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ASSEMBLY — 36TH SESSION

TECHNICAL COMMISSION

Agenda Item 28: Protection of certain accident and incident records and of safety data collection and processing systems in order to improve aviation safety

DEVELOPMENT AND DISTRIBUTION OF SAFETY INFORMATION REPORTING SYSTEM TO SHARE INFORMATION AMONG STATES

(Presented by the Republic of Korea)

EXECUTIVE SUMMARY

Reporting and sharing safety information are fundamental in aviation safety. Especially reporting and sharing safety information about accidents and serious incidents among States must be preceded for the improvement of aviation safety. This working paper aims to emphasize the role and support of ICAO in the development and distribution of a standardized electronic reporting system to allow States to also report and share minor safety information such as minor incidents, malfunction, confidential reports other than accidents and serious incidents.

Action: The Assembly is invited to recommend that ICAO develop and distribute a modified standardized index system with less categories and less details to fill out, and therefore to modify ECCAIRS according to the "modified ADREP 2000".

Strategic Objectives:	This working paper relates to Strategic Objective A
Financial implications:	Not applicable
References:	

1. **INTRODUCTION**

1.1 It is essential to collect and analyse aviation safety information and reflect it in the aviation policy for the improvement of aviation safety. There is no doubt that gathering, analysing and sharing such information greatly contribute to the improvement of international aviation safety. Thus, the application of an internationally standardized electronic database system for data exchange by States would significantly improve its efficiency.

2. STATUS

2.1 ICAO ensures that Contracting States establish a formal reporting system to collect safety information about accidents, serious incidents, as a requirement; or other incidents such as minor incidents, malfunction and confidential reports, as a recommendation, occurred during aircraft operations and to share them with States based on ICAO-recommended standardized database system. ICAO confirms the compliance with such requirements and recommendations through USOAP protocol. In other words, States need to maintain such other incidents data in the standardized database system.

[Annex 13]

Database systems

- 8.4 **Recommendation.** A State should establish an accident and incident database to facilitate the effective analysis of information obtained, including that from its incident reporting systems.
- 8.5 **Recommendation.** The <u>database systems should use standardized formats to facilitate data</u> exchange.

Analysis of data — Preventive actions

8.6 A State having established an accident and incident database and an incident reporting system shall analyse the information contained in its accident/incident reports and the database to determine any preventive actions required.

Exchange of safety information

8.9 **Recommendation.**— <u>States should promote the establishment of safety information sharing networks among all users of the aviation system and should facilitate the free exchange of information on actual and potential safety deficiencies.</u>

[ICAO USOAP PROTOCOL (AIG)]

- 6.507 Has the State established an accident and incident database for facilitating the effective analysis of information obtained, including that from its accident and incident reporting systems?
- 6.509 If yes, is the database created in a standardized format to facilitate data exchange?
- 6.511 Does the State analyse the information contained in its accident/incident reports and the database to determine any preventative actions required?

2.2 However, ICAO USOAP results show that most States, 25 out of 27 States (where registered the audit results on the ICAO USOAP website) do not sufficiently comply with such recommendations and were advised to take an appropriate corrective action. It reflects the fact that most States do not seriously consider the introduction of the system, or are having difficulties establishing the system.

3. PROBLEMS OF EUROPEAN ECCAIRS SYSTEM RECOMMENDED BY ICAO

- 3.1 ICAO has recommended States use ECCAIRS (European Co-ordination Centre for Aviation Incident Reporting Systems), developed by European Commission, which allows Contracting States to share safety information about accidents and/or incidents prepared based on ICAO-developed ADREP 2000, a standardized index system. Some States are applying ECCAIRS as a tool to report accidents and serious incidents to ICAO.
- 3.2 However, because ECCAIRS was originally designed for detailed accident and major incident data, which can be identified thorough and long-term accident/incident investigation process, other incidents such as minor incidents, malfunction or confidential reports are not really appropriate for the system; compared to accidents or serious incidents, occurring frequencies of these events are so high that it is almost infeasible to input such an extensive items of ECCAIRS whenever they happen, even when there are not any detailed information like accidents or serious incidents. Consequently, potential reporters such as witnesses of such events, airlines become reluctant to report them, and it can have adverse impact on aviation safety.
- 3.3 Even though each State intends to develop a system like ECCAIRS based on ADREP 2000, it is very hard to understand the logic and complexity of the ADREP 2000, which inevitably prevents States from developing its own system.

4. **CONCLUSION**

- 4.1 It is recommended that ICAO develop and distribute a modified standardized index system, such as 'simplified ADREP 2000' with less categories and less details to fill out, for minor incidents or general safety information to be efficiently and appropriately reported and shared among States.
- 4.2 It is therefore also recommended that ICAO modify ECCAIRS according to the modified ADREP 2000.