58th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

Dhaka, Bangladesh 15 to 19 October 2023

AGENDA ITEM 3: AVIATION SAFETY

COMPETENCY-BASED TRAINING/ASSESSMENT FOR SMS INSPECTORATE PERSONNEL

(Presented by the Republic of Korea)

SUMMARY

The Global Aviation Safety Plan (GASP) has a goal of the implementation of effective SSP and calls for States' SSP to evolve to include effective SMS oversight. Recently, as service providers' SMS becomes more mature and their safety intelligence advances, it becomes more difficult to effectively perform the role of a field inspector. To achieve GASP goal, it is necessary to introduce competency-based training and assessment (CBT/A) for SMS inspectors.

COMPETENCY-BASED TRAINING/ASSESSMENT FOR SMS INSPECTORATE PERSONNEL

1. INTRODUCTION

- 1.1 According to the Doc 9859 Safety Management Manual, States are responsible for ensuring that the service providers establish and implement their SMS and for doing the followings:
 - SMS acceptance
 - Acceptance of SPIs and SPTs
 - Monitoring a service provider's safety performance
 - Service provider's SMS surveillance
- 1.2 To fulfill these responsibilities, States should have qualified technical personnel, including SMS inspectors. Competencies and training required for SMS inspectors are addressed in Safety Management Manual as follows:

a) Competencies:

- enhanced leadership skills
- understanding of business processes
- experience and judgement required to assess performance and effectiveness.
- safety risk-based surveillance
- safety data collection and analysis
- safety performance measurement and monitoring
- safety promotion activities
- b) Examples of training for inspectors on the SSP and SMS principles
 - how to carry out SMS assessment
 - how to evaluate a service provider's SPIs for acceptance
 - how to generally oversee the service provider in a safety management environment
- 1.3 Safety Management Manual also recognizes that surveillance and monitoring of service providers' SMS will require competencies that may not have been critical before SMS requirements were introduced. Inspectors will need to complement their existing technical knowledge with additional skills to assess the suitability and effectiveness of the service providers' SMS implementation. Those competencies are in addition to those required for the conduct of compliance oversight and may be addressed by training existing staff or by hiring additional staff.

2. DISCUSSION

- 2.1 In accordance with Safety Management Manual, traditional aviation safety inspectors from different disciplines such as flight operations, airworthiness, flight dispatch, cabin, dangerous goods, air navigation and aerodrome/heliport, who were previously performing compliance oversight, now put into SMS-related tasks after having been provided with training on SSP and SMS. But as service providers' SMS becomes more mature and their safety intelligence advances, it becomes more difficult to effectively perform the role of a field inspector.
- 2.2 Hazard identification, risk assessment, mitigation, and safety analysis are difficult aeras to assess for adequacy and effectiveness when inspectors do not have actual experience of participating in the service providers' SMS implementation process. In industries where SMS implementation is highly matured, it is critical for inspectors to have specialized understanding and practical experience in each SMS elements, beyond the competencies outlined in the Safety Management Manual, in order to communicate with service providers and assess them based on accurate understanding and sufficient confidence.

- 2.3 Republic of Korea is now considering hiring new inspectors who have experience in SMS implementation, it is not easy for States to standardize the qualifications required to be an SMS inspector, including specialized training program requirements that correspond to their high level of competencies.
- 2.4 Manual on the competencies of civil aviation safety inspectors (CASI), Doc 10070, specifies the duties, competencies and requirements of license, experience, and training for aviation safety inspectors in detail. Additionally, the manual presents the CASI Career and Training Lifecyle which is very systemically designed to maintain and/or develop the inspectors' competencies.
- 2.5 Manual of procedures for operations inspection, certification and continued surveillance, Doc 8335, stipulates specific experience requirements for CASI. For example, a minimum of 5,000 hours of flight experience as a civilian or military pilot is required to be a commercial air transportation flight operation inspector.
- 2.6 The Global Aviation Safety Plan (GASP) has a goal of the implementation of effective SSP and calls for States' SSP to evolve to include effective SMS oversight in place. To achieve the goals, States that have reached a higher level of SMS implementation will need more competent inspectors. It is believed that obtaining Senior/Principal inspectors specialized in SSP/SMS and having them lead a team of traditional CASIs could be a progressive model to effectively oversight service providers' SMS implementation.
- 2.7 To this end, it is necessary to introduce competency-based training and assessment (CBT/A) for SMS inspectors. The competencies required for SMS inspectors could be analyzed in more detail by career, such as initial senior principal, and a differentiated training curriculum should also be designed for each level. In addition, for senior/principal SMS inspectors, it is recommended that experience and knowledge requirements required to successfully fulfill their duties, if feasible, as specific as those established for traditional CASIs.

3. ACTION BY THE CONFERENCE

- 3.1 The Conference is invited to:
 - a) urge ICAO to develop guidance on CBT/A for SMS inspectors, including a review of their experience and knowledge requirements, if feasible.
 - b) request ICAO to provide specialized training opportunities for States and senior/principal level of inspectorate personnel.