SMS for Small Organizations: Considerations for Regulators

March 2015

Introduction

Regulator's Guidance for Dealing with Small Organizations Implementing SMS

The introduction of safety management systems (SMS) across the aviation industry brings some specific challenges for small organizations. Indeed, some small organizations may feel that SMS is too complex or too costly to implement.

We hope to help you with some thoughts on how, as a regulator, you can help small organizations to get their SMS in place and how you can assess a small organization's SMS.

Throughout this guidance, we consider an organization with between five and twenty staff as a *Small* organization, and one with less than five staff as *Very Small* but you will still need to define this for your organizations. We advise small organizations that SMS can be boiled down to a very simple concept:

- Actively look for safety issues in your operations, products, or services;
- Develop corrective actions to reduce the risks those safety issues present; and
- Monitor to be sure that you have appropriately controlled those risks.

An SMS does not have to be complicated to be effective.

This guidance for regulators should be read in conjunction with the Safety Management International Collaboration Group (SM ICG) *SMS Guidance for Small Organizations*.

How Complex is the Small Organization?

It is important that you define what constitutes a *Small* organization. It is not just the size of the organization that matters, but the risk and complexity of the activity.

Complexity considerations include:

- Operating environment (mountainous terrain, arctic operations, offshore operations, etc.);
- Number of types of operations (passenger operations, cargo, aerial work, Emergency Medical Services, etc.);
- Fleet complexity —number of aircraft or aircraft types;
- Number of locations (bases);
- Maintenance —number of ratings, types of product ratings, specialized work, technologies employed, number of customers and sub-contractors;
- Types of products and parts designed/manufactured;
- Number of aircraft movements (aerodromes and Air Navigation Service Providers(ANSPs));
- Surrounding terrain and levels of equipment at aerodromes;
- Density and complexity of traffic for ANSPs;
- Extent of contracted activities; and
- Number of runways and taxiways at aerodromes.

Several regulators have produced guidance material covering SMS for small organizations (referred to in Appendix 1), which may be useful.

The SM ICG page on SKYbrary has some useful links to additional SMS material in the SMS for Small Organizations article, located under the Guidance/Tools heading. This will include guidance, tools, forms, and templates that can be customized for an organization. Any SM ICG member will be able to give you access to a customizable version of the templates and tools.

The following material contains some guidance on how you might approach the assessment of a small organization's SMS.

The key to successful SMS in small organizations is to minimize the regulatory burden. The harder it is for an organization to achieve compliance, the less likely it will be to embrace SMS. This still requires compliance with the requirements, but achieving compliance is made as easy as possible.

The more willing an organization is to adopt SMS, the more effective that SMS is likely to be.

The ICAO SMS Framework from a Regulator's Perspective

The following section highlights some of the additional considerations that the Regulator needs to follow when evaluating an SMS based on the ICAO SMS Framework.

1. Safety Policy and Objectives

A small organization's policy and objectives can (and should) be set out very simply; do not expect a detailed document.

1.1 Management Commitment and Responsibility

Consider whether the management commitment statement really is a statement of commitment. One way to test this is by asking whether managers know what is in the policy.

1.2 Safety Accountabilities

Consider whether the nominated Accountable Executive has the ultimate accountability for the SMS.

1.3 Appointment of Key Safety Personnel

Consider whether someone has been appointed to look after the day-to-day running of the SMS and whether the person has been trained. It is unlikely that small organizations will have the resources for this to be a full-time appointment.

1.4 Coordination of Emergency Response Planning

Consider whether the emergency response plan (ERP) has been coordinated with other organizations that may be affected and with the emergency services, and whether it covers the likely emergencies.

1.5 SMS documentation

A small organization should not be expected to have an extensive SMS manual. It may not even have a specific SMS manual as long as its safety processes and procedures are documented.

2. Safety Risk Management

You would expect people across the organization to be aware of the organization's biggest risks and what actions are in place to mitigate them.

2.1 Hazard Identification

Consider whether the organization has a simple process to actively look for safety issues. Does it identify safety issues from occurrence or incident reports? Does the organization encourage good reporting? Is there a Hazard Log, and more important, is it used?

2.2 Safety Risk Assessment and Mitigation

Consider the process for identifying what could happen as a result of each safety issue and assessing the consequence and likelihood. Is there a risk assessment tool and is it used? Is it appropriate? Does the process determine acceptable risks? A risk matrix may be useful, but in a *Very Small* organization, it may not be necessary.

3. Safety Assurance

You would expect the organization to have processes in place to measure and monitor how well the SMS is performing.

3.1 Safety Performance Monitoring and Measurement

Consider how the organization measures its safety performance. Are the performance measures appropriate? Are they appropriate for the size of the organization? Are there other measures that might be more effective? What auditing is being carried out to assess the effectiveness of the SMS?

3.2 The Management of Change

Consider whether the management of change process is appropriate for the size of the organization.

3.3 Continuous improvement of the SMS

Consider whether internal audits are required; a *Very Small* organization will probably not have the resources to have an internal auditor, and engaging a contract auditor may impose a financial burden. For *Very Small* organizations, an internal review (a self assessment) may be as effective as a formal audit.

The SM ICG has developed a simple Management Review template for *Small* organizations in Appendix 16 of its *SMS Guidance for Small Organizations*. This can be used to summarize and document the safety assurance activities on a regular basis.

4. Safety Promotion

You would expect that the organization is promoting its safety management processes through training and ongoing communication.

4.1 Training and Education

Consider whether the Safety Manager, if there is one, has received SMS training. Have all the staff read the SMS manual and understood their roles within the SMS. What training resources (DVD, pamphlets, books, etc) are available?

4.2 Safety Communication

Consider how the organization communicates its safety policy, strategies, issues, successes, and failures. Does it hold safety briefings or meetings? How often? Are there safety bulletins? Does the management lead by example?

Applying a Phased Approach to SMS Implementation for Small Organizations

The regulator should consider applying a phased approach to how it accepts the implementation of SMS in small organizations. It should be appropriate to the amount of small organizations it is responsible for. Learning from how the phased implementation went with large organizations will help you adapt the implementation approach accordingly.

Most organizations will adopt a phased approach to implementing an SMS. At the same time, some regulators may consider mandating a phased implementation. While a mandatory phased implementation may work with some large organizations, it may be difficult to achieve with a lot of small organizations. A mandatory phased implementation for small organizations should be considered with caution, particularly if the phases are tied to strict time limits. The regulator should consider the following before deciding to use a time-limited phased implementation:

- Setting specific dates for each phase of implementation will impact your inspector workload. There will be an increased workload for assessing each organization's progress and compliance at that date. Will there be enough inspectors to complete the assessments in a timely fashion?
- Consider the limited resources that may be available to the small organization to achieve compliance, especially in a short timeframe. Most organizations are cost conscious and operate with tight budgets and carefully established staff numbers. Giving more time to implement SMS may result in a more effective SMS, rather than producing an off-the-shelf SMS that may not be suitable to an organization's operations.
- Consider also the potential outcomes if the small organization does not (or cannot) meet the date for compliance. If the organization supplies an essential service (e.g., a small remote aerodrome providing a vital communication link), what would be the regulatory response? Suspending the certificate is probably not an option and a financial penalty, if available, might jeopardise the safety of the operation.

Placing too stringent implementation demands is also likely to result in "push back" from the organization; it is likely to see SMS as another administrative burden, rather than a positive and beneficial safety program.

A good approach is for the regulator to agree on an implementation program with each organization that is acceptable to each party. In this way, both regulator and regulated will be able to achieve a satisfactory result.

It is important for the regulator to provide good guidance on its expectations of small organizations, who may find it hard to interpret the regulations to implement safety management systems that suit their size. Phased visits may also provide an opportunity to work with the organization to influence and provide guidance.

Inspector Training

The regulator's inspectors need to recognize that the SMS of a small organization is likely to be much simpler. It may be accomplished with less documentation and procedures than would be required for a larger organization. Inspectors should be trained to recognise what a good but simple SMS looks like. This will help them to accept simpler documentation and procedures that still meet the SMS requirements.

All inspectors should read any guidance material issued by the regulator about SMS implementation in small organizations. If there is no specific guidance material issued by the regulator, there are useful SM ICG products for small organizations on SKYbrary.

The SM ICG has produced a document on regulatory *SMS Inspector Competency Guidance* that should be referred to. Assuming that inspectors have received basic SMS training, the following additional subjects should be covered:

- Proportionality within the regulatory framework, if any;
- How to encourage small organizations to implement effective SMS;
- Challenges of SMS implementation in small organizations;
- Best practices of SMS implementation in small organizations;
- Safety culture and communication in small organizations; and
- Planning and carrying out an SMS evaluation for small organizations.

While some training could be computer-based, a facilitated training session is recommended. This should include case study exercises, preferably undertaken in groups. This would allow inspectors to explore the varieties of SMS they may encounter. Instructors should emphasize that an SMS needs to fit the size, nature, and complexity of the organization and that there is probably no single "right answer" to an exercise.

The means of achieving compliance may differ across the industry and informal processes may meet the intent of SMS requirements for some small organizations. The training should emphasise that inspectors should not push particular solutions for SMS (either their own personal views or examples from other organizations).

The training should encourage inspectors to provide advice and guidance to small organizations during the evaluation process. This will encourage the organization to be open in its responses. Inspectors should understand how the organization is establishing its SMS first and then determine how suitable it is.

Information Sharing

A small organization may have difficulty in collecting internal data because of the low level of activity (e.g., number of flights, number of movements). If a just reporting culture is not in place, reporting may be limited because of the difficulty of ensuring anonymity in a small organization.

When there is little feedback on operations, reactive hazard identification is difficult to achieve. In the same way, it may be difficult for a small organization to collect external data, as there may be insufficient resources to monitor events encountered by other organizations.

Sharing information between small organizations can provide a much bigger source of safety information. Information sharing can be initiated either by the organization itself or with the assistance of the regulator.

The regulator has an important role to play in sharing information as it has an overview of safety issues shared by similar organizations. This could be done through regular safety meetings with small organizations. These meetings would allow organizations to present their safety issues and the regulator to present the results of accident and incident investigations and to raise common issues found during SMS audits.

The regulator could also arrange meetings on particular safety topics, inviting relevant organizations of all sizes, so that small organizations could benefit from the experience of larger organizations. Industry associations should also be invited to safety meetings.

Because of the lack of resources, it is sometimes challenging for small organizations to attend meetings, so arranging for them to be broadcast via video or web-based conference could reduce travel burdens and encourage wider attendance.

The regulator could set up a common database through which operators could access de-identified incidents reports of other organizations.

Inspectors might allocate time during audits or inspections for safety promotion, conveying safety messages and sharing safety plan priorities, safety bulletins, and accident and incident reports.

Appendix 1: Regulator's Guidance Material for Small Organizations

Transport Canada – Advisory Circular 107-002: Safety Management Systems Development Guide for Small Operators/Organizations

This Advisory Circular (AC) addresses each SMS element for both minimal-complexity, one-person operations and moderate complexity organizations, with documentation examples throughout.

UK CAA – Safety Management Systems – Guidance for Small, Non-complex Organizations (ver. 1.0)

This provides a guide to SMS, highlighting key points for small organizations. It includes useful examples of SMS documentation and checklists.

CAA NZ – Advisory Circular 00-4: Safety Management Systems

This AC tabulates characteristics of small, medium, and large organizations in the Introduction and provides "guidance based on size of organization" for each SMS element.

CAA NZ – SMS Booklet 03 – Implementing Safety Management Systems – Guidance for Small Aviation Organizations

This booklet contains information designed to help small aviation organizations to implement an effective SMS that is built-for-purpose without being difficult or resource-intensive.

CASA SMS Resource Toolkit Booklet 7 – SMS for Small, Non-complex Organizations

This is a simple overview of SMS for smaller aviation organizations, such as those involved in transport/charter, training and maintenance. It defines 'small, non-complex', highlights the fact that SMS is scalable—that not all elements of an SMS will look the same in all organizations—and that there are advantages to being small.

This paper was prepared by the Safety Management International Collaboration Group (SM ICG). The purpose of the SM ICG is to promote a common understanding of Safety Management System (SMS)/State Safety Program (SSP) principles and requirements, facilitating their application across the international aviation community.

The current core membership of the SM ICG includes the Aviation Safety and Security Agency (AESA) of Spain, the National Civil Aviation Agency (ANAC) of Brazil, the Civil Aviation Authority of the Netherlands (CAA NL), the Civil Aviation Authority of New Zealand (CAANZ), the Civil Aviation Safety Authority (CASA) of Australia, the Direction Générale de l'Aviation Civile (DGAC) of France, the Ente Nazionale per l'Aviazione Civile (ENAC) in Italy, the European Aviation Safety Agency (EASA), the Federal Office of Civil Aviation (FOCA) of Switzerland, the Finnish Transport Safety Agency (Trafi), Japan Civil Aviation Bureau (JCAB), the United States Federal Aviation Administration (FAA) Aviation Safety Organization, Transport Canada Civil Aviation (TCCA) and the Civil Aviation Authority of United Kingdom (UK CAA). Additionally, the Civil Aviation Department of Hong Kong (CAD HK), the International Civil Aviation Organization (ICAO), and the United Arab Emirates General Civil Aviation Authority (UAE GCAA) are observers to this group.

Members of the SM ICG:

- Collaborate on common SMS/SSP topics of interest
- Share lessons learned
- Encourage the progression of a harmonized SMS/SSP
- Share products with the aviation community
- Collaborate with international organizations such as ICAO and civil aviation authorities that have implemented or are implementing SMS and SSP

For further information regarding the SM ICG please contact:

Regine Hamelijnck
EASA
+49 221 8999 1000
regine.hamelijnck@easa.europa.eu

Jacqueline Booth
TCCA
(613) 952-7974
jacqueline.booth@tc.gc.ca

Amer M. Younossi
FAA, Aviation Safety
(202) 267-5164
Amer.M.Younossi@faa.gov

Igor Penna
ANAC
+55 213 5015 268
igor.penna@anac.gov.br

Stephen Duffield
CASA
+61 7 3144 7362
stephen.duffield@casa.gov.au

Additional SM ICG products can be found on SKYbrary at:
http://www.skybrary.aero/index.php/Safety_Management_International_Collaboration_Group (SM_ICG)