



WORKING PAPER

ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 30 : Other Issues to be considered by the Technical Commission

DATA FUSION CENTER

(Presented by United Arab Emirates)

EXECUTIVE SUMMARY

As defined by ICAO DOC 9859, *Safety Management System (SMS)*, data fusion is the process of integrating multiple data sources to produce more consistent, accurate, and useful information than that provided by any individual data source.

A data fusion center will produce several benefits such as improved collection of data, improved collaboration and communication across intelligence, command, control, and response teams, increased ability to analyse and respond to events, improved situational awareness for intelligence analysts and decision makers, and increase dissemination and knowledge capture for the benefit of all concerned.

Such data fusion centers will facilitate other States' access to knowledge and could qualify under the No Country Left Behind (NCLB) initiative too.

Action: The Assembly is invited to:

- a) recognise the benefits of data fusion centre to advance safety;
- b) instruct ICAO to implement Recommendation 7.1/1 – Data-driven decision-making and establish a working group (WG) that will facilitate the establishment of such platform;
- c) instruct ICAO to build synergies (by integration) with iSTAR, which contained several Apps that could provide tools to States; however a better transparency and engaged on the evolution of iSTARs from States should be formulated by ICAO; and
- d) instruct ICAO to present to the ICAO Council and to the next Assembly, a report about the progress on such initiative.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives: Safety, Air Navigation Capacity and Efficiency, and Economic Development of Air Transport.
<i>Financial implications:</i>	
<i>References:</i>	

1. INTRODUCTION

1.1 The HLSC 2015 was made aware of the various types of information that could be included in a global framework, as outlined in HLSC/15-WP/59, presented by the United Arab Emirates.

1.2 The conference agreed to recommend that ICAO launch a study to assess the need to enhance the Universal Safety Oversight Audit Programme – Continuous Monitoring Approach (USOAP-CMA) online framework to be a more transparent data fusion center that would complement the work conducted by ICAO and Member States through the USOAP-CMA, Electronic Filing of Differences (EFOD), Regional Aviation Safety Groups (RASGs) and other working groups.

1.3 It is unclear what is the current approach adopted by ICAO for the creation and maintenance of this data fusion center.

2. DISCUSSION

2.1 As explained by ICAO DOC 9859, data fusion is the process of integrating multiple data sources to produce more consistent, accurate, and useful information than that provided by any individual data source.

2.2 A data fusion center will produce several benefits such as improved collection of data, improved collaboration and communication across intelligence, command, control, and response teams, increased ability to analyze and respond to events, improved situational awareness for intelligence analysts and decision makers, and increase dissemination and knowledge capture for the benefit of all concerned.

2.3 Such data fusion centers will facilitate other States' access to knowledge and could qualify under the NCLB initiative too.

2.4 Everyone should keep in mind the recommendation formulated by EVALUATION AND INTERNAL AUDIT OFFICE in their Evaluation Report on the Global Plans, Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP), conducted recently. Somehow, such platforms could facilitate the recommendations expressed therein, in particular Recommendation 6 which recommends for, "The Secretariat to develop and implement performance monitoring system with clear indicators, reporting arrangements and guidelines at regional and global levels for both Plans." Because "There is no functional monitoring system for the GANP. There is a lack of clearly defined roles and responsibilities and mechanisms for monitoring at various levels, and for aggregating data at a global level (single/common platform for all regions to report on)."

2.4.1 The On-Line Framework (OLF) may have reached the expectation of recommendation stated by HSLC 2015. Yet, more integration of data source should be added to it such as Annex 13 — *Aircraft Accident and Incident Investigation Safety Recommendations* issued by States (not limited to those addressed to ICAO), Airworthiness Directive, Operational directive issued by States, etc.

2.4.2 Such superpower centers will revolutionise the detection of safety hazards and safety risk and will erase any unnecessary blocker to access knowledge or safety data / information.

2.4.3 The UAE is also interested in a better integration with iSTARs which offers to States several Apps. On the same subject, the UAE would like to understand more on how these Apps are decided and how useful they appear to their end-users.