7
3.3 Limited Operations ..... 8
3.4 No Operations ..... 8
3.5 Return to Normal Operations ..... 8
4. Monitoring External Service Providers & Other Airlines ..... 9
4.1 Monitoring Service Providers ..... 9
4.1.1 General ..... 9
4.1.2 ISAGO Program ..... 9
4.1.3 IATA Audit Pools ..... 10
4.1.4 Other Methods for Monitoring External Service Providers ..... 10
4.2 Monitoring Other Airlines ..... 11
5. Safety Assurance during COVID-19 ..... 12
5.1 General ..... 12
5.2 Emerging Risks to Monitor During COVID-19 ..... 12

## Revision Record

| Symbol | Meaning |
|---|---|
| □ | Addition |
| △ | Amendment |
| ⊗ | Deletion |

## Revision Table

| Edition | Issue Date | Chapter | Description |
|---|---|---|---|
| Ed. 1 | 12 May 2020 | N/A | Initial |
| Ed. 2 | 05 Jun 2020 | 3.2.4 | Risk assessment methodology has been detailed and Risk Assessment Tool for ISARP Compliance has been introduced. |
| | | 5.1 | Heading is changed from Identifying Hazards to Operations to Safety Assurance during COVID-19. |
| | | 5.2 | Significant operational issues/areas to be monitored during COVID-19 is added. |
| Ed.3 | 03 Aug 2020 | All | Minor changes |
| | | 3,5 | Return to Normal Operations subchapter is added. |
| | | 5,2 | New emerging risks are added to the list and grouped as per operational areas. |

# 2. Introduction

During this unprecedented COVID-19 crisis, airlines around the world are cancelling flights, temporarily suspending operations and/or continuing with limited resources. Considering the abnormal conditions under which operations currently take place, the effective and flexible monitoring of quality, compliance, and safety management systems carry special importance.

This document provides guidance to airlines on how to effectively manage quality, compliance and safety monitoring during the COVID-19 crisis.

The recommendations provided herein are to be considered as a baseline for best practices. All airlines should also follow regulations and guidance issued by their applicable authorities.

IATA will continuously improve and update this guidance in alignment with IOSA program policies.

# 3. Monitoring of Internal Operations and Maintenance Functions

## 3.1 General

Airlines are facing challenges in monitoring their operations. The following procedures are applicable to the monitoring of internal operations and maintenance functions addressing risk assessment, evaluation, auditing, and other acceptable methods to ensure compliance with all applicable regulatory requirements and IOSA Standards and Recommended Practices.

The following summarizes the recommendations for the monitoring of the operations conducted under COVID-19 measures, if the operations become limited or inactive or if the operations are suspended.

| Operations under COVID-19 |
| --- |
| Monitoring compliance with COVID-19 relevant requirements |
| Conventional Audit (if possible) |
| Consider Remote Audit |
| Risk Assessment of Active Operations |
| Any other acceptable monitoring methodology |

| Limited Operations |
| --- |
| Postpone relevant audits using risk-based approach |
| Consider Remote Audit before back to operations |
| Self-assessment by operational departments before back to operations |
| Risk Assessment before back to operations |
| Any other acceptable monitoring methodology before back to operations |

| No Operations |
| --- |
| Postpone all audits |
| Risk Assessment before back to operations |
| Consider Remote Audit before back to operations |
| Any other acceptable monitoring methodology before back to operations |

** This figure has been designed using resources from Freepik.com, designed by macrovector.*

## 3.2 Operations under COVID-19

### *3.2.1. Monitoring Compliance with COVID-19 Relevant Requirements*

Aviation authorities, as well as industry organizations such as IATA, are issuing new regulations, guidance and/or alleviations to existing regulations concerning the management of the operations affected by the COVID-19 crisis. Airlines should review the issued health and operational safety requirements and adjust their procedures accordingly.

In this context, within the IOSA Standards Manual (ISM) Edition 13, ORG 3.2.2 states: "The Operator shall have a process to identify changes within or external to the organization that have the potential to affect the level of safety risks associated with aircraft operations, and to manage risks that may arise from or are affected by such changes in accordance with ORG 3.1.1 and ORG 3.1.2."

Considering the above provision, airlines should ensure risk management is applied to any changes introduced through new health and occupational safety requirements that have the potential to affect the established operational processes, procedures, products, equipment and/or services. Also, risk management should be applied to any organizational and operational changes imposed due to the COVID-19 crisis.

IATA is closely monitoring developments related to this crisis, in coordination with the World Health Organization (WHO) Secretariat, International Civil Aviation Organization (ICAO), and the US Centers for Disease Control and Prevention (CDC).

Resources and guidance for airlines and other travel professionals can be found at https://www.iata.org/en/programs/safety/health/diseases/.

### *3.2.2 Conventional Onsite Audits*

If the current conditions allow onsite audits for the assessment of internal operations and maintenance functions to be performed, airlines should perform such audits in accordance with processes and procedures defined in their applicable manuals.

Airlines should also ensure relevant requirements and guidance related to operations during COVID-19 such as social distancing rules, use of protective equipment, etc., are followed by the auditors and auditee while the audit is being performed. Refer to the WHO site for relevant information.

### *3.2.3 Remote Audit*

If the current condition does not allow internal onsite audits to be performed, airlines may decide to perform remote audits as an alternative method. Main processes and procedures relevant to such method should be documented.

The following should be considered for the different phases of the audit process:

Audit Planning

- Detailed audit plan that includes scheduled calls and persons to be interviewed
- Internet connection and reliable communication equipment availability
- Documentation access (cloud server, file sharing platform, documentation software etc.)
- IT solutions for video conferencing and document sharing etc.
- Requesting a cross-reference list to enable an efficient remote assessment

- Determining the methodology and techniques to be used for assessing the records remotely
- Identifying the personnel to be interviewed

Documentation Audit

- Reviewing the cross-reference list, when applicable.
- Assessing the documentation prior to the start of the remote audit
- Analyzing the previous audit results and other information as applicable

Implementation Audit

- Assessing records and evidences provided through cloud storage or shared server, live sharing of screens or any other acceptable methods
- Observing records and evidences through shared images or screens
- Uploading records and evidences into an auditing software
- Interviewing management and operational personnel through video conference tools
- Observing the operation through live video broadcasting
- Increasing sampling size whenever possible, to compensate for the lack of direct observation of operations

### *3.2.4 Risk Assessment of Active Operations to Ensure Conformity with IOSA Requirements*

If an airline is unable to perform onsite or remote audits due to a lack of resources or unavailability of operational and/or management personnel, an assessment should be made to identify the risk levels regarding the compliance with IOSA Standards and Recommended Practices (ISARPs).

As operations are performed under abnormal conditions, concerns regarding complying with each ISARP should be determined and risks of not complying should be identified as follows:

- Provisions with immediate concerns requiring mitigation may be determined as **high** risk;
- Provisions with significant concerns requiring monitoring may be determined as **medium** risk;
- Provisions with minimal or no concerns may be determined as **low** risk

Risk of not complying should be identified for short term (0-30 days), medium term (30-90 days) and long term (90-120 days).

If an activity related to an ISARP is subject to regulatory exemption, this might be considered when risk assessment is performed. Please refer to the ICAO page for COVID-19 Contingency Related Differences (CCRD) here.

Mitigating actions and monitoring methods should be established and may include but are not limited to:

- Actions to ensure conformity for the high-risk provisions;
- Self-assessment by operational departments;
- Assessment of the reports and feedback from station manager/personnel, flight crew and any other operational personnel; and
- Any other acceptable methods.

Mitigating actions should be recorded and tracked.

IATA prepared a template for Operators to assist in the risk assessment of active operations. Here is the link to the Risk Assessment Tool for ISARP Compliance.

## 3.3 Limited Operations

If any part of the operations became inactive due to the crisis, for example if the airline temporarily suspended its passenger transport operations, it should adjust its quality assurance or compliance monitoring program and audit plan and postpone relevant audits.

Before the inactive operations restart, airlines should consider one, or a combination of the following monitoring methods:

- Conducting risk assessment of the operations' compliance with requirements as defined in **3.2.4**;
- Conducting remote assessment(s) before the inactive operation restarts as defined in **3.2.3**;
- Collecting and analyzing the self-assessments performed by the relevant departments before the inactive operation restarts;
- Any other acceptable method.

## 3.4 No Operations

If the airline's entire operation is temporarily inactive due to the crisis or governmental measures, monitoring is important to anticipate and prepare for the operation restart.

Before the operational restart, the airline should ensure necessary measures are in place and consider one or more of the following monitoring methods:

- Conducting risk assessment(s) of operations' compliance with the requirements as defined in **3.2.4**;
- Conducting remote assessment(s) before the inactive operation restarts as defined in **3.2.3**;
- Collecting and analyzing the self-assessment(s) performed by the relevant operational department(s) before the inactive operation restarts;
- Any other acceptable method.

## ☐ 3.5 Return to Normal Operations

Before and when the Operator restarts its operations, internal monitoring activities laid down in this document should consider all exemptions granted by the authorities and all new types of operations such as transport of cargo in 1passenger aircraft.

Also, monitoring of key organizational changes (e.g. changes in operational personnel, management personnel, post holders, safety and quality personnel) and their effect are essential before returning to normal operations.

Additionally, Operators should revise the quality assurance / compliance monitoring program to ensure areas with higher risks are prioritized. This should include the operational areas to monitor during COVID-19 listed in Ch 5.2. This could be performed through the procedures described in 3.2.4 Risk Assessment of Active Operations to Ensure Conformity with IOSA Requirements.

# 4. Monitoring External Service Providers & Other Airlines

## 4.1 Monitoring Service Providers

### *4.1.1 General*

Similar to internal monitoring activities, airlines are likely to face difficulties and challenges in the monitoring of their service providers during this COVID-19 crisis. Thus, the following illustration summarizes the recommendations intended to provide assistance with the monitoring of external service providers.

| Monitoring Service Providers | | Monitoring Other Airlines |
|---|---|---|
| ISAGO Audit Report | Systematic review & risk assessment of reported hazards and/or occurrences | IOSA Audit Report |
| ISAGO GSP Self Declaration Report | Performance Reports | SAF.23 Operator Questionnaire |
| Self-assessment Checklists, Questionnaires and Postal Audits | Any other acceptable monitoring methodology | Self-assessment Checklists, Questionnaires and Postal Audits |
| IATA Audit Pools: DAQCP, IFQP & IDQP | | Any other acceptable monitoring methodology |

### *4.1.2 ISAGO Program*

IATA's Safety Audit for Ground Operations (ISAGO) program offers airlines several benefits when used as part of the monitoring of ground operations safety. The program is recognized as an acceptable means of conformance with the IOSA requirements related to risk management and oversight of such outsourced arrangements.

ISAGO is particularly beneficial for an airline that as a result of the COVID-19 crisis found itself with depleted auditing resources, requiring new ground service providers or seeking a ground service provider at a new destination. ISAGO also promotes the use of the IATA Ground Operations Manual (IGOM) and other IATA reference documentation in the development of operational procedures by ground service providers to achieve conformity with the ISAGO standards. ISAGO is the only program that requires a ground service provider to have a safety management system equal to that required of an airline, and demonstrably assists the development of a better safety culture.

Airlines that enter an ISAGO Airline Membership Agreement receive unlimited access to the ISAGO Registry that hosts over 500 ISAGO Audit Reports and other valuable information on ground service providers at over 250 airports worldwide. ISAGO Audit Reports cover corporate safety audits of all ISAGO Registered ground service providers and the audit of at least one of their station operations. During the COVID-19 crisis, ground service providers that are not able to conduct ISAGO Registration renewal audits or unable to close an audit are required to submit to IATA an extenuating circumstances questionnaire that provides information on maintaining safety. The submitted questionnaires are also only available from the ISAGO Registry.

Here is the link to the ISAGO website for more details. If you are interested in gaining access to the ISAGO Registry, ISAGO Audit Reports and questionnaires please contact the ISAGO team at isago@iata.org.

### *4.1.3 IATA Audit Pools*

**De-Icing/Anti-Icing Quality Control Pool**

Airlines may continue to use the De-Icing/Anti-Icing Quality Control Pool known as DAQCP. It currently consists of about 100 member airlines and through its active members, performs inspections on approximately 600 companies that provide de-icing/anti-icing services and post de-icing/anti-icing checks at more than 300 airports worldwide. The DAQCP also offers a passive membership to airlines that do not have an audit organization or the experience in winter operations.

The 2019-2020 Winter season was finalized before the COVID-19 crisis, except for a few stations. Reports are available and valid for one year.

Here is the link to the DAQCP website for more details.

**IATA Fuel Quality Pool**

The IATA Fuel Quality Pool (IFQP) is a group of almost 200 airlines that share fuel inspection reports and workload at more than 1400 airports worldwide. The IFQP offers the opportunity to join as active or passive members should an airline require to simply buy station reports.

The pool counts with hundreds of full inspection reports for at least 1000 airports. Due to the COVID-19, many airports are now being monitored via Desktop Audit until a full inspection is possible again. Information is available for IFQP airline members as to the latest status at each airport. Here is the link to the IFQP website for more details.

**IATA Drinking-Water Quality Pool**

The IATA Drinking-Water Quality Pool (IDQP) was created by airlines to share audits on drinking-water quality around the world. IDQP also developed its own procedures for conducting airfield inspections, using the highest quality standards. Many airports have valid full inspection reports, others are only covered via desktop audits. If required, airlines may consider to be part of the pools to reduce the workload and costs. Here is the link to the IDQP website for more details.

### *4.1.4 Other Methods for Monitoring External Service Providers*

Among others, the airline may also use the following methods for monitoring external service providers:

- Use of self-assessment checklists, questionnaires, and postal audits;
- Systematic review & risk assessment of reported hazards and/or occurrences;
- Assessment of performance reports;
- Ongoing assessment of the reporting and feedback from the station manager/personnel, flight crew and any other operational personnel;
- If conditions allow, perform onsite or remote audits and inspections; and
- Any other acceptable monitoring method.

## 4.2 Monitoring Other Airlines

The IATA Operational Safety Audit (IOSA) Program is an internationally recognized and accepted evaluation system designed to assess the operational management and control systems of an airline. Airlines should use the IOSA Program for the monitoring of other airlines such as codeshare and wet lease partners.

If an airline is unable to undergo or complete a registration renewal audit prior to the current expiration date, the airline can currently submit a claim of Extenuating Circumstances for Audit Conduct and provide an up-to-date status report. Such status report is called SAR.F23 - Extenuating Circumstances - Operator Questionnaire. This questionnaire should be used for the monitoring partner airlines as an acceptable method to the IOSA Audit Reports during the COVID-19 crisis.

IOSA Audit Reports and Operator Questionnaires can be requested by accessing the online IOSA Repository system. Please use this link to Register as a user.

For any questions, please refer to the IOSA Repository User Guide (pdf) or contact iosa@iata.org.

Non-IOSA registered entities should also complete this request form (doc) and return it to the IOSA team.

# △ 5. Safety Assurance during COVID-19

## 5.1 General

Identifying hazards, managing and monitoring associated safety risks are critical for the successful management of the crisis and the restart of operations.

In accordance with IOSA Standard ORG 3.4.1, the airline's safety monitoring activities shall include the assessment of the management system to ensure the organization is identifying hazards to operations and assessing the effectiveness of safety risk controls.

This chapter provides guidance on how to manage safety risks and monitor the process within the scope of safety assurance activity during COVID-19 crisis.

## △ 5.2 Emerging Risks to Monitor During COVID-19

The following emerging risks, among others, could be considered as significant to be monitored during the COVID-19 crisis. The list is based on ICAO Doc 10144, "ICAO Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19" and EASA document "Review of Aviation Safety Issues Arising from the COVID-19 Pandemic" and guidance issued by IATA.

### △ Organizational & Human Factor Related Risks

- Significant workforce changes and loss of key personnel,
- Shortage of operational and technical staff
- Degraded management systems and loss of experienced nominated persons due to furlough and redundancies;
- Unsafe feeling of personnel about being laid off and/or returning to work;
- Exceptional operational considerations related to flight time limitations, flight duty periods and fatigue, accommodation facilities and transportation for crew, human factor aspects, etc.
- Personnel no longer working collaboratively;
- Decreased wellbeing of aviation professionals during shutdown;
- Reduced level of attention, distractions and stress at personal level due to economic pressure

### △ Operation Related Risks

- Introduction of new Standard Operating Procedures (SOPs) in response to Business Model Changes, including but not limited to new/revised crew procedures for routine activities, such as passenger handling and responses to onboard medical issues. Maintenance personnel tasked with new procedures, etc.;
- Cargo flights performed with aircraft certified for transportation of passengers;
- Low weight operations;
- Humanitarian flights for evacuation and repatriation;
- Extensions provided to operational personnel (e.g. validity of medical certificates), Personnel medical certifications expiration, when applicable and required;

- Documentation and database updates may not have been applied;
- Outdated or inconsistent information in aeronautical information and flight plans.

Please see IATA Guidance for flight operations during and post pandemic.

### △ Engineering & maintenance Related Risks

- Exemptions may have deferred the execution of several maintenance tasks;
- Exemptions or the use of the MEL or the delayed rectification of defects or a combination of these may affect aircraft systems, leading to an increased flight crew workload or deactivated alarms detrimental to the flight crew situation awareness;
- Maintenance issues such as storage and de-storage of aircraft due maintenance, fuel system, pitot/static system management, lack of spare parts, expiring airworthiness certificates;
- Aircraft returning to service after it has been stored in non-optimal conditions or for a long period may present hidden defects and failures, possibly in emergency systems;
- Microbiological contamination of aircraft fuel system;
- Significant workforce changes and loss of key personnel;
- The introduction of new destinations or stop-overs may increase the risk of improper execution of line maintenance tasks, when performed under temporary contracts without the possibility to perform a thorough evaluation of the maintenance provider(s);
- Potential for an increase in MEL items because of reduced staffing levels due to illness or furloughs, lack of parts availability, fewer aircraft operating and needed in service;
- Disinfection (biocides) effect on aircraft systems and structural components;
- Manuals not updated due to lack of resources within the operations and/or regulators;
- Operator's incomplete tracking of "out of phase" maintenance tasks generated as a result of tasks' due threshold/periodicity extension use.

Please see IATA Guidance for managing aircraft airworthiness during and post pandemic.

### △ Training Related Risks

- Increased periods between license/ validation checks;
- Long gap in flying following type-rating training;
- Ground handling training program disruption;
- Skills and knowledge degradation due to lack of recent practice.

Most common hazards, risks and mitigation actions are also provided in IATA guidance documents published. Here is the link to the IATA Safety website for the relevant guidance documents.

https://www.iata.org/en/programs/safety/

For questions and suggestions, contact iosa@iata.org.