International Civil Aviation Organization

SEVENTH MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM (APRAST/7)

(Bangkok, Thailand, 31 August to 4 September 2015)

Agenda Item 5:   Update, discuss and review of APRAST activities

ANNEX 19 AND IMPLEMENTATION OF SSP/SMS

(Presented by India)

SUMMARY

This paper provides an overview of the establishment of the State Safety Programme in India and the level of progress made.

1.   INTRODUCTION

1.1   Implementation of SMS in India was in force since the year 2004 in the area of Aerodromes and subsequently Air traffic service provider. The implementation was supported by the specific legislation and the subordinate legislation.

1.2 In the year 2010, Rule 29C was incorporated in the Aircraft Rule 1937 for the establishment of the State Safety Programme by the State followed by incorporation of Rule 29D for the introduction of Safety management system by the service providers as mandated in ICAO Annexes 1, 6, 8, 11, 13 and 14.

1.3   To provide direction in the implementation of State Safety Programme at the State level and SMS at the service provider level, State Safety Programme (SSP) – India, a higher level document was issued in the year 2010. The SSP-India provides a framework to meet the safety management provisions contained in ICAO Annexes 1, 6, 8, 11, 13 and 14 and to progressively improve safety performance across all affected aviation service providers.

1.4   To provide guidance to the service providers in the implementation of the Safety management System in phased manner, subordinate legislation in form of "Civil Aviation Requirement, Section 1, Series C part I", Gap analysis tool & Hazard Log has been issued.

 1.5   Introduction of ICAO Annex 19 consolidated the safety management provisions in the existing ICAO Annexes and introduces new requirements such as the safeguarding of safety data which is beyond the requirements of ICAO Annex 13. Gap Analysis with Annex 19 has been carried out and changes in the documents are in progress.

1.6   Based on the analysis of the safety data and the guidance provided by the ICAO, DGCA- India has identified Seven State Safety priorities along with associated performance indicators. To mitigate the safety threat identified by the seven safety priorities targets for the year 2015 and 2016 have been specified along with the safety action plan.

2.   DISCUSSION

2.1   Legislative Provision

2.1.1   *Current provision*

2.1.1.1   India introduced Rule 81 in Primary legislation, the Aircraft Rules 1937, requiring specific service providers to implement Safety Management System as early as 2004. The existing arrangements were reviewed and the Primary legislation was subsequently amended. This led to the introduction of Rules 29C and 29D which required the establishment of the SSP by State and Safety Management Systems by the operators in line with the ICAO SARPS. At the same time, existing Civil Aviation Requirements were reviewed and updated as necessary.

2.1.2   To provide guidance to the service providers in establishing their Safety Management System, subordinate legislation in the form of the "Civil Aviation Requirement, Section 1 Series C Part I" was also issued in 2010. This prescribes a phase-wise approach and the activities to be carried out in each phase.

2.1.3   *Impact of Annex 19*

Most of the requirements of Annex 19 have already been introduced in the Indian civil aviation legislation. Modification of the regulations is under process to extend the applicability of the SMS to include the design and manufacturing organizations of aviation products and training organizations in India. Provision already exists in Primary legislation for the protection of the safety data under Annex 13. However, this will be modified to extend the protection to other safety data as required under Annex 19.

2.2   Implementation of SSP and SMS

2.2.1   *Establishing the required structure*

2.2.1.1   The implementation of the SSP in India was a significant task, not the least because of the size and complexity of the aviation industry. In order to effectively manage and gain support for the implementation, new structures were created which involved much of the aviation industry.

2.2.1.2   An SSP Steering Committee headed by the Secretary Civil Aviation, Government of India was established to oversee and monitor the implementation of SSP and safety policy by the State. The committee comprised representatives from the government, the DGCA, defence authorities and major service providers. In addition, a new DGCA SSP/SMS Division was established under overall Chairmanship of the Director General to practically manage the implementation of the SSP and to ensure implementation of requirements of SMS by stakeholders. The SSP/SMS Division is part of the Air Safety Directorate and provides a safety focal point for all Directorates of DGCA.

2.2.2   *Implementing the SSP*

2.2.2.1   An implementation plan was drawn up for each phase of the SSP. The implementation is managed by the SSP/SMS Division and is overseen by the SSP Steering Committee.

2.2.3   *Supporting Service Providers to implement their SMS*

2.2.3.1   With over 200 service providers of differing sizes and maturity, providing an appropriate level of support was a significant undertaking. To assess the size of the task, the first step for all service providers was to carry out a gap analysis to analyze existing processes against the new SMS requirements. The DGCA facilitated this by developing a user-friendly tool which allowed in-house analysis by the service provider followed by a review with dedicated teams from the regulator.

2.2.3.2   Having completed the gap analysis, service providers then developed an implementation plan and, through a series of workshops attended by most aviation organizations in India, were provided with information on the SSP, changes to regulations and practical guidance to develop the SMS.

2.2.3.3   The DGCA prioritized and focused its efforts on providing direct support to 25 'major' aviation organizations making up over 75% of aviation activity in India. These included all major airports, airlines, MROs and the ANSP. A series of SMS oversight meetings and visits were undertaken to provide practical support, assess progress and learn lessons which could be adopted by other service providers. The process was supported by field officers and inspectors from most Directorates which ensured a wider understanding of SMS across the DGCA.

2.2.3.4   The DGCA also responded to the requests of service providers by providing both general guidance (including routine safety bulletins) and specific guidance material on hazard log/risk register and guidance which describes in detail potential sources of data, how to enter and utilize the risk assessments in determining the safety performance indicators by the operator for itself.

2.2.3.5   An assessment of progress at the end of year 2014 identified that good progress had been made by many stakeholders and allowed the DGCA to prioritize resources to provide additional support to those that had not yet met all of the requirements.

2.2.3.6   SMS has also been introduced in the type design and manufacturing organisations in India. This sector is governed by stringent requirements and quality control. There is need to develop specific for the implementation of the SMS in the type design and manufacturing organisations.

2.2.4   ***Safety Performance Measurement and the establishment of a basic ALoSP***

2.2.4.1   To date, the safety performance of service providers has been assessed by conducting routine audits and inspections of service providers and by collecting and analyzing data from the existing Mandatory Occurrence Reporting system and Voluntary Reporting System and, for example, the 100% monitoring of DFDR data by scheduled operators.

2.2.4.2   The DGCA has started the process of implementing a safety performance framework and processes for measuring safety performance at a State level and establishing quantitative safety performance targets for the more mature service providers.

2.2.4.3   New data collection, storage and analysis processes are being developed to provide a more accurate picture of aviation safety performance. With the analysis of the safety data DGCA-India has established Seven State Safety priorities and associated safety performance indicators (SPIs) with yearly targets. This has enabled DGCA India to establish a basic State Acceptable level of safety Performance (ALoSP) and a State Safety Plan. The seven safety priorities are:

- Airborne conflict
- Controlled flight into terrain
- Runway excursions and overruns
- Wildlife and bird strikes
- Loss of control in flight
- Ground collisions and ramp safety
- Deficient maintenance

3.   ACTION BY THE MEETING

3.1   The Meeting is invited to:

   a) To note the information contained in this Paper.

   b) Take action for developing specific guidance for the implementation of SMS in type design and manufacturing organisations.

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