



International Civil Aviation Organization
Asia and Pacific Office

ICAO

Eleventh Meeting of the Asia Pacific Accident Investigation Group (APAC-AIG/11)

(Singapore, 16 – 17 August 2023)

Agenda Item 3: Update on ICAO AIG-related Requirements and Activities

INTRODUCTION OF THE ICAO OCCURRENCE VALIDATION STUDY GROUP

(Presented by the Secretariat)

SUMMARY

This working paper introduces the ICAO Occurrence Validation Study Group (OVSG) and its activities to yearly produce the global accident and incident data with quality, reliability and validity through the process of validation and verification.

Action by the meeting is outlined in paragraph 3.

REFERENCES

OVSG Terms of Reference
OVSG Operational Guidance
Annex 13 – Aircraft Accident and Incident Investigation
Annex 19 – Safety Management
Global Aviation Safety Plan (Doc 10004)
Manual of Aircraft Accident and Incident Investigation, Part IV – Reporting (Doc 9756)
ADREP Taxonomy

1. INTRODUCTION

1.1 AIG Divisional Meeting/1999 (Recommendation 2/1 – ADREP data analysis) recommended establishing a group of experts to develop safety indicators and analyse accident data. It was agreed that one group of experts would carry out both tasks.

1.2 Accordingly, the Safety Indicators Study Group (SISG) was established in 2001. During initial meetings, a general agreement was reached that one valuable output of the group's activity would be for it to produce an agreed dataset of accidents and serious incidents and that no single set of safety indicators would meet all data analysis purposes.

1.3 At the SISG/20 meeting in 2020, it was agreed that the name of the group be changed to Occurrence Validation Study Group (OVSG) to better reflect the deliverables of the group, which produces annually a reviewed dataset of accident and serious incident records from the previous year as the ICAO official accident/incident data and information.

1.4 The OVSG meets conducts the preliminary reviews of occurrence datasets by teleconferences held mid-year and then meets the following February each year to complete the validation. The group is composed of experts involved in accident investigation, air safety investigation, safety reporting system, safety analysis, safety intelligence, data science, safety data management and operational safety from States, international organizations as well as the manufacturers and service providers who serve as technical advisers to the group.

2. DISCUSSION

2.1 Annex 13 requires States (of occurrence) to send notifications and ADREP reports of investigations of accidents and serious incident to ICAO. ICAO collects and stores this information in the ICAO ADREP database that includes the global accident and incident data since 1970s.

2.2 Because the investigation data included in the notification or even in the ADREP Preliminary Reports is often preliminary, missing or incomplete, the OVSG reviews and validates the reports submitted by Member States from the previous year at its annual meeting.

2.3 In addition, during the meeting the OVSG identifies and adds those missing accidents or serious incidents that are not reported by States to produce a complete list of global accidents and serious incidents with essential data and information. According to the OVSG Operational Guidance, these non-official reported occurrences need to be verified with the State of occurrence during the four weeks after the OVSG annual meeting.

2.4 Moreover, the OVSG revisits the accidents categorized as the occurrence category of UNK by the ADREP taxonomy and updates the category when the relevant information becomes available from the investigation. These activities and process make sure the deliverables of the OVSG have data quality, reliability and validity.

2.5 The OVSG validated data provides the basis for any accident statistics and analysis. It has been used for publication of the ICAO annual safety report and regional safety report to monitor the global aviation safety trends as well as some of the safety indicators associated with the 2023-2025 edition of Global Aviation Safety Plan (GASP) Goal 1 - *Achieve a continuous reduction of operational safety risks*. The GASP Study Group also uses the OVSG validated data to identify its global high-risk categories of occurrences (G-HRCs), which should be reflected in the Regional Aviation Safety Plans (RASPs) and National Aviation Safety Plans (NASPs).

2.6 In addition, the OVSG validated data is used by the ICAO Universal Safety Oversight Audit Programme (USOAP) to identify and prioritize its activities. It also provides data support for other ICAO expert groups upon request, such as a request received from the Airworthiness Panel (AIRP) to monitor the annual trend of loss of control – inflight (LOC-I) events to evaluate the implementation and results of previous AIRP work and inform future activities.

2.7 ICAO ADREP data and information on accidents and incidents is available for States upon request in order to assist them in their accident or incident investigation and prevention efforts. ICAO Annex 19 requires States to establish a safety data collection and processing system (SDCPS) to develop safety intelligence for improving safety. This includes data and information pertaining to accident and incident investigations.

2.8 It is beneficial for the global aviation community to have access to a dataset of accidents and incidents with quality and reliability to support data-driven decision-making for maintaining and improving safety. It is also beneficial for States and regional entities to use the dataset as benchmarks for safety analysis or to develop their RASPs and NASPs, respectively.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) Note the information included in this working paper; and
- b) Encourage States in the APAC region to participate in the activities of the OVSG and support the verification of the accidents identified by the OVSG as the State of Occurrence, State of Operator or State of Registry, if requested.

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