SM ICG Industry Engagement Group: Product Use Survey Results

March 20, 2024

About the SM ICG

This document 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 Programme (SSP) principles and requirements, facilitating their application across the international aviation community. In this document, the term "organization" refers to an aviation service provider, operator, business, and company, as well as aviation industry organizations; and the term "authority" refers to the regulator authority, Civil Aviation Authority (CAA), National Aviation Authority (NAA), and any other relevant government agency or entity with oversight responsibility.

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 (CAA NZ), the Civil Aviation Authority of Singapore (CAAS), Civil Aviation Department of Hong Kong (CAD HK), the Civil Aviation Safety Authority (CASA) of Australia, the Direction Générale de l'Aviation Civile (DGAC) in France, the Ente Nazionale per l'Aviazione Civile (ENAC) in Italy, the European Union Aviation Safety Agency (EASA), the Dominican Republic Civil Aviation Institute (IDAC), the Finnish Transport and Communications Agency (Traficom), the Irish Aviation Authority (IAA), Japan Civil Aviation Bureau (JCAB), the United States Federal Aviation Administration (FAA) Aviation Safety Organization, Transport Canada Civil Aviation (TCCA), United Arab Emirates General Civil Aviation Authority (UAE GCAA), and the Civil Aviation Authority of United Kingdom (UK CAA). Additionally, the International Civil Aviation Organization (ICAO) is an observer 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

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SM ICG products can be found on SKYbrary at http://bit.ly/SM ICG.

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Introduction

The Safety Management International Collaboration Group (SM ICG) is a joint cooperation between regulatory authorities for the purpose of:

- Promoting a common understanding of safety management and Safety Management System (SMS)/State Safety Program (SSP) principles and requirements,
- Developing related safety management guidance materials, and
- Facilitating their harmonization and implementation across the international aviation community.

The SM ICG develops guidance documents and tools available for free to the worldwide aviation community through the SKYbrary website. The SM ICG holds biannual plenary meetings, hosted by its members, in order to further its safety related projects, topics, and discussions. During these meetings, the SM ICG provides a formal opportunity, referred to as Industry Day, for the aviation industry representatives and SM ICG to engage in discussions on safety management.

Recently, aviation industry representatives have requested an opportunity to provide input and feedback on the documents and tools developed and promulgated by the SM ICG. The SM ICG Steering Committee (consisting of the core membership of regulatory authorities) sees significant merit in setting up a collaborative system with industry representatives, while also being mindful of the SM ICG's charter and resource constraints.

To that end, the SM ICG Steering Committee set up the SM ICG Industry Engagement Group (IEG) Project Team to determine how to best engage with industry. The SM ICG IEG Project Team Terms of Reference document states the following objectives.

The SM ICG IEG works to enhance industry collaboration with regards to:

1. Collecting industry representative input with regard to emerging industry safety management needs and priorities, which may inform future SM ICG products.
2. Insight and feedback on both existing and draft SM ICG products to increase confidence that our products will continue to meet industry needs and will increase opportunity and engagement between aviation service providers and regulatory authorities across the world.

One of the first activities by the SM ICG IEG Project Team was to collect input from stakeholders on their awareness of SM ICG products, their use of the products, and information on topics they would find helpful to inform future products. This document summarizes the results of that survey.

The SM ICG wishes to thank the participants for completing the survey, which is invaluable to our work in remaining timely and relevant in the aviation safety community.

Methodology

The SM ICG IEG Project Team developed the SM ICG Product Use Survey, creating the questions with the above objectives in mind. The team worked to balance the detail of the responses with the length of the survey to encourage more respondents to complete it.

The survey was created in Google Forms as the SM ICG has a Gmail account connected to that service which can be easily translated on the respondents' side when taking it.

The SM ICG Steering Committee reviewed and approved the survey for distribution. Once the approval was achieved, the survey was distributed to the following groups:

- The external SM ICG mailing list
- The initial list of potential IEG members (industry groups representing specific sections within the industry)
- SM ICG Members (for distribution to their CAA stakeholders and industry groups)

The survey was sent out multiple times (depending on who was distributing it), with the earliest date being August 28, 2023, and the latest in October 2023. Responses were closed on November 3, 2023, to allow time for all potential participants to respond.

Survey Questions

The following are the 2023 SM ICG Product Use Survey questions.

Question About You

1. Organization/State/Administration
2. Select the aviation sector you work in from an option below.
   a. If you selected Other, please describe:
3. How big is your Organization/Company? (Numerical response/Range)
4. What is your Position/Job Function?
   a. If you are in management, select the position that best describes your role.
   b. If you selected Other, please describe:

SM ICG Awareness

5. Did you know about the SM ICG before receiving this survey?
6. If you knew about the SM ICG, how did you hear about us? (Select all that apply)
   a. If you selected Other, please describe.
7. Have you ever used any SM ICG Products on SKYbrary?

SM ICG Product Use (if selected yes to question 7 otherwise skips to question 9)

8. Which SM ICG product(s) have you used? How did you use them (for training or familiarization, incorporated into process, adapted into process, etc.)? What worked? What did not? Suggestions for improvement? (See below for a reference list of SM ICG products.)

Future

9. What topic or topics could you/your organization use more help with?
10. Is there any additional information you would like to share with us?
11. If you are not currently on our mailing list, but would like to be added, please provide your name, organization, and email address below or email it to smicg.share@gmail.com.

Results

There were a total of 137 respondents to the survey. Responses were not required to any of the survey questions; therefore, some questions had more responses than others. Below are the specifics for each question.

Questions About You

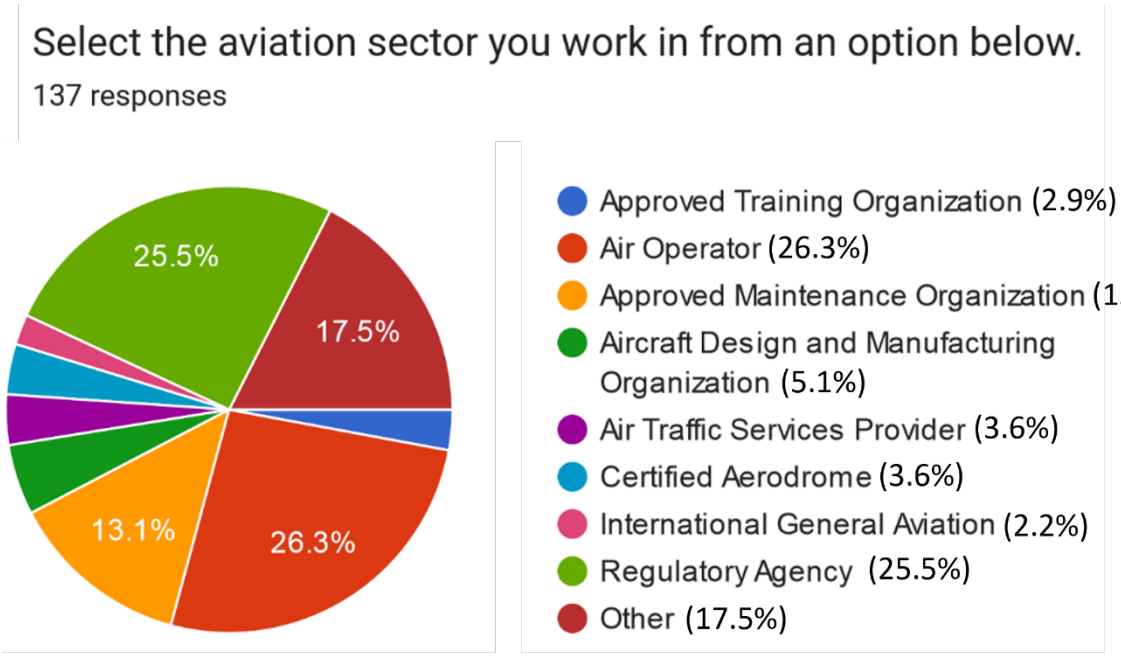
Organization/State/Administration

Below is a list of the organizations that provided responses to this question. In cases where there were multiple responses from one organization, the number of respondents from that organization are listed in parentheses after the organization name. The multiple responses are listed first in the list in descending order.

- ENAC - Ente Nazionale per l'Aviazione Civile **(26)**
- UK CAA **(8)**
- Unknown/Anonymous **(6)**
- CAA Finland - Traficom **(5)**
- JAL/ JAPAN **(4)**
- ANAC/Brazil **(3)**
- Changi Airport Group **(3)**
- ST Engineering **(3)**
- Avtrac (UK Ltd / UK/ UK CAA **(2)**
- Japan **(2)**
- Jetstar Japan **(2)**
- Loganair **(2)**
- Acropolis Aviation Ltd.
- Acumen Aviation
- Adria Tehnika d.o.o.
- AerFin Limited
- Aeropair Ltd/United Kingdom
- Aerospace
- AIR POWER
- Airbase GSE, UK, UK CAA
- AIRBUS | HELIBRAS / Brasil / ANAC
- Aircarrier Safety Inspector Office/JCAB/MLIT
- Aircraft operator / Ireland
- ANA/JAPAN
- ANSP, UK CAA
- AOPA
- ATEC (Association of Air Transport Engineering and Research)/Japan
- Aviation Safety Expert
- Bahrain Airport Company
- Baines Simmons/UK/ Various, principally UK CAA & EASA.
- Binter Airlines
- British Airways Euroflyer
- Cambrian Flying Club
- Charles Taylor Aviation Asset Management Ltd.
- CHC Scotia Ltd
- Circo Globo
- Civil Aviation Authority of Singapore **(3)**
- Civil Aviation Safety Authority of Australia **(3)**
- Dansoft Aviation Services Ltd/UK/CAA
- Draken Europe
- E.N.A.C.-IT
- EASA
- FedEx Express, UK, FAA
- Hawk Aerosafety LLC
- Hybrid Air Vehicles
- ICAOSAM - SRVSOP
- Japan Civil Aviation Bureau (JCAB)
- JAXA/Tokyo/Japan
- Jet2.com
- Marshall of Cambridge Aerospace Ltd
- Moog Controls Limited, UK
- NATS
- Nepal Airlines Corporation
- Nippon cargo Airlines

- Nordix Regional Airlines
- Papua New Guinea
- Pratt & Whitney / Singapore
- Royal Aeronautical Society
- SAESL
- Safety Audit, Starflyer, Japan
- Safety Management Division of an airline
- Safran Landing Systems Services Singapore
- SaxonAir Charter
- SIA Engineering Company/Singapore
- TAGS Flight Training
- The Air Law Firm
- Transport Canada Civil Aviation
- TUI
- TUIfly
- UAS SPA / Italy / ENAC
- UK Flying School
- Ukraine
- University of the West of Scotland
- US - Part 135 & 145

Aviation Sector



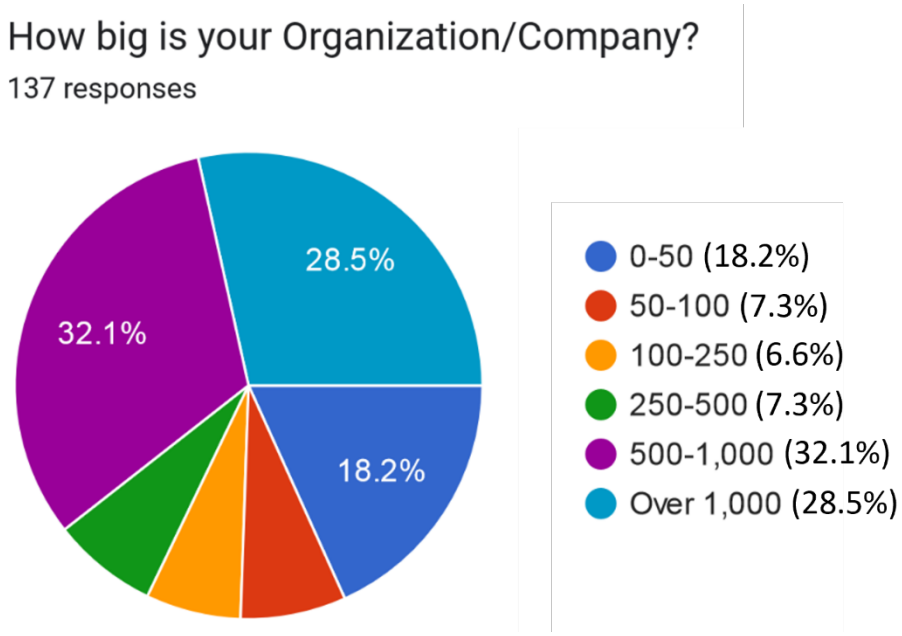
Other:

Below is a list of the respondents' answers after selecting Other. In cases where there were multiple responses from one sector, the number of respondents selecting that sector are listed in parentheses after the sector name. The multiple responses are listed first in the list in descending order.

- CAMO **(2)**
- Airport Operator
- airworthiness organisation
- ATEC is one of the public foundations in aviation society in Japan. ATEC conducts research into the safety of air transport.
- Audit
- Aviation Authority
- Aviation Safety Consulting & Training
- Business Aviation
- CAA
- Cabin Lighting systems and emergency exit marking systems
- DTO Organisation
- Education
- Independent administrative agency
- Italian Civil Aviation Authority
- NAA

- OEM, Repair Station
- Pilot GA
- RSOO
- Safety
- Safety Training and Consulting
- Solicitor
- Standalone CAMO
- Supervisory Authority
- We are an Airworthiness Management Organisation
- Unknown/Anonymous

Size of Organization/Company



Position/Job Function

Below is a list of the respondents' answers regarding their position or job function. Where there were multiple responses for a position/function, the number of respondents selecting that position/function are listed in parentheses after the position/function name. The multiple responses are listed first in the list in descending order.

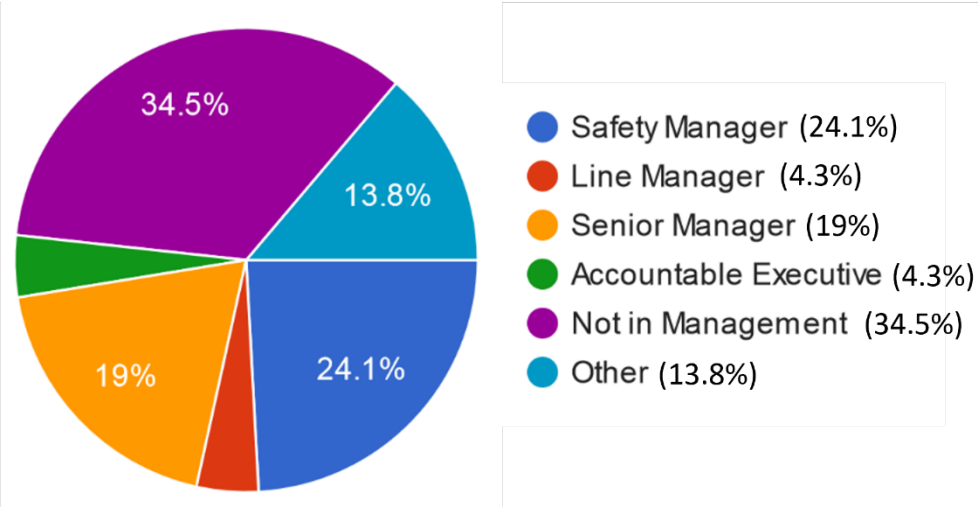
- Quality Manager **(9)**
- Airworthiness and Operations inspector **(6)**
- Safety Manager **(5)**
- Inspector **(4)**
- Pilot **(4)**
- Manager **(3)**
- Senior Manager **(3)**
- ATM/ANS Inspector **(2)**
- CEO **(2)**
- Compliance Manager **(2)**
- Flight inspector **(2)**
- Head of Quality & Compliance (Quality Manager) **(2)**
- Project Manager **(2)**
- Accountable and Compliance Manager
- Advisor
- Aerodrome inspector - process manager aerodrome certification
- Aerodrome Safety
- Aeronautical Engineer/Product Certification Department
- Aerospace Engineer
- AGA SPECIALIST
- Airworthiness Expert
- Airworthiness Surveyor
- Assistant Director
- Authority Inspector and Regulatory Officer
- Aviation Safety Expert
- Aviation Safety Specialist

- Business Support / Compliance Director
- CAMO Safety Manager
- Captain
- Chief Operating Officer / Accountable Manager
- Civil Aviation Specialist
- Compliance oversight
- Consultant
- Continued Airworthiness Manager
- Contractor working as line crew and training captain
- CPT TRI TRE
- Deputy Chief Flying Instructor
- Director
- Director/FRM, Analysis of voluntary Report, SMS, etc.
- Engineer
- Engineering Station Manager
- Engineering Trainer
- Flight Data Analyst/Safety Manager
- Flight Operation Inspector
- Flight Safety
- Flying Instructor
- Flying Operations Inspector (CASA) and SMS course facilitator (UNSW)
- FOI
- General Manager Safety Audit
- Ground Operations Regulations & Standards Specialist
- Head of Air Traffic Services
- Head of Airworthiness
- Head of ATM/ANS oversight office
- Head of NATS Safety Management System
- Head of Safety and Compliance
- Head of Safety Data Analysis
- Head of Technical, Compliance & Quality
- Inspection Duties
- Instructor
- Internal Auditor
- Manager Aerodrome Safety
- Manager of Corporate Safety
- Manager Quality Standards
- Manager/Safety Management
- NAA Airworthiness Inspector
- Nominated Person Flight Operations
- OPS-inspector
- Oversight inspector
- Owner
- President
- Quality Engineer
- rehire
- Risk Assessment and SMS
- Safety & Quality Manager
- Safety, Security &QA
- Safety Analyst
- Safety Assurance
- Safety include alcohol management
- Safety Officer
- Safety performance Specialist
- Safety Pilot
- Safety Promotion and Continuous Improvement Coordinator
- Safety promotion team
- SCMM
- Senior Consultant (Continuing Airworthiness)
- Senior Deputy Director
- Senior Inspector, Flight Operations, Helicopters
- Senior Manager International Line Mx
- Senior Manager, Aerodrome Safety
- Senior Quality Manager
- senior technical advisor
- Senior Technical Officer/Quality Assurance
- Site Quality Manager
- SMS Manager
- SMS Trainer
- Special Adviser
- specialist officer
- Sub director
- Technical Advisor
- Unemployed at present
- Vice President /Aviation Safety Research Dept. Corporate Safety and Security

Roles in Management

If you are in management, select the position that best describes your role.

116 responses



Other:

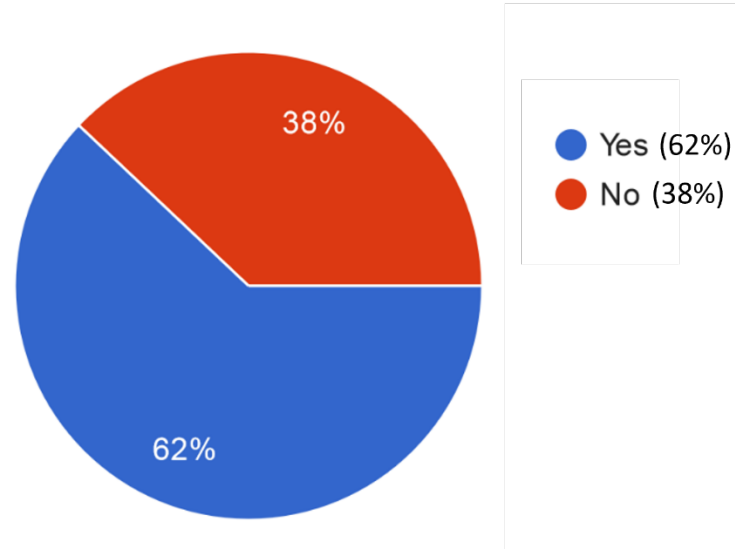
- Project and Process Manager **(2)**
- Aerodrome inspector - aerodrome certification process manager
- Air Navigation Service Inspector taking care about regulation and certification
- Assisting nominated Safety Manager in overseeing Aviation SMS
- Compliance & Safety
- Compliance Manager (was Quality)
- Head of SMS Department
- I was Training coordinator in one operational base of the operator I worked for.
- Manager in Safety Management Office
- Mid Management
- Middle management position
- NAA Airworthiness Inspector for EASA surveillance oversight
- Responsible for POA and Compliance
- Rulemaking officer
- Site Quality Manager

SM ICG Awareness

Knowledge of SM ICG

Did you know about the SM ICG before receiving this survey?

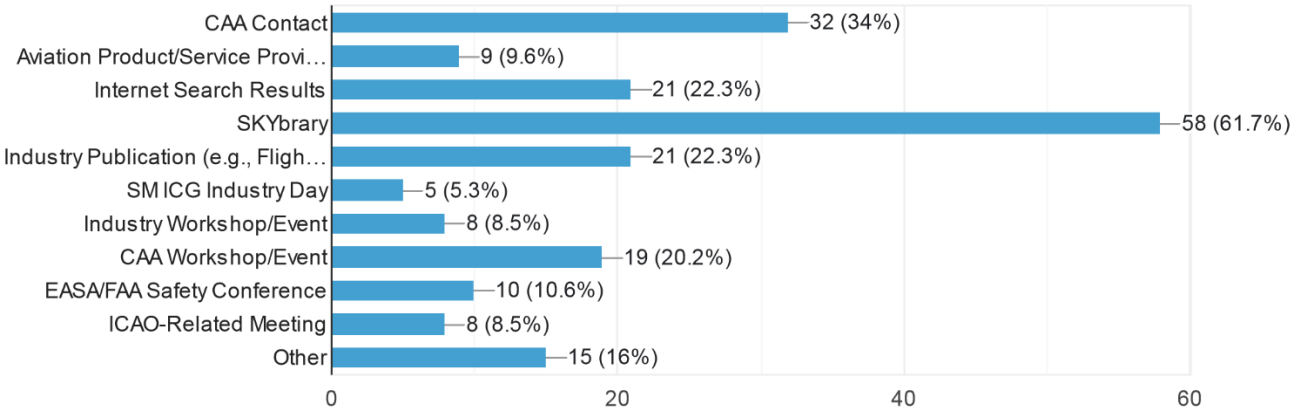
137 responses



How Did You Hear About Us?

If you knew about the SM ICG, how did you hear about us? (Select all that apply)

94 responses

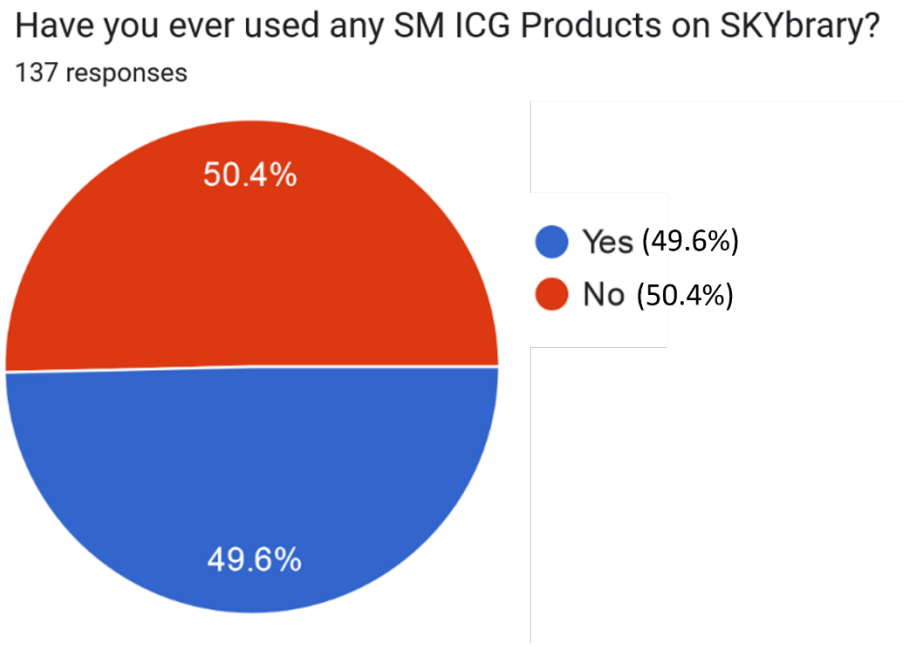


Other:

- Academic study/research
- ANAC
- CAA Skywise Notification
- CASA, CAA NZ
- Former Steering Committee Member
- From various websites
- In company training
- Infoshare Spring 2022
- Internal Training
- Learned from EASA (Member State Tasks)
- Measuring Safety Performance Guidelines for Service Providers
- Royal Aeronautical Society

- SENASA
- SMS courses and seminar teacher lecturer
- TCCA
- Working with colleagues

Used SM ICG Products?



SM ICG Product Use

SM ICG Products Used and How

Below is a summary of the responses to the following question: *Which SM ICG product(s) have you used? How did you use them (for training or familiarization, incorporated into process, adapted into process, etc.)? What worked? What did not? Suggestions for improvement? (See below for a reference list of SM ICG products.)* See Appendix A for the full list of responses.

Summary

Many respondents noted that they have used all SM ICG products and generally the products focused on SMS, SSP, and Safety Fundamentals. In general, products were used for reference, familiarization, planning, program improvement, training (for self and development of training for others), incorporation into processes, and sources of reference for safety communications and promotion purposes. One respondent noted that the products provide *"Inspiration, so much clarity in simplicity."* Another said, *"These resources are great and give people a good starting place for different parts of the SMS that they may be working on."*

The product that was referenced the most in the responses was the **SM ICG SMS Evaluation Tool**. Many people noted that they used it for familiarization, to develop training and guidance, and to assess the level of effectiveness of SMS implementation within an organization. The second most referenced topic was **Safety Culture**. Most respondents did not specify which SM ICG Safety Culture product they were referring to, but there was reference to the following—Industry Safety Culture Evaluation Tool and Guidance, Organizational Culture Self-Assessment Tool for Regulators, and Safety Culture for Effective

Safety Management. These products were used in training safety representatives and for familiarization/personal knowledge.

The third most referenced product was **Hazard Taxonomy Examples**. One respondent used it to build a hazard log. Another used it when developing their initial HIRM process, noting it was more useful than the ADREP taxonomy for understanding different types of hazards and how these could be categorized in a practical way.

Three additional products that were referenced many times were: **SMS for Small Organizations**, **Measuring Safety Performance Guidelines for Service Providers**, and **Safety Manager's Role in SMS**. Most common uses were for familiarization, incorporation into processes and training, and to provide guidance to industry.

Other products that were referenced multiple times included: **Attitudes and Behaviors for Effective SMS**, **Risk-Based and Performance-Based Oversight Guidance**, and **10 Things You Should Know About SMS**. Once again, products were "*used for general awareness and briefing/training on SMS including providing guidance for capturing in process.*" It was noted that the products are *"viewed as a good body of data to extract salient points from."*

Some suggestions were included in the responses to this question. One suggestion was to increase awareness of SM ICG materials. A couple of respondents suggested presenting the content in other formats, such as videos and posters. One respondent suggested starting forum discussions, questions and answers on specific topics, and benchmarking or sharing best practices from other industries. Another respondent asked for a Japanese version of a specific product—highlighting the need to increase the translation of products into other languages.

Another suggestion focused on creating implementation tools and guidance specific to industries (e.g., AMO, AOC). One respondent expressed the need for more *"aircraft maintenance related examples and topics as most of the other products are typically using airline operations for example illustration."* Finally, one respondent asked if a *"common acceptable 'User Guide' for SMS"* could be created for Industry.

Future

Topics Respondents Could Use Help With

Below is a summary of the responses to the following question: *What topic or topics could you/your organization use more help with?* See Appendix B for the full list of responses.

Summary

The responses to topics that commenters could use help with were wide ranging. The topic area that garnered the most interest was **Safety Performance Management and Safety Performance Indicators (SPIs)**. People were looking for methodologies in setting up measures, ways to monitor, best practices, and specific examples for each aviation domain.

Another popular topic area was **Safety Culture** and in particular **Just Culture**. Respondents were looking for tools and guidance on implementing a positive safety culture within an organization. They would also

like further information on how to capture just culture and organizational safety culture maturity and progress.

In addition, respondents would like methods to enforce **management participation** in operational safety issues and materials that would make the accountable manager see the benefits of SMS. Some other related topics included **Change Management** (tools, guidance, and a framework) and **Human Performance** (and its interaction with SMS).

Many survey respondents noted that they would like more products on **SMS** and **Safety**. These included SMS assessments, SMS tools and training, SMS implementation, SMS audits, and continuous safety improvement at the Industry and State levels. They also focused on **SMS in smaller organizations**, asking for information on implementation, training, promotion, and simpler approaches for these smaller entities.

Respondents asked for information on three of the four SMS components—**Safety Promotion**, **Safety Assurance**, and **Safety Risk Management**. The topic area that had the most responses (after Safety Performance Management) was **Hazards and Risk**. People want revised hazard classification-related materials, hazard examples and analysis, and hazard taxonomies. They would like to see hazard identification and risk management simplified and a documented, standardized risk assessment methodology. They asked for information on when a risk assessment should be conducted and guidelines for what happens after a risk assessment. They would like guidance on developing a risk picture and also the top risks to aviation, including emerging threats.

A key theme across all proposed topics was the suggestion to include **best practices and examples** in SM ICG products. This applied to safety cases/risk assessments, implementation of SMS and SRM, and SMS oversight. In general, people felt that sharing practical examples, lessons learned, and identified trends would prove useful.

Another key theme was to focus products on **specific domains**. UAS/Drones/Aerodromes were areas that were mentioned numerous times. Other areas included: navigation, maintenance, design or production organizations, ATM, fatigue management in engineering, component rated (C6) related companies, RST, and airspace and flight operations.

One respondent noted that the SM ICG should focus on **keeping their current products updated**.

Finally, some additional topic areas of interest included **Integration** (integrating SMS across organizations and integrating SMS with other management systems), **Safety and Quality** (differentiating SMS and QMS), **Regulations** (consistency/standardization of regulations in implementing SMS), and **Future** (Systems Thinking, Safety-II, future development for SMS/SSP evaluation, SMS changes to account for UAS).

Additional Information?

The following answers were provided to the question: Is there any additional information you would like to share with us?

- Concerned over the safe integration of manned and unmanned operations.
- Definitions. Hazard for instance has a broad meaning, and in aviation this definition could be misinterpreted, coming to consider all things a hazard. But what hazard is really important to

manage safety? I think a clear definition for ""operational"" hazards could help build a logical way to correlate hazards with their risks or unsafe events, bring in last instance a better way to make decisions in where the resources to manage the risks should be put into it.

- Evidence-Based Training (EBT)
- Helping Regulator's understand that aircraft aren't always being Operated/Active
- How can I collaborate with articles, hazard examples?
- A very good contribution to the safety community was the European Helicopter Safety Team (EHEST)- Maria from EHEST. Unfortunately, it had limited capabilities due to when you made a revision, you could not see the history of a hazard. It would be interesting to issue a new tool for risk assessment.
- I would like to attend seminars if you organize some and I would like to participate to change management workshops to improve our approach.
- I would like to know SMICG more in detail.
- Keep up the good work!
- Keep up the great work!
- Obs the difference between safety performance and safety management performance
- Risk Based Audit
- Skybrary is an excellent source of compliance information keep up the good work.
- "SMS is often misunderstood (or misused), especially when it is verbalized but not diligently practiced and lived. I personally find SM ICG's publication to be more mature (and more practical) than many other publications, including ICAO Doc 9859. So, thank you all to the founding and core group that had facilitated the understanding through its thoughts expressed in its publications and which I concur with most.
- Second, may I suggest that more in the industry be co-opted rather than regulators? After all, the ones implementing a SMS is a regulated service provider so you will find greater expertise within this group. SMS is not and cannot be driven by what may be construed as a bureaucracy.
- SPO HR operations
- thank you for your work!
- The trend of safety audit on SM ICG
- We are an airport operator, and we've been experiencing on ground reality safety challenges for cascading information by stakeholders to their staff.
- We would like to be able to contribute to any reviews or regulations
- Would like to participate in InfoShare with the Safety Management community

Subscribe to Mailing List?

There were 61 responses to this and all that requested (and provided their email addresses) were added to the SM ICG external mailing list.

Conclusion

The SM ICG received invaluable feedback from survey respondents both on what SM ICG products they are using and what would be helpful to them in the future. The SM ICG is reviewing the results of this report carefully to help inform areas where they might update existing products and what future products they may develop.

The report will be shared with all SM ICG members as well as members of the SM ICG Industry Engagement Group (IEG). The IEG is a technical group composed of international industry organizations representing the main aviation domains influencing safety management who voluntarily offer consolidated insight and feedback on behalf of their organizations. The report will also be posted to SKYbrary.

The plan is to conduct similar surveys in the future to continue to gather input on the SM ICG products and areas where the SM ICG can provide the greatest benefit to the aviation community.

Appendix A: SM ICG Product Use

Below is the full text of the feedback provided to the following question:

Which SM ICG product(s) have you used? How did you use them (for training or familiarization, incorporated into process, adapted into process, etc.)? What worked? What did not? Suggestions for improvement? (See below for a reference list of SM ICG products.)

Responses have been grouped into categories to make them easier to follow.

***Note:** Answers are documented as provided, including grammatical and/or spelling errors.*

SM ICG Products

- ALL (8)
- Safety Management System
  - SM ICG SMS Evaluation Tool (19)
  - Hazard Taxonomy Examples (12)
  - SMS for Small Organizations (9)
  - Safety Manager's Role in SMS (7)
  - Attitudes and Behaviors for Effective SMS (5)
  - 10 Things You Should Know About SMS (4)
  - SM ICG Position Paper on the SMS/QMS Relationship (2)
  - SMS Integration – Points to Consider (2)
  - Risk Based Decision Making Principles (2)
  - Safety Management Terminology (3)
  - The Frontline Manager's Role in Safety Management Systems
  - Safety Fundamentals (section of website)
  - SMS Factsheet for Design, Manufacturing, and Production Organizations
  - SMS Inspector Competency Guidance
  - Training Program Outline for Inspector SMS Competency
- Safety Culture
  - Safety Culture (17)
- Regulator / Safety Oversight
  - Measuring Safety Performance Guidelines for Service Providers (7)
  - Risk-Based and Performance-Based Oversight Guidance (4)
- Other
  - Change Management at the State Level
  - SSP Assessment Tool and Guidance

Reasons for Using

- SMS
  - Used for general awareness and briefing/training on SMS including providing guidance for capturing in process. Viewed as a good body of data to extract salient points from.

  - all product have been used during the implementation of SMS in Part-145 approved organization.
  - Almost all of them mostly for service provider promotion purposes and as a reference material for Authority staff training.
  - It does provide a good insight regarding SMS.
  - Hazard Taxonomy Examples: As the size of my organization here in Brasil as a subsidiary of AIRBUS in France, some hazards weren't use at the safety management itself, but were under quality management sector. We incorporate the "operational" hazards into our procedures and was very good results, as we can correlate the hazards with the hazard reports that we treat/ receive internally giving to us a more clear way to manage risks and its consequences.
  - I have used nearly all SMS related documents in my course at University of New South Wales and nearly all SMS related documents during development of SMS implementation guidance material for air transport operators at my work at CASA. We currently have 420 operators (smaller air transport) transitioning to SMS. The SM ICG guidance material has been very helpful.
  - These resources are great and give people a good starting place for different parts of the SMS that they may be working on.
  - Safety Management Terminology (guidance). Improve actionability and readability of vocabulary to promote interoperability and mass use of linked data products. I will do this with other safety vocabularies (ADREP) in my MSc project.
- Other
  - Reference/familiarization and training for self as well as developing training materials.
  - We use the products for familiarization and incorporation and adaption into process.
  - Skybrary articles - Producing training material, self study, interview preparation,
  - The publications are used as source of reference for safety communications, including training as well as to adapt some of the suggested practices
  - To define complex / non-complex organisation versus big / small operator from a number of your brochures (rather than other documents)
  - Inspiration, so much clarity in simplicity. I have recommended to others.
  - Usage – information for planning, program improvement and training development
  - I have used about RB related documents for making training documents of RB oversight.
  - I have used the tiles in my job. All are useful. Primarily I direct operators to them. I first used these products as a regulator in Europe.
- Safety Culture
  - I studied to help the organization instill a culture of safety.

Suggestions

- Other
  - Suggestion – create more awareness of the availability of the resource materials. Forum discussions or Q&A on specific topics. Benchmark or best practices sharing from other industries.
  - I used the materials provided for the development of processes, procedures, training, workshops, etc. I would suggest presenting this content in other formats as well, for e.g. videos.

- SMS
  - Can the ICG publish more Publicity materials eg Videos, Posters etc as resource materials to support implementation and sustenance of SMS?
  - It is good to see the various Authorities (EASA, FAA, TCCA, CAAS…) in the Collaboration Group. Can a common acceptable “User Guide” for SMS be developed for the Industry?
- Regulator / Safety Oversight
  - Measuring Safety Performance Guidelines for Service Providers (guidance), Japanese version should be published for our reference.
  - It is recommended to have implementation tools and guidance specific to industries e.g. AMO, AOC, etc.
  - I would like to see more Aircraft maintenance related examples and topics as most of the other products are typically using airline operations for example illustration.

Appendix B: Future Topics

Below is the full text of the feedback provided to the following question:

What topic or topics could you/your organization use more help with?

Responses have been grouped into categories to make them easier to follow.

***Note:** Answers are documented as provided, including grammatical and/or spelling errors.*

- Keep the current products updated
- Safety Management System
  - Safety and SMS (4)
  - Implementation of SMS in small organisations
  - SMS and ATO operations
  - SMS ASSESSMENT
  - SMS Audits
  - SMS implementation (2)
  - SMS TOOLS
  - SMS training support for smaller organizations
  - Safety management, interface between the UKCAA and FAA
  - Continuous improvement of Safety (at industry and State Level)
  - support about implementation of SMS pillars to organisations
  - Management Commitment
    - I am very interested in methods to enforce Management participation in operational safety issues
    - something that makes the accountable manager see the benefit in SMS
    - Safety manager training
  - HAZARD:
    - Revised hazard classification related materials, etc.
    - Setting up a Hazard Taxonomy to classify Safety Issues and establishing a system to share information domestically within Japan.
    - Hazard examples and analysis
    - It would be greatly appreciated if you could show Hazard Taxonomy for GH as well as Flight Crew.
    - maintaining a comprehensive Hazard Register and its use;
    - Taxonomies examples for hazards
    - Taxonomy of Hazard Classification
  - RISK:
    - Also, simplify Hazard ID and Risk Management... far too many see it as overly complicated.
    - Risk assessment methodologies;
    - Risk/ Hazard Management;
    - Risk-based auditing and measuring SMS performance;
    - Risk-based surveillance;
    - Practical application of risk assessment methodologies, ERCS practical applications;

  - Safety Risk Management being applied effectively in a real life situation – taking theory into practice. How to stay in the "Safety Space".
  - Management of Safety Information
  - Safety Risk Management
  - Differentiation between business risks vs operating risks, and how to identify key risks from hazards identified.
  - CAA SORA for drone flights
  - Root cause identification
  - guidelines on when a risk assessment should be conducted (for minor changes, too, in which there are existing procedures to check that the change is managed);
  - guidelines or checklist on what happens after a risk assessment is conducted i.e. if the activity is ongoing, how can it be retired;
  - guidelines on safety case and/or aeronautical study and uses and how each differ from a risk assessment. On this, I note that some states use safety case and aeronautical study interchangeably or worse still, interchangeable also with a risk assessment;
  - Guidance on developing a risk picture in particular with regards to data collection for example, the baseline dataset that are collected for analytics at state level is being cascaded across to the aviation community to monitor similar datasets so that collective analysis can be conducted when required.
  - Standardization of risk assessments; use of Proxies in Safety Assessment
  - Top risks to aviation/ emerging threats/ newly identified lessons or best practices
- Safety Assurance / Performance
  - Measuring Safety Performance Guidelines for Service, sharing of good or best practices observed for read across opportunities; Measuring safety management performance
  - SPI dashboards and platforms
  - Safety performance indicators.
  - Safety Performance Indicators (3) - for similar organisations / product types, practical application, recommendations with metrics and measures
  - SPIs development
  - Guidance or harmonization for inspectors on evaluation of service providers' SMS e.g. PSOE; and [from industry] Guidance on setting of the target and trigger values for safety performance indicators.
  - Materials related to maintenance check flight and test flight. Suggestions of SPI (Safety Performance Indicators) in different location of processes, like SPI for monitoring and SPI to show results.
  - Samples of safety performance indicators definition for each aviation domain
  - Basis... maybe a brochure and some more detail on safety performance management (Objectives, Targets, Indicators, Monitoring etc).
  - To introduce effective SPI and SPT
- Safety Promotion
  - At industry and State Level
- Regulator / Safety Oversight
  - SPI and Risk Management oversight on operator/145/camo/21
  - SMS Measurement for smaller organisations.

  - Specific explanations of the SMS GAP ANALYSIS CHECKLIST AND IMPLEMENTATION PLAN, as well as specific examples and explanations of SPT and SPI. Guide to Acceptable Level of Safety Performance
- SMS/QMS
  - QMS Tools, Safety Tools such as risk analysis techniques.
  - Safety and Quality
  - SMS evaluation and more rigid differentiation between QMS and SMS.
  - SPI development and Integration of QMS and SMS
- Audit
  - Safety Audit as high risk Base
  - Auditing programming
  - Audit on Safety Management Process; controls monitoring (how do do this effectively and create a feedback loop)
  - Subject of the Safety Audit and audit of SMS from Compliance side
- Safety Culture
  - Survey
  - Inculcating a safety culture within the organization
  - Just/ Safety culture
  - Specific SPI/SPT setting method, Specific methods to promote safety culture and just culture.
  - Implementation of Positive Safety Culture
  - Safety Culture Tools – one suggested focus on topics/case studies for maintenance error
  - Further information for capturing just culture and organization safety culture maturity/progress and senior management buy in (appreciate that there is already SM ICG products on these but further outputs would be beneficial as these are pinch points within most organizations particularly for the development of SMS)
  - The industry and regulators could do with clearer guidance on the just culture, especially its limitations in various legal jurisdictions, and national cultural environments. Happy to discuss, I conduct research in this area at University of New South Wales.
  - Unwritten Ground Rules and their effect on a safety culture
  - We need support to improve just culture over all
- Change Management (2)
  - In big organizations
  - How to conduct change management.
  - Tools/ Guidance materials for measuring maturity of safety culture of the organisation,
  - guidelines on what does Management of Change entails. On the last, a framework would be useful, particularly since it may have been misunderstood as solely about conducting risk assessments "
- Integration
  - We have observed that some States find it challenging to design/develop an effective SDCPS and HIRM system that closely links to it.
  - Inter-Organisation SMS integration.
  - Safety terminology and data integration/interoperability
  - Supply chain management
  - Integrated SMS/POE/MOE

- Human Performance (2)
  - Topic of human performance and its interaction with SMS
  - Human Factors considerations for design organizations (as in errors that can be introduced within the design process - not the HF/ergonomics of the product/aircraft).
  - Human performance related topics (other than human factors) for sharing and guidance as aviation is still very much a labor-intensive industry
- Best Practices/Examples:
  - Industry best practice / examples of safety cases that are well handled
  - I would like to know specific examples of implementation of aviation safety management and risk management. I would like to know specific examples of SPI and SPT safety management.
  - Best practices and practical know-how of SMS oversight. Best practices to promote service providers to enhance effective SMS.
  - practical examples of implementation, examples of lessons learnt, trends identified
- Small Operators
  - Promotion material for small high risk operators to implement effective SMS without too much burden.
  - The number of small operators (even one person or only a couple of persons = the whole nominated post holders) is high compared to large organisations. The risk assessment and also CAA audits with the perspective of scheduled air carrier does not fit properly. We need simple approach. EASA-OPS / compliance monitoring of very small organisation is a rare example of recognizing differences.
- Domains / Interdependency
  - Access to industry days focused across domains e.g. maintenance, CAMO etc rather than generalized SMS forums
  - More study on safety correlation and interdependency among different domains (ATM, Aerodrome, UAS, etc)
  - Operational risk assessment. Obstacle evaluation. Best practices in aerodrome domain.
  - Navigation - safety - ATM Digitization
  - Drones Operation
  - EASA manual
  - Electronic Compliance & SMS Management Platform
  - fatigue management in engineering
  - Flight safety
  - Flight Training topics
  - CAMO
  - CAMO Contracts and Leasing Company Awareness
  - SMS within Component Rated (C6) related companies and its impact.
  - RST
  - Maintenance, Continuing Airworthiness, Design and Production
  - Aerodromes Design and Operations
  - AIRSPACE AND flight operations
  - Cybersecurity and Sustainable development
  - UAS
  - What to report as maintenance, design or production organization.

- Regulators and Agreements
  - Consistency of regulation in implementing SMS.
  - Changes in General Aviation Regulations
  - bi lateral agreements
  - Safety, Security, regulation
  - Safety and regulatory information
  - Standardization of approach from regulators (UK CAA).
- Future
  - SMS
    - The future developments for SMS and SSP evaluation.
    - Other topics of interest would be those relating to certain Annex 19 SARPs and Doc 9859 SMM guidance which provide broad theoretical concepts, but do not suggest what mechanism or what these should look like in practice. With reference to the upcoming amendments to these ICAO documentation, such topics could include:
      - specific consideration given to human performance implications;
      - establish a surveillance policy;
      - develop and maintain a process to evaluate the effectiveness of actions taken to manage safety risks and resolve safety issues; and
      - establishing an analysis process which includes the identification of practices / operational strategies resulting in positive outcome
    - Safety Management and Safety Management System - How to have an effective SMS in the organization? How to implement SMS effectively? Prepare a paper that outlines how the SMS needs to change to enable the provision of new unmanned traffic management services
  - Safety Assurance
    - Systems Thinking and Safety-II
- Other
  - SPO HR operations
  - statistics