



DIRECTORS GENERAL OF CIVIL AVIATION-MIDDLE EAST REGION

Second Meeting (DGCA-MID/2) (Jeddah, Saudi Arabia, 20-22 May 2013)

Agenda Item 6: Aviation Safety

REGIONAL SAFETY INDICATORS AND TARGETS

(Presented by the Secretariat)

SUMMARY

This paper highlights the need to establish regional and national safety priorities in line with the Global Aviation Safety Plan (GASP), which provides the framework for the development of regional, sub-regional and national implementation plans. It proposes a set of Metrics and safety indicators for the monitoring of safety performance in the MID Region and seeks the agreement on the associated safety targets.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 Safety fundamentally contributes to the sustainable growth of a sound and economically viable civil aviation system. It is a guiding priority for the States and industry that fosters economic prosperity and social development.

1.2 The ICAO Assembly, through Resolution A37-4, recognized that progress in improving global safety and efficiency of civil aviation is best achieved through a cooperative, collaborative and coordinated approach in partnership with all stakeholders under the leadership of ICAO.

1.3 In addition, the Assembly resolved that the Global Aviation Safety Plan (GASP) shall provide the framework for the development of regional, sub-regional and national implementation plans. The implementation of such plans would ensure that efforts aimed at improving international civil aviation safety and efficiency are harmonized and coordinated.

1.4 To ensure that continuous Safety improvement and harmonized global Air Navigation modernization advance hand-in-hand, ICAO has developed a strategic approach that links and measures progress in both areas under complementary frameworks. This supports States and stakeholders in realizing the safe sustained growth, increased efficiency and responsible environmental stewardship that societies and economies globally now require.

1.5 This strategic approach for improving safety and efficiency is reflected in the newly amended ICAO Global Aviation Safety Plan (GASP) as well as in its companion document, the ICAO Global Air Navigation Plan (GANP). These Global Plans jointly form a harmonized and interdependent framework to improve safety as well as air navigation performance.

2. DISCUSSIONS

2.1. According to ICAO, by 2030, the number of passengers will reach 6 billion a year on scheduled services alone. This is approximately double today's numbers. The number of aircraft departures will also double to well over 50 million a year. The aviation eco-system will come under pressure to meet the demand. The challenge would be to provide the necessary air transport capacity to enable the growth of the industry and also continue to enhance safety and reduce environmental impact.

2.2. Contemporary strategic planning processes designed to further improve aviation safety are based on the incorporation of proactive safety management practices, providing a multi-disciplinary and risk-based approach to achieve a continuous improvement on safety performance. The monitoring of safety performance and its enhancement is achieved through identification of relevant safety indicators as well as the adoption and attainment of aviation safety targets.

2.3. The GASP specifically establishes targeted safety objectives and initiatives while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.

2.4. The GASP objectives and associated target dates are developed for the global aviation community as a whole. Each objective includes specific initiatives to be implemented by States in a progressive manner in accordance with defined timelines.

2.5. The Plan recognizes the need for Member States to establish priorities within a global framework that are appropriate to their distinct operational contexts. In this way, the initiatives included in the GASP will facilitate the improvement of each Member State's safety oversight capabilities, the implementation of State Safety Programmes (SSP) and the implementation of a safety structure necessary to support the air navigation systems of the future.

GASP Objectives

Near-term Objective

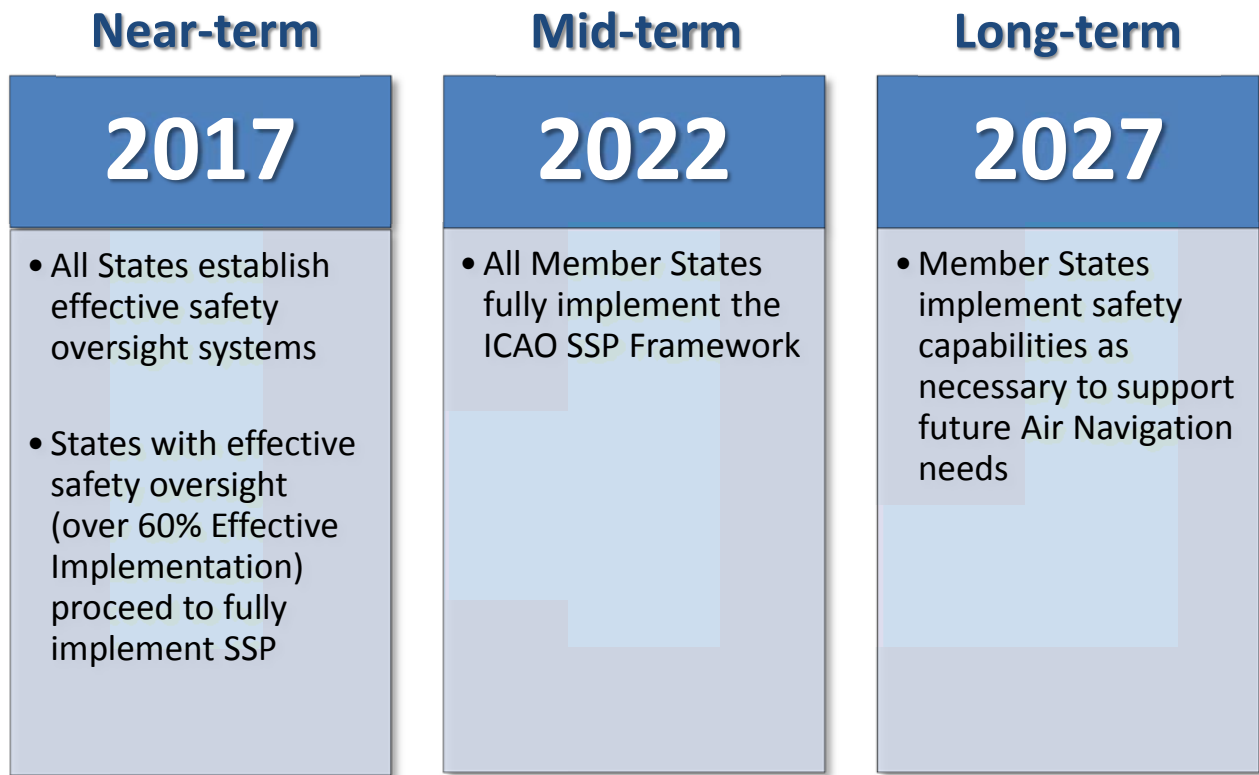
2.6. Implementation of ICAO Standards and Recommended Practices (SARPs) related to the State's approval, authorization, certification and licensing processes is a prerequisite enabler for safe and sustainable air traffic growth. In the near term, Member States lacking these capabilities will ensure that they have the resources as well as the legal, regulatory and organizational structures necessary to fulfil their fundamental safety oversight obligations.

Mid-term Objective

2.7. The mid-term objective calls for all States to achieve full implementation of SSPs and Safety Management Systems (SMS) globally to facilitate the proactive management of safety risks. The mid-term objective therefore represents the evolution from a purely compliance-based oversight approach to one which proactively manages risks through the identification and control of existing or emerging safety issues. The target implementation date for the mid-term objective is 2022.

Long-term Objective

2.8. The focus of the long-term objective is the implementation of proactive and predictive systems that ensure safety in a real-time, collaborative decision-making environment. Sustainable growth of the international aviation system will require the introduction of advanced safety capabilities (e.g. full trajectory-based operations) that increase capacity while maintaining or enhancing operational safety margins and manage existing and emerging risks. The long-term safety objective is intended to support a collaborative decision making environment characterized by increased automation and the integration of advanced technologies on the ground and in the air, as contained in ICAO’s Aviation System Block Upgrades (ASBUs) strategy. The target implementation date for the long-term objectives is 2027.



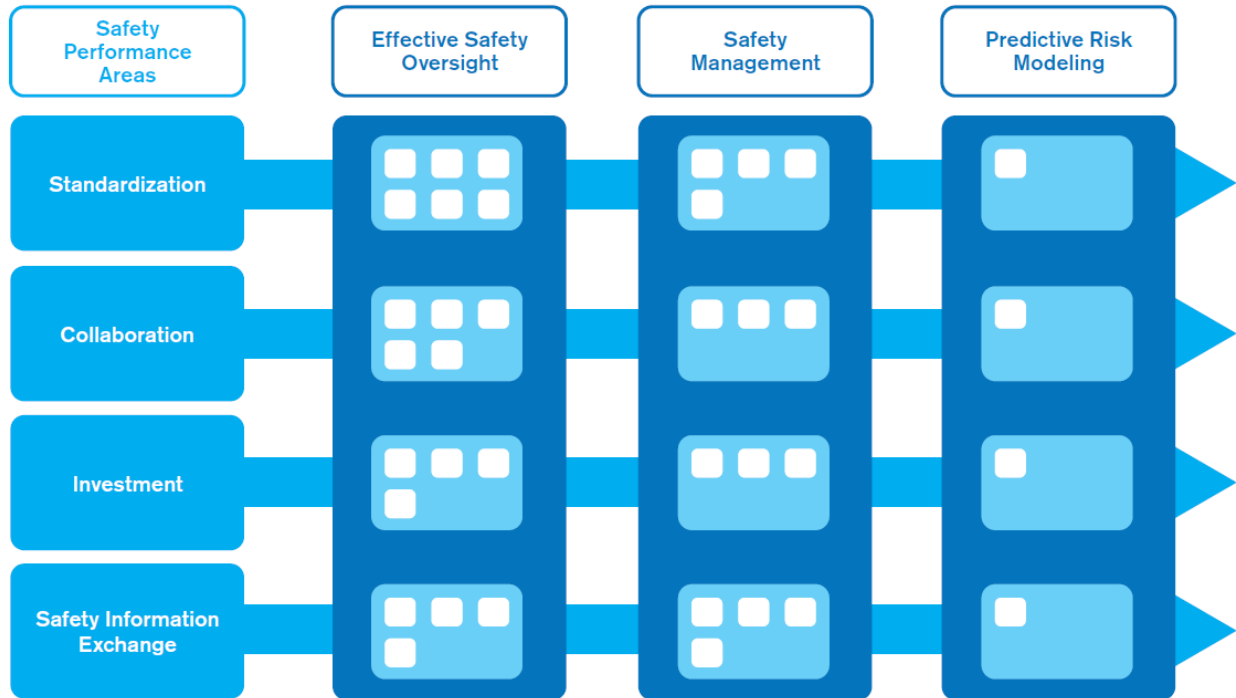
Safety Performance Areas

2.9. The following four Safety Performance Areas form the structure for the implementation of the GASP initiatives and related safety objectives established by regions, States or industry:

- Standardization;

- Collaboration;
- Investment; and
- Safety information exchange.

GASP Structure



Measuring safety outcomes

2.10. ICAO and the RASGs publish annual Safety Reports to provide regular updates on the level of progress achieved with respect to the GASP objectives through measurement of reactive, proactive and predictive safety indicators. An analysis of multiple safety indicators is essential to assess safety performance globally as well as at the regional levels.

2.11. Taking into consideration the GASP objectives, safety performance areas and safety initiatives, the following Table presents the proposed Metrics and safety indicators for the monitoring of safety performance in the MID Region. The meeting may wish to agree on the associated safety targets:

	Metric	Safety Indicator	Safety Target
1	Safety oversight: Effective Implementation (EI) by State and Significant Safety Concerns	<i>Number of States with an EI over 60%</i>	
		<i>Number of Significant Safety Concerns</i>	
2	Accidents and serious incidents	<i>Number of accidents per million departures</i>	
3	Runway and Ground Safety (RGS)	<i>Number of Runway excursion accidents as a percentage of all accidents</i>	
		<i>Number of Runway incursion accidents as a percentage of all accidents</i>	
4	In-Flight Damage (IFD)	<i>Number of In-flight Damage accidents as a percentage of all accidents</i>	
6	Loss of Control In-Flight (LOC-I)	<i>Number of LOC-I accidents as a percentage of all accidents</i>	
7	Controlled Flight Into Terrain (CFIT)	<i>Number of CFIT accidents as a percentage of all accidents</i>	
8	Aerodrome Certification	<i>Number of certified international aerodrome as a percentage of all international aerodromes in the Region</i>	
9	SSP/SMS Implementation	<i>Number of States having completed implementation of SSP Phase 1 (Element:1.2(i) and 4.1&4.2)</i>	
		<i>Number of States having completed implementation of SSP Phase 2 (Element:1.1, 1.2(ii), 1.3, 1.4(i), 3.1(i), 2.1(i) and 4.1&4.2)</i>	
		<i>Number of States having completed implementation of SSP Phase 3 (Element:1.4(ii), 2.1(ii), 3.2(i), and 4.1&4.2)</i>	
		<i>Number of Service Providers having completed implementation of SMS Phase 1 (1.1(i), 1.5(i), (1.3), and 4.1&4.2) as a percentage of all service providers required to implement SMS</i>	
		<i>Number of Service Providers having completed implementation of SMS Phase 2 (1.1(ii), 1.2, 1.4, 1.5(ii) and 4.1&4.2) as a percentage of all service providers required to implement SMS</i>	
		<i>Number of Service Providers having completed implementation of SMS Phase 3 (2.1(i), 2.2, 3.1(i), 3.2, 3.3(i) and 4.1&4.2) as a percentage of all service providers required to implement SMS.</i>	

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) endorse the proposed Metrics and Safety Indicators;
- b) agree on the associated Safety Targets;
- c) urge States to:
 - i. develop national safety implementation plans, ensuring the alignment with and support to the agreed regional safety priorities (Metrics, Indicators and Targets);
 - ii. provide necessary data and regular updates to the ICAO MID Regional Office and/or RASG-MID appropriate Teams on the level of progress achieved through measurement of the agreed safety indicators, at national level;
- d) task the RASG-MID with:
 - i. the monitoring and measurement of the agreed safety indicators, at regional level; and
 - ii. the identification of necessary measures to reach the agreed safety targets.

- END-