International Civil Aviation Organization

Accident and Incident Analysis Working Group

Second Meeting (AIA WG/2)
(Cairo, Egypt, 14 – 16 March 2017)

Agenda Item 2: **AIA WG Work Programme**

OCCURRENCE DATA VALIDATION TOOL

(Presented by the Secretariat)

SUMMARY
The first meeting of the Accident and Incident Analysis Working Group (AIA WG/1, Cairo, 29-31 March 2016) agreed on the development of a tool to allow the ICAO MID Regional Office (on behalf of the RASG-MID) to validate occurrence data in coordination with concerned States. A mock-up of the final tool has been developed by ICAO Secretariat, implementing the proposals of AIA WG/1. Decisions and further input for fine-tuning of the tool is needed by the Working Group, in particular with regards to data fields, validation workflow and user roles.
Action by the meeting is at paragraph 6.

REFERENCES

- AIA WG/1-Report
- RASG-MID/5-REPORT

1. INTRODUCTION

1.1 AIA WG/1 agreed that, for data to be consistent between RASG-MID and ICAO's Integrated Safety Trend Analysis and Reporting System (iSTARS), a tool should be developed to support validation of occurrences by the AIA WG, feeding back the data to iSTARS once approved.

1.2 ICAO is currently in the process of developing the tool, as presented in the screen mock-ups included in the associated PowerPoint presentation (PPT #1).

1.3 In order to continue the development of the tool, the AIA WG/2 need to discuss the following aspects:

  a) the criteria for inclusion of occurrences in the tool;
  b) the fields to be collected and related taxonomies;
  c) the workflow of validating occurrence data;
  d) the roles of the users of the tool; and
  e) the procedures to be followed by the users of the tool.

2.   DATA SELECTION CRITERIA

2.1   The validation tool will use iSTARS and the ADREP database as sources of data. Only a subset of these occurrences will be relevant to the MID Region, so it will be necessary to define the criteria used to select occurrences relevant to this group.

2.2   It is proposed that an occurrence will be included where any of these fields refers to a State in the MID Region:

> a)   the State of Occurrence;
> b)   the State of Registration; and
> c)   the State of Operator.

3.   FIELDS

3.1   The tool under development currently includes twenty-seven fields for each occurrence. Twenty-five of these are standard fields used in ECCAIRS and two are defined by RASG-MID.

3.2   The following two fields proposed by RASG-MID currently have no associated taxonomy which may hinder effective analysis:

> a)   main root cause; and
> b)   contributing factor.

3.3   It is recommended that the AIA WG/2 specify taxonomy for the fields mentioned above.

3.4   The existing "Descriptive Factor" taxonomy in ECCAIRS may be a useful reference point for the development of the missing taxonomy. For the purposes of standardization, it is recommended that the ECCAIRS "Descriptive Factor" taxonomy be adopted by AIA WG/2.

4.   WORKFLOW AND USER ROLES

4.1   The workflow for the review and validation of occurrence data currently implemented in the tool includes four stages:

> a)   Not Reviewed: the initial stage for an occurrence that meets the data selection criteria;
>
> b)   Under Review: the occurrence is under active review and will be edited by authorized users;
>
> c)   Valid: the changes made to the occurrence are accepted. The validated occurrence data will now be visible in iSTARS; and
>
> d)   Invalid: the occurrence will be marked as invalid. Subsequent downloads from iSTARS will include this field to ensure that this occurrence can be excluded from consideration in any statistical analysis.

4.2   If an occurrence report is left in the "Not Reviewed" stage for an extended period of time (to be defined by AIA-WG), then it will automatically move to the "Valid" stage.

4.3   There are currently three roles associated with this workflow; a user may perform one or more of these roles. They are:

   a)   Reviewer: a user in this role may review the occurrence and contribute to the discussion about the occurrence, but may not make any changes to the occurrence report;

   b)   Editor: this role gives the user the ability to make changes to the occurrence report. An "Editor" may change an occurrence report from "Not Reviewed" to "Under Review"; and

   c)   Validator: the user with this role may move an occurrence report from "Under Review" to "Valid" or "Invalid" stages.

   All users will be "Reviewers" by default.

4.4   There is a separate "Administrator" role which is not part of the workflow. The user(s) with this role may assign or un-assign users to the "Editor" and "Validator" roles.

5.   PROCEDURE

5.1   Each occurrence report will have a forum-like space for discussions. All users can use this feature to discuss the occurrence without having to make changes to it.

5.2   Once consensus has been reached on the correct and valid values, an "Editor" can set these values in the report.

5.3   A "Validator" may then review the occurrence report and set it as "Valid".

6.   ACTION BY THE MEETING

6.1   The meeting is invited to:

   a)   define taxonomies for additional fields defined by the AIA WG Core Team;

   b)   review and accept the proposed workflow steps;

   c)   review and accept the proposed user roles; and

   d)   view the associated PowerPoint presentation and provide feedback to ICAO by 31 March 2017.

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