International Civil Aviation Organization

WORKING PAPER

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ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 36: Aviation safety and air navigation implementation support

THE USE OF SAFETY DATA AND SAFETY INFORMATION AT THE STATE LEVEL

(Presented by the International Air Transport Association (IATA))

EXECUTIVE SUMMARY

States' oversight obligations include an overall view of the safety performance of its aviation system, and ensuring that the proper actions are taken to address intolerable risk. This requires a systematic and integrated application of the safety management principles by both the State and Service Providers.

All safety data and safety information deemed relevant by a State is in scope for an State Safety Program (SSP). As such, safety reporting provisions in existing Annexes and PANS are part of the safety data for an SSP.

IATA recognizes that it could take years for some States to enact all Annex 19 provisions into their respective legal frameworks. In addition, although guidance is being prepared, there remains a possibility of misinterpretation of the protection SARPs, leading to non-harmonized implementation.

Action: The Assembly invited to request that ICAO facilitate Industry/State collaboration in establishing Safety Data Collection and Processing System (SDCPS) models that:

a) meet the needs of a State SSP to manage safety at the State level;
b) address the concerns of airline Operators on the use of information from voluntary reporting and auto data capture systems;
c) establish protocols to maintain the de-identification of individual service provider data; and
d) adhere to the protection principles as outlined in Annex 19.

Strategic Objectives:	This working paper relates to the Safety Strategic Objective.
Financial implications:	Minimal cost for ICAO States and Industry to facilitate collaboration as suggested.
References:	Annex 19 – *Safety Management* Doc 9859, *Safety Management Manual (SMM)* State letter AN 8/3.1-16/16, Adoption of Amendment 1 to Annex 19 Doc 10046, *Report of the Second High-Level Safety Conference (2015)*

[1] English, Arabic, Chinese, French, Russian and Spanish versions provided by IATA.

1. INTRODUCTION

1.1 In recognition of the increasing complexity of the global air transportation system and the interrelated nature of aviation activities required to assure the safe operation of aircraft, ICAO received recommendations from the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety (Montréal, 20 to 22 March 2006) (DGCA/06) and the High-level Safety Conference (Montréal, 29 March to 1 April 2010) (HLSC/2010) regarding the need for an Annex dedicated to safety management.

1.2 Annex 19 – Safety Management was adopted 14 November 2013. It consolidated material from existing Annexes regarding State Safety Program (SSP), safety management system (SMS) and the collection and use of safety data, into one Annex, allowing States to focus their attention on the importance of integrating the safety management of diverse aviation activities, while also facilitating the evolution of SMS by harmonizing provisions applicable to different types of service providers. It also included the elevation of State Safety Oversight activities outlined in Doc 9734 ~ Safety Oversight Manual, Part A - The Establishment and Management of a State's Safety Oversight System, to Standards, included in Appendix A.

1.3 More recently, 2 March 2016, ICAO adopted Amendment 1 to Annex 19 which further develops the safety management provisions. Specifically, an upgrade of SSP provisions integrated with the State safety oversight (SSO) system critical elements (CEs); enhancement of SMS provisions; the extension of an SMS to organizations responsible for the type design and/or manufacture of engines and propellers; and enhanced provisions for the protection of safety data, safety information and related sources. This amendment becomes applicable 7 November 2019.

2. DISCUSSION

2.1 ICAO requirements mandate that States establish a SSP to ensure an acceptable level of safety is established and maintained in their civil aviation systems. States are further required to ensure that SMS are implemented by Service Provider's (SPs), including Commercial Air Carriers operating in accordance with Annex 6.

2.2 Both systems have similar framework elements and complement each other to achieve effective Safety Management in a civil aviation system.

2.3 As SSP and SMS are both performance-based systems, Annex 19 — *Safety Management* mandates that Safety Data Collection and Processing Systems (SDCPSs) are established to capture, store, aggregate, and enable analysis of safety data and safety information to support their respective safety management activities.

2.4 Being a performance-based system, SMS, by its very nature, requires each Service Provider (SP) to identify and manage their safety risks in the context of their organization. Therefore, even though the framework and elements are consistent, the way they are implemented in an organization (i.e. processes, organizational structure, risk thresholds, etc.) will be unique. Consequently, the State should not dictate how an organization meets its SMS obligations, but rather ensure that the system in place is having the desired effect. Efficacy, not efficiency, is to be evaluated.

2.5 With SMS, Service Provider's (SP) must identify and manage safety risks, as well as monitor ongoing safety performance of their respective organizations. Similarly, the State SSP outlines

the requirement for States to identify and manage safety risks to the State's entire civil aviation system and measure safety performance of the State, and not individual SPs.

2.6 States have an obligation to have an overall view of the safety performance that their aviation system is delivering and ensuring that the proper actions are taken to address intolerable risk. It requires a systematic and integrated application of the safety management principles by both the State and Service Providers.

2.7 Although each SP has the autonomy to develop their own SMS in the context of their organization, it is recognized that the aviation community as a whole benefits when the integration of such information can provide a more complete picture. As such, there are requirements in Annex 19 for States to not only share and exchange safety information with SPs and other Sates as appropriate, but also promote the establishment of safety information sharing and exchange networks amongst all stakeholders. SMS and SSP are both dependant on this.

3. PRESENT CIRCUMSTANCES

3.1 Since the 1970's, provisions requiring States to establish safety data or reporting systems have been included in ICAO Annexes and documents. Most are sector-specific safety reporting systems, except those from Annex 13, which are focused specifically on accidents and serious incidents.

3.2 According to Article 37 of the Convention on International Civil Aviation (Chicago Convention), Standards for safety reporting in existing individual Annexes are binding on States. PANS do not have the same status as SARPs but States are required to publish up-to-date lists of significant differences from PANS documents in their Aeronautical Information Publications, as they are mostly complementing their related Annexes (Assembly Resolution 38-11).

3.3 All safety data and safety information deemed relevant by a State is in scope for an SSP. As such, safety reporting provisions in existing Annexes and PANS, which are considered to be important to safety, are part of the safety data for an SSP.

3.4 Airline operators have collected a wealth of safety data and safety information in their respective SMS programs from both voluntary reporting and automated data capture systems.

3.5 States have recognized the value of aggregate, de-identified Operator safety information to support their SSP activities.

3.6 A variety of CAAs have expressed interest in using this data to identify, mitigate and measure risks to aviation safety in the respective State. It has been stressed that they are not interested in the specific source of the information, but rather the identified trends.

3.7 It is recognized that some safety information from an airline Operator's SMS program is highly sensitive to both the airline and its employees, and if applicable, their unions or associations. It is also recognized that the information is extremely valuable to an SMS or SSP in the interest of maintaining or improving aviation safety.

3.8 IATA members are concerned that States may make some of the voluntary or auto-data capture systems mandatory to report to the State.

3.9 IATA fully supports information sharing to States at a de-identified level, predicated on established protocols to maintain the separation of individual air carrier data.

3.10 IATA recognizes and fully supports the revised Annex 19 language enhancing the protections of safety data and safety information, and their sources. IATA also recognizes that it could take years for some States to enact these provisions into their respective legal frameworks. Additionally, although guidance is being prepared, there remains a possibility of misinterpretation of the protection SARPs, leading to non-harmonized implementation.

4. CONCLUSION

4.1 IATA proposes that Industry/States collaborate in developing Safety Data Collection and Processing System (SDCPS) models that meet the needs of a State SSP to manage safety at the State level, address the concerns of airline Operators on the use of information from reporting and auto data capture systems, while also adhering to the protection principles as outlined in Annex 19.

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