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Safety risk-based surveillance provisions

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Overview

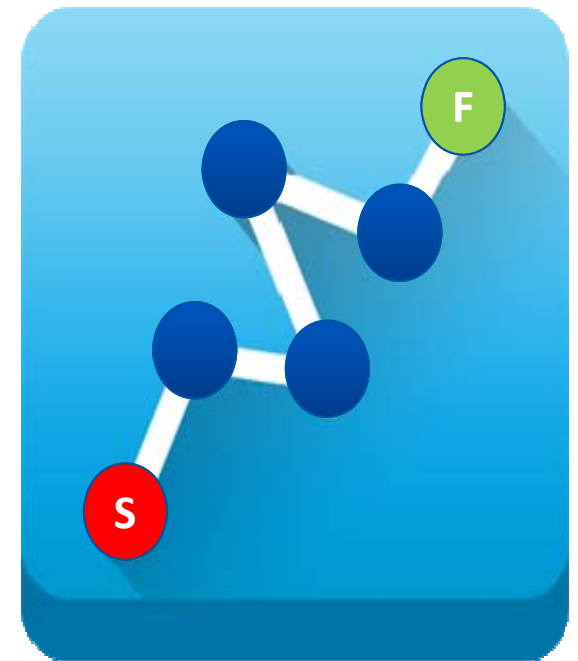
1. Annex 19, Amendment 1

- a) Surveillance vs. Oversight
- b) State safety management responsibilities
- c) Surveillance obligations

2. Safety Management Manual, (Doc 9859), 4th ed

- a) Data-driven decision making process
- b) Prioritizing surveillance activities
- c) Service provider organizational safety risk profiles
- d) Sector safety risk analyses
- e) Impact of SRBS

3. Safety Management Implementation (SMI) website



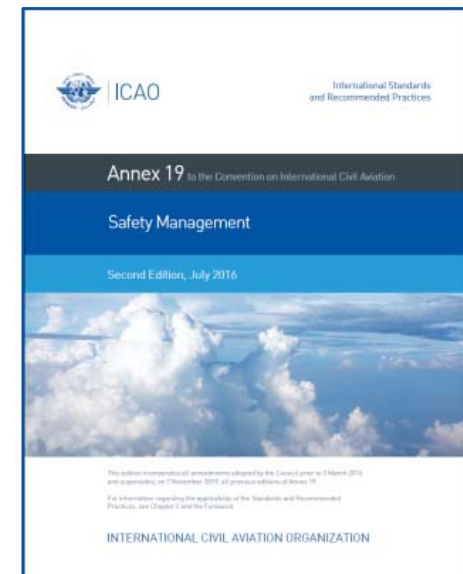


Amendment 1 to Annex 19

New definitions

***Safety oversight.** A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

***Surveillance.** The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

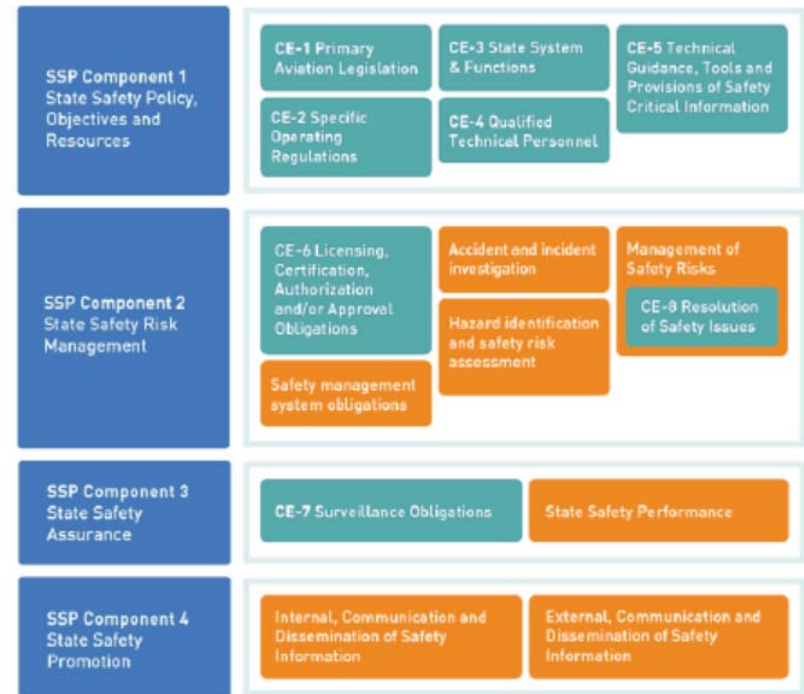




Amendment 1 to Annex 19

In recognition of the need to **clarify the relationship** between the eight critical elements (CEs) of a State safety oversight (SSO) system found in Appendix 1 and the detailed SSP framework elements previously found in Attachment A, Amendment 1 to Annex 19 consolidates, in **Chapter 3**, the provisions related to **States' safety management responsibility**.

The CEs of an SSO system constitute the **foundation of an SSP**. Chapter 3 integrates the eight CEs of the SSO system with the SSP framework elements into a **streamlined set of SARPs** to facilitate implementation. **The CEs remain visible in Appendix 1**.





Amendment 1 to Annex 19

3.4 State safety assurance

3.4.1 Surveillance obligations

3.4.1.1 States shall meet the surveillance obligations in accordance with section 7 of Appendix 1.

Note.— The surveillance of the service provider takes into consideration the safety performance as well as the size and complexity of its aviation products or services.

3.4.1.2 **Recommendation.**— *States should establish procedures to prioritize inspections, audits and surveys towards those areas of greater safety concern or need.*

Note.— Organizational risk profiles, outcomes of hazard identification and risk assessment, and surveillance outcomes may provide information for the prioritization of inspections, audits and surveys.

3.4.1.3 **Recommendation.**— *States should periodically review the safety performance of an individual service provider.*



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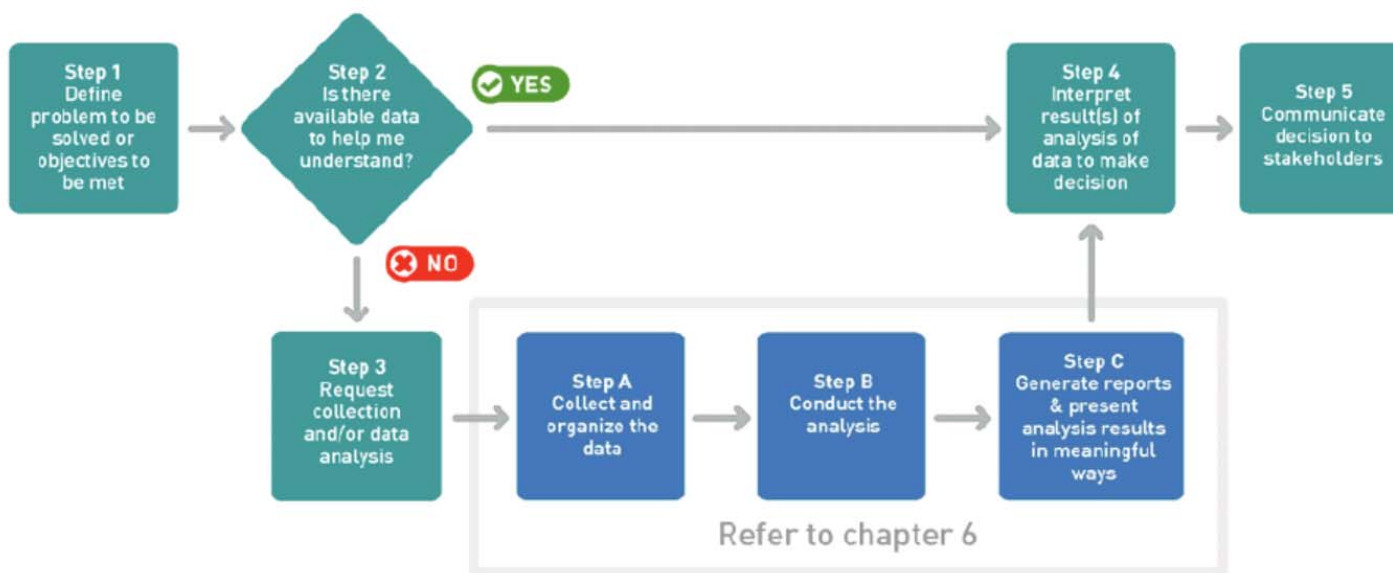


Figure 16. Data-driven decision-making phases



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Prioritizing Surveillance Activities

- A safety risk-based surveillance (SRBS) approach enables prioritization and allocation of State's safety management resources commensurate with the safety risk profile of each sector or individual service provider.
- States gain experience and familiarity with each service provider by monitoring the steadily developing maturity of their safety assurance process, and in particular, their management of safety performance.
- The State may choose to amend the scope and/or frequency of surveillance as their confidence and evidence of the service provider's safety capability develops.



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Prioritizing Surveillance Activities

- The foundation of effective SRBS is reliable enough and meaningful data. Without reliable and meaningful data, it is difficult to defend adjustments to the surveillance scope or frequency.
- States should develop or reinforce their data management capabilities to ensure they have reliable and comprehensive data upon which to base their (data-driven) decisions.

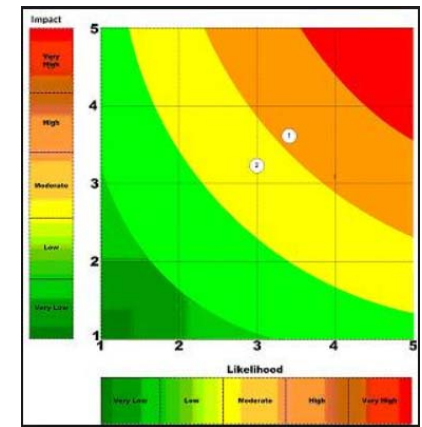


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Service provider organizational safety risk profiles

States may wish to develop organizational safety risk profiles using information that may already be available for service providers including:

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





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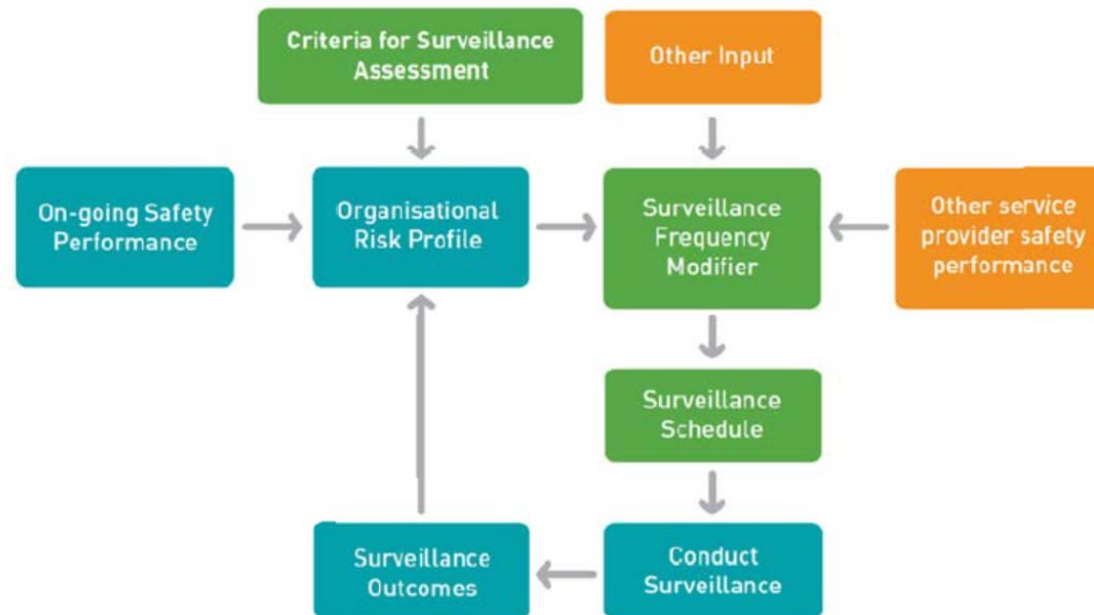


Figure 21. Safety risk-based surveillance concept



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Sector safety risk analyses

- Individual sector safety risk analyses may also allow the State to evaluate common safety risks that affect multiple service providers with similar types of operations (for example, short-haul airlines).
- Analyses at the sector level allows the State to view the aviation system in context: how the parts contribute to the whole. It empowers the State to identify which sector(s) will benefit from higher levels of support or intervention, and which sectors are the best candidates for a more collaborative approach.
- This gives the State assurance that regulation across the aviation system is commensurate and targeted at the areas with greatest need.



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Impact of safety risk-based surveillance

- SRBS requires ongoing interactions between the State and the aviation community beyond compliance-based audits and inspections.
- The output of internal reviews, analysis and decision-making within the service provider's system becomes a targeted action plan addressing key safety risks and the mitigations that effectively address them. The analysis from both the State and the service provider define the priority areas of safety concern, and outline the most effective means of addressing them.
- Safety risk-based surveillance may not necessarily reduce the amount of surveillance conducted or the resources, however, the quality of the surveillance and the quality of the interaction between the regulator and the service provider will improve greatly.





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Safety Management Implementation Website



- ✓ To **complement** the 4th Edition of the **SMM**:
<https://www.icao.int/safety/SafetyManagement/Pages/Practical-examples-and-tools.aspx>
- ✓ Will include the examples currently found in the SMM and **provide a mechanism** for the **sharing of best practices**. We hope to collect examples during this workshop!



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