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ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 26: Safety management and safety data

REQUEST FOR ICAO'S LEADERSHIP IN PROMOTING THE GLOBAL IMPLEMENTATION OF PROACTIVE SAFETY MANAGEMENT APPROACH

(Presented by the Republic of Korea)

EXECUTIVE SUMMARY

At the High-level Safety Conference (HLSC) 2010, a number of delegates outlined concerns related to difficulties and impediment in the transition to the State Safety Programme (SSP) environment which is relying upon risk-based and data-driven safety management. One of the key elements to the success of the proactive safety management approach is the free flow of safety data and information within States, regions and at the global level, together with well-defined safety analysis methodology. This working paper describes the need for ICAO's leadership for promoting the global implementation of proactive safety management approach.

Action: The Assembly is invited to:

a) call upon ICAO to conduct a survey to recognize the reality of the global implementation of a proactive safety management approach under the SSP and Safety Management Systems (SMS) environment;
b) note that the Republic of Korea will host an SSP/SMS International Seminar in 2011 and call upon ICAO to support the seminar to share experiences and lessons learned by States in implementing their SSP/SMS;
c) call upon ICAO to develop a comprehensive safety-related Information Strategy Plan (ISP) and seek arrangements with States, regional bodies and other stakeholders to promote safety data and information sharing and build up a harmonized global safety analysis system; and
d) call upon ICAO to assure the protection of State safety intelligence from the inappropriate use of identifying States, so as to promote safety intelligence exchange between ICAO and States.

Strategic Objectives:	This working paper relates to Strategic Objective A.
References:	Doc 9935, *Report of the High-level Safety Conference (2010)*

1. INTRODUCTION

1.1 Toward the proactive management of safety, Safety Risk Management (SRM) and Safety Assurance (SA) are key processes to implement a service provider's Safety Management System (SMS) and a State Safety Programme (SSP). Therefore, ICAO has made a commitment to apply proactive safety risk management principles to its strategic safety decision-making processes. At the High-level Safety Conference (HLSC) 2010, a number of delegates outlined their concerns as follows:

1.1.1 *Topic 2.1 (Managing the transition to the implementation of SSP environment).* There was general agreement on a phased approach for the implementation of an SSP, especially as it may present a challenge to some States due to the associated workload. In this respect, ICAO was called upon to show its leadership in promoting the exchange of available information on the implementation of SMS and SSP and to form a study group to develop guidance material for the implementation of SSP. It was also requested to promote, where possible, the use of regional bodies to monitor the progress of implementation of SSPs in those regions.

1.1.2 *Topic 2.3 (Sharing of safety information).* There was recognition that safety data analysis requires the use of common metrics and there was strong support for the establishment of a group of experts by ICAO to develop such metrics. The importance of a common taxonomy was also highlighted. A critical factor in relation to information sharing was that *"there must be a clear understanding of how and to whom safety information would be disseminated and also how such information would be used."*

1.1.3 *Topic 2.4 (The protection of sources of safety information).* There is need for trust in the protection of safety data from inappropriate use by aviation organizations and to distinguish where and when safety data/safety information/safety intelligence needs to be protected from misuse. In order to establish the free flow of information for analysis, the protection of information from all available sources of safety data from improper use is essential to ensure its continued availability.

1.2 Among other things, the Republic of Korea believes that the safety-related information strategy with common understanding by States and other stakeholders is of utmost importance for its successful transition to proactive safety management. Further, a pragmatic approach is necessary in managing the transition, given that the applicability date of November 2010 of SSP implementation is very close.

2. DISCUSSION

2.1 ICAO's safety management development and its implementation

2.1.1 All States shall implement their safety regulations in accordance with applicable ICAO safety management Standards and Recommended Practices (SARPs): Annex 1 (*Personnel Licensing*), Annex 6 (*Operation of Aircraft*), Annex 8 (*Airworthiness of Aircraft*), Annex 11 (*Air Traffic Services*), Annex 14 (*Aerodromes*), and Annex 13 (*Aircraft Accident and Incident Investigation*). ICAO has supported the development of safety management practices and their implementation through SSP and SMS implementation training programmes and workshops to create a common understanding of basic

safety management concepts. In addition, as an outcome of the HLSC 2010, ICAO would proceed with the development of a safety management Annex, providing regulators and safety practitioners across all aviation disciplines with a common safety management framework.

2.1.2 However, many States still struggle to adopt and realize the new concept of safety management under their safety oversight system, even though the applicability date of November 2010 is very close. In this regard, ICAO provided States only the conceptual framework for the State Safety Risk Management (SRM) and it is not able to play enough to assess safety management performance. A number of delegates at the HLSC 2010 outlined this problem that their States were encountering in implementing their SSP.

2.1.3 Further, the Universal Safety Oversight Audit Programme (USOAP) under the Comprehensive Systems Approach (CSA) clearly showed the status of global safety levels and realities for many States. According to the second edition of the CSA Analysis Report produced by ICAO in 2009, the global average for lack of effective implementation remains 42 per cent at the initial audit phase. Considering that the CSA has been carried out as a "snap-shop" audit, this means there is still a large need for complementing basic safety management globally.

2.1.4 In this connection, ICAO should conduct a survey and evaluate the associated workload which States have been faced with the implementation of the SSP. The phased approach should focus on "State's As-Is", as well as "Global To-Be". After surveying the real situation in most States, ICAO should make the effort to facilitate global implementation of proactive safety management on a harmonized basis.

2.2 ICAO's leadership in promoting the exchange of safety intelligence

2.2.1 ICAO has made a commitment to develop an analysis system capable of monitoring global safety objectives through the assessment of numerous criteria as presented in the A37-WP/69. The iSTARS seems to be a good demonstration of a safety risk-based decision making tool, but a significant increase in the amount of information available to support proactive safety analysis is required due to continued SSP and SMS implementation. ICAO will begin integration of additional data and various forms of safety information provided by both internal and external sources.

2.2.2 The successful integration of external information will require agreement among key stakeholders regarding the definition of safety metrics as well as alignment of analysis methods to ensure consistent assessments of global safety trends and benchmarks. Accordingly, ICAO's role in this regard will be essential to establish a strategy and to develop a plan for the integration of information used for this purpose. An Information Strategy Plan (ISP) would enable a clear understanding of how and to whom safety information would be disseminated and also on how such information would be used. In this respect, ICAO is called upon to show leadership in promoting the exchange of available information for the implementation of SMS and SSP and to facilitate the voluntary free-flow of information.

2.2.3 A key consideration in terms of the transparent use of safety information is that it should not be used for inappropriate purposes. With regard to the importance of information within a safety performance environment, there is a need for trust in the protection of a State's safety data from inappropriate use by global safety classification and to distinguish where and when safety data/safety information/safety intelligence needs to be protected from misuse. Forming a committee to deal with the safety intelligence independently can be one resolution to support data protection. The participants of

such a committee should be the safety intelligence holders in each State. It should be further discussed to assure the resolution of safety issues without unnecessarily identifying individuals, organizations or States.

3. PROPOSAL

3.1 ICAO should conduct a survey and evaluate the associated workload that States have faced during the implementation of the SSP in reality and continue its efforts to support States with specific guidance to resolve the outlined concerns.

3.2 Regional cooperation is also important for the harmonization of SSPs. The Republic of Korea will host a SSP/SMS International Seminar in 2011 for the Asia-Pacific Region to provide a forum for the sharing of knowledge, experiences and lessons learnt by States and Organizations. In this regard, ICAO is requested to support the Seminar.

3.3 The Republic of Korea supports ICAO's role to facilitate the effective identification of hazards and the resolution of unacceptable safety risks through the analysis of multiple sources of safety intelligence. All activities of data exchange and safety intelligence should be integrated and centralized in ICAO. Further, ICAO should seek arrangements with States, regional bodies and other stakeholders to promote safety data and information sharing on a voluntary basis.

3.4 A critical factor in relation to information sharing is that there must be a clear understanding of how and to whom safety information will be disseminated and also how such information would be used. Information Strategy Planning (ISP) can facilitate the integration of information used for this purpose

3.5 To form a committee to deal with the safety intelligence independently could be one resolution of data protection. The participants of the committee should be the safety intelligence holders in each State. It should be further discussed to assure State intelligence protection from unnecessary use of identifying individuals, organizations or States, so as to promote safety intelligence exchange between ICAO and States.

4. CONCLUSION

4.1 As a result of HLSC 2010, ICAO will take follow-up actions to resolve the concerns raised by States and other stakeholders. Nonetheless, considering the reality that the global average for lack of effective implementation remains high as shown in the report of USOAP CSA 2009, there is still a large room for ICAO to provide support to States with various efforts including development of specific guidance and fostering collaboration at the regional and global levels. Further, ICAO's proactive safety management approach will be relying upon the implementation of State SSP/SMS and a significant increase in the amount of information available to support proactive safety analyses will be an inevitable consequence. ICAO's leadership is required, in particular, with regard to the proposal in Section 3.

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