

International Civil Aviation Organization

Accident and Incident Analysis Working Group

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Agenda Item 2: AIA WG Work Programme

GUIDANCE ON SAFETY INFORMATION EXCHANGE WITH ICAO

(Presented by the Secretariat)

SUMMARY

This information paper introduces a Circular, under development by the Integrated Aviation Analysis section (IAA), which will provide clear guidance to States about how to share safety data with ICAO.

REFERENCES

- Chapter 5 of ICAO Annex 19 Safety data collection, analysis and exchange
- Chapter 4 of ICAO Doc. 9859 State Safety Programme
- Chapter 4 of ICAO Annex 13 Notification

1. Introduction

- 1.1 Chapter 4 of Annex 19 makes the following recommendations:
 - a) If a State, in the analysis of the information contained in its database, identifies safety matters considered to be of interest to other States, that State should forward such safety information to them as soon as possible.
 - b) Each State should promote the establishment of safety information sharing networks among users of the aviation system and should facilitate the free exchange of information on actual and potential safety deficiencies.
- 1.2 These recommendations are followed by a note: "Standardized definitions, classifications and formats are needed to facilitate data exchange. Guidance material on the specifications for such information-sharing networks is available from ICAO."
- 1.3 Integrated Aviation Analysis (IAA) section is currently preparing a Circular that will provide guidance to States about the definitions, classifications and formats, as well as the transfer mechanisms for safety information exchange.

- 1.4 In Chapter 4 of Doc. 9859, Safety Management Manual, recommends that: "The State's [safety data collection and processing systems] should include procedures for submission of accident and incident reports to ICAO, which will facilitate global safety information collection and sharing. Guidance on accident and incident notification and reporting, as per the requirements of ICAO Annex 13, is provided in Appendix 6 to this chapter."
- 1.5 The guidance in Appendix 6 is out-of-date so the Circular will provide updated guidance and cover a wider variety of information than the Annex 13 occurrence reports.
- 1.6 In addition to the need for guidance material outlined above, there is a need to address deficiencies in the current processes. For example: ICAO does not have a well-defined process for receiving occurrence data from States:
 - a) Currently occurrence information is transmitted via a large number of channels: by post, fax, or email to various recipients within ICAO and the Regional Offices.
 - b) After notifications arrive there is a protracted delay before the occurrence data is entered into the ADREP and iSTARS databases.
 - c) Reports arrive in many different file formats that often require translation and transcription before the information is in a suitable format.
- 1.7 There is a need for a clearly defined and simple process which makes the information available with minimal delay and user interaction.
- 1.8 IAA intends to implement new systems to facilitate efficient, automated, safety information transfer and the use of these systems will be documented in the Circular.
- 1.9 The fundamental requirement for the new systems is that States must provide safety information in a machine-readable format.
- 1.10 File formats currently under consideration include:
 - a) ECCAIRS e5f;
 - b) XML; and
 - c) JSON.
- 1.11 Communication channels currently under consideration include:
 - a) secure file transfer to an ICAO server;
 - b) a RESTful API; or
 - c) email.
- 1.12 For those States that do not use a database to manage occurrence data a web-based form may be an adequate solution for their reporting requirements.