



*International Civil Aviation Organization*

**NINTH MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM  
(APRAST/9)**

*(Bangkok, Thailand, 31 October to 4 November 2016)*

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**Agenda Item 3.2: APRAST outputs for RASG consideration and approval**

**UPDATE ON APAC REGIONAL AVIATION SAFETY PRIORITIES AND TARGETS**

*(Presented by APRAST Co-Chairs)*

**SUMMARY**

This Paper provides an update on the progress of the Asia and Pacific Regional Aviation Safety Priorities and Targets.

Action by the meeting is at Paragraph 3 of this Working Paper.

**1. INTRODUCTION**

1.1 The APAC Regional Aviation Safety Priorities and Targets, which were approved at RASG-APAC/4, are aligned to the ICAO Global Aviation Safety Priorities and Targets outlined in the Global Aviation Safety Plan (GASP). The Regional Aviation Safety Priorities cover the following five areas:

- a. Reduction in Operational Risks
- b. Improvements in Safety Oversight and Compliance
- c. Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)
- d. Predictive risk management and advanced regulatory oversight
- e. Enhanced Aviation Infrastructure

1.2 The region's progress in attaining the APAC Regional Aviation Safety Priorities and Targets (see **Appendix A**) is continuously monitored with regular updates reported at RASG-APAC meetings. This paper provides an update on the progress of Asia and Pacific Regional Aviation Safety Priorities and Targets.

**2. DISCUSSION**

2.1 Based on the responses received from 18 States/Administrations (Australia, Bangladesh, Bhutan, Fiji, Hong Kong China, Japan, Lao PDR, Macao China, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Pakistan, the Philippines, Samoa, Singapore and Thailand), and information collected mainly from ICAO HQ and Industry organisations thus far, the APAC region has varying progress on the APAC Regional Aviation Safety Priorities and Targets. All targets are uncompleted currently, even as there has been progress in some of them, since the update at APRAST/8.

**Regional Priority 1: Reduction in Operational Risks**

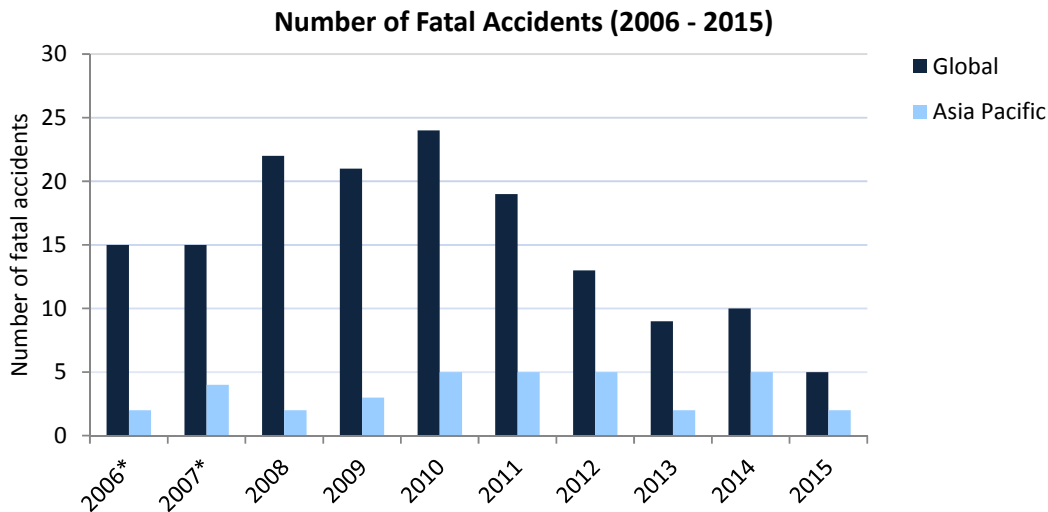
Target: RASG-APAC to complete the development of current identified priority SEIs by end 2016

	Update at APRAST/8	Update at APRAST/9
Number of Priority Level 1 SEIs	11	No change in status from update at APRAST/8
Number of completed Priority Level 1 SEIs	9	
Number of Priority Level 1 SEIs to be developed	2	

**Table 2.2:** Development of Priority Level 1 SEIs

2.2 The two remaining Priority Level 1 SEIs to be developed are SEI LOC/2 on “Hazard Identification and Risk Management” and SEI LOC/4 on “Flight Crew Proficiency”. AAPA and DCA Malaysia are to provide updates on the development of SEI LOC/2 and SEI LOC/4 respectively at APRAST/9.

Target: Reduction in the number of fatal accidents in 2018 compared to 2014 irrespective of the volume of air traffic in the APAC region



**Chart 2.3:** Number of global and APAC fatal accidents (2006 – 2015)

\* Figures for years 2006 and 2007 were based on the 2013 Asia Pacific Safety report as current iStars data only dates back to 2008.

Note - Figures for years 2008 to 2015 were based on iStars data extracted on 23 September 2016. Data has been filtered to only include over 5,700kg scheduled commercial airplane fatal accidents.

2.3 Chart 2.3 shows the number of global and APAC fatal accidents which occurred from 2006 to 2015, also available in the 2016 APAC Annual Safety Report. There are 3 less fatal accidents in 2015 compared to 2014, in the APAC region.

Target: States and Industry to complete the implementation of all priority SEIs in RASG-APAC work programme by 2018

SEI Ref	SEI outputs	No of States/Administrations that have implemented*	
		Update at APRAST/8	Update at APRAST/9
CFIT/1	a. Model regulation to implement equipage of Ground Proximity Warning System (GPWS)	4	8
	b. Model Advisory Circular for operators to ensure the effectiveness of GPWS Equipment	4	7
	c. Model Advisory Circular for operators on training progress on the use of GPWS	3	9
CFIT/2 & LOC/1	Model Advisory Circular on Standard Operating Procedures for Flight Deck Crew members	Not yet monitored.	Not yet monitored.
CFIT/3	Model Advisory Circular on Instrument Approach Procedures using Continuous Descent Final Approach Techniques	Not yet monitored.	Not yet monitored.
CFIT/5	Model Advisory Circular on the development, implementation and assessment of crew resource management training programme for flight crew members and other personnel	3	7
CFIT/6	Model Advisory Circular on the training of flight crew in Approach and Landing Accident Reduction (ALAR) and CFIT Prevention	3	3
LOC/5	Model Advisory Circular to alert flight crew on Mode Awareness and Energy State Management Aspects of Flight Deck Automation	4	4
RE/2	Guidance material for air traffic controllers about stabilized approaches and increase air traffic controllers' awareness of the part that ATC can have in contributing towards unstable approaches	Not yet monitored.	Not yet monitored.
RS/1	Runway Safety Maturity Checklist	Not yet monitored.	Not yet monitored.

**Table 2.4:** Level of Implementation of Priority SEIs in RASG-APAC Work Programme

\* Statistics are based on the 13 States/ Administrations (Australia, Bangladesh, Fiji, Hong Kong China, Japan, Macao China, Malaysia, Maldives, Pakistan, the Philippines, Samoa, Singapore and Thailand) that responded to the survey on the implementation of SEI outputs before RASG-APAC/6 in Aug 2016. These statistics include instances where States/ Administrations have existing tools which fulfil similar intentions of the SEI outputs.

2.4 The implementation of SEIs is monitored through the implementation of their outputs. At APRAST/8, no information was collected on the implementation levels as the monitoring mechanism on the implementation of SEI outputs was yet to be set up. Before APRAST/9, Secretariat set up a monitoring mechanism, through which the implementation of 6 SEI outputs were monitored initially. To improve the collection of survey data, Bangladesh has been developing a website to enable online submission of information on the implementation of SEI outputs. More safety tools would be added to this monitoring mechanism.

**Regional Priority 2: Improvements in Safety Oversight and Compliance**

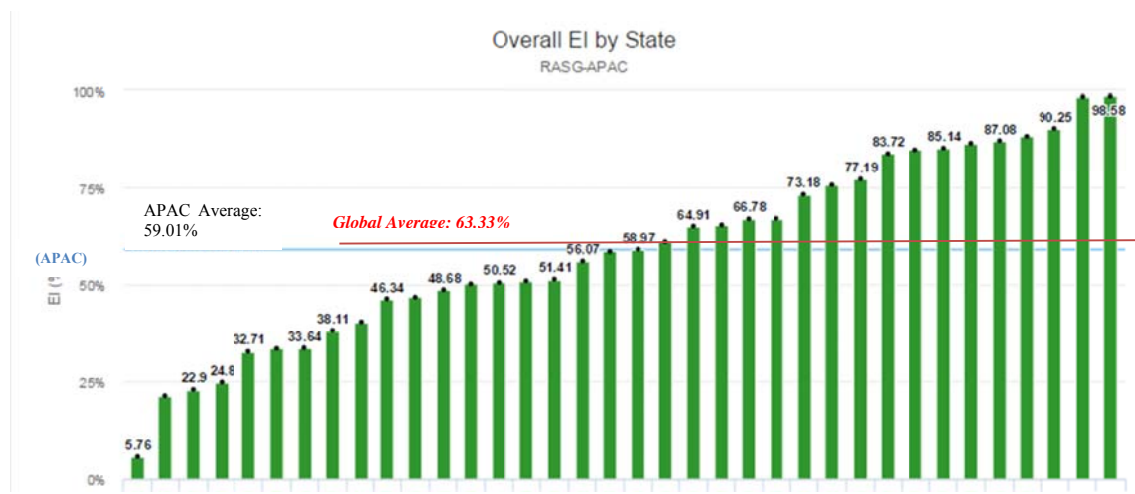
Target: Task force (to be formed by APRAST) to develop an action plan on capacity building by June 2016

2.5 The Capacity Building Task Force was established at APRAST/8 with a focus on developing an action plan, where specific training requirements that could contribute towards raising the Effective Implementation (EI) of ICAO USOAP Critical Element 4 will be recommended, particularly in the areas of flight operations, airworthiness, air navigation services and accident investigation. The Task Force comprises participants from Brunei Darussalam, Malaysia, Papua New Guinea, Singapore (Champion) and the United States, with support from the ICAO APAC regional office. The Task Force developed an action plan on capacity building at the APRAST/8 meeting, which was later approved at RASG-APAC/6. The Task Force will update its progress at APRAST/9.

Target: States to resolve any SSCs identified by the ICAO USOAP CMA programme promptly within the timeline specified in the corrective action plan and agreed to by ICAO

2.6 Same as the update given at APRAST/8, two States, with SSCs in the area of Air Operator Certification, are in the process of resolving the SSCs. ICAO APAC Regional Office will continue to monitor the situation of resolving SSCs for APAC States.

Target: States to achieve at least 60% EI in USOAP CMA by 2017



**Chart 2.7: Ascending overall EI scores by APAC States**

2.7 There is a drop in average overall EI in APAC but the same number of audited States attained at least 60% overall EI, compared to the update given at APRAST/8. Seventeen out of 36 (47.22%) audited States have at least 60% overall EI while the APAC average overall EI dropped from 59.18% to 59.01%, which is below the global average overall EI (63.33%). States are strongly urged to step up efforts to improve their safety oversight capabilities.

Targets: By end of 2017, (1) maintain at least 60% of applicable APAC airlines to be IOSA certified; (2) achieve at least 15% of applicable APAC airlines to be ISSA certified; (3) pursue at least a 50% increase in ISAGO registrations.

	IOSA		ISSA		ISAGO	
Certification/Registration	Update at APRAST/8	Update at APRAST/9	Update at APRAST/8	Update at APRAST/9	Update at APRAST/8	Update at APRAST/9
<b>Current Status</b>	51 APAC airlines certified	82 APAC airlines certified*	No information available	6 APAC airlines certified*	37 APAC stations registered	51 APAC stations registered*

**Table 2.8:** Status relating to IOSA and ISSA certification for APAC airlines, as well as ISAGO registration for APAC stations

\* IATA provided these statistics in Aug 2016.

2.8 The number of APAC airlines with IATA Operational Safety Audit (IOSA) certification increased from 51 to 82. There are 6 APAC airlines with ISSA certification. The total numbers of applicable airlines in ICAO APAC region for IOSA and ISSA certifications are not available. Compared to APRAST/8, there is a 38% increase in ISAGO registrations from 37 to 51.

***Regional Priority 3: Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)***

Target: Industry, particularly airlines, aviation training organisations, maintenance and repair organisations, airport operators, air navigation service providers, organisations responsible for the type design or manufacture of aircraft and aviation service providers to implement SMS by 2017

	Update at APRAST/8	Update at APRAST/9
Aviation organisations that have implemented SMS out of those required to implement SMS	66 % (1060 out of 1597)	69% (1474 out of 2140)
No of States/Administrations that have provided information	11	16

**Table 2.9:** Status of SMS implementation for Industry

\* Statistics are based on the 16 States/ Administrations (Australia, Bhutan, Fiji, Hong Kong China, Japan, Lao PDR, Macao China, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Samoa, Singapore and Thailand) that responded to the survey to update on the implementation of Regional Safety Priorities numbers 3 and 5. Cases where the regulator cannot validate the implementation of SMS are excluded from these statistics.

2.9 The implementation of SMS for Industry is being monitored by the Secretariat. The increase in implementation of SMS in organisations requiring SMS, from 66% to 69% with more States responding to the latest survey before APRAST/9. The remaining 27 States/ Administrations are strongly urged to progress their SMS implementation and provide status updates to the Secretariat.

Target: States to implement the full ICAO SSP by 2022

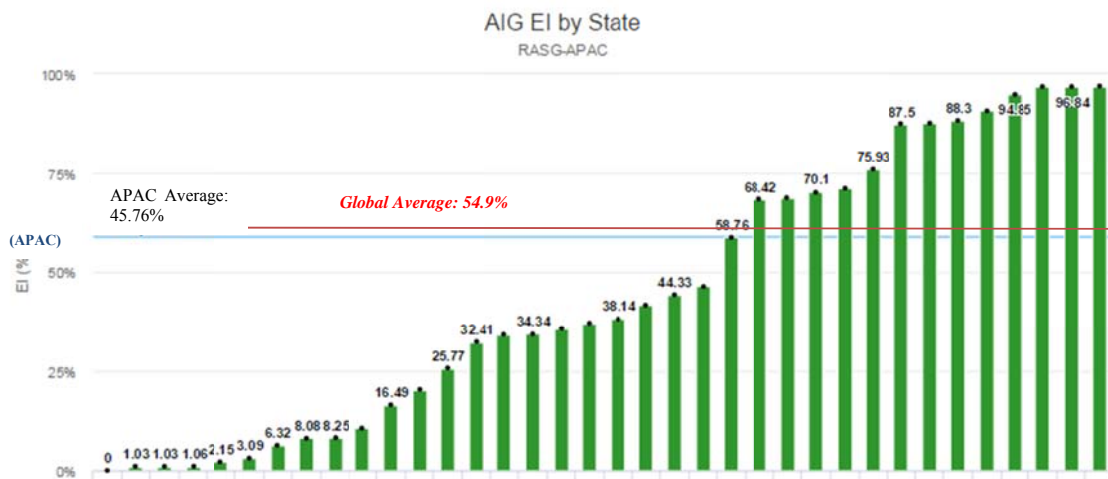
Implementation Stage	No. of States	
	Update at APRAST/8	Update at APRAST/9
No of States/Administrations that have provided information to ICAO iSTARS	15	No change in status from update at APRAST/8
SSP implementation completed	2	2
Implementation Plan Defined	3	6
Gap Analysis completed	4	4
Gap Analysis started	6	3

**Table 2.10:** Implementation of SSP by APAC States

2.10 Since APRAST/8, based on information on ICAO iSTARS self-reported by States, 3 less States are at the stage of starting the SSP gap analysis and 3 more have defined the SSP Implementation Plan. The remaining 23 States are encouraged to provide information on the SSP implementation to ICAO.

**Regional Priority 4: Predictive risk management and advanced regulatory oversight**

Target: States to achieve at least 60% EI in AIG of USOAP CMA by 2017



**Chart 2.11:** Ascending AIG EI scores by APAC States

2.11 Compared to the update at APRAST/8, the number of audited APAC States which have attained at least 60% EI in AIG remained the same at 13 out of 36 (36.11%). The APAC average AIG EI increased from 45.68% to 45.76%, towards the global average AIG EI (54.9%).

Target: To develop regional mechanism for data collection, analysis and sharing by 2017

2.12 RASG-APAC/6 was updated on the progress of developing the Governance Plan on a regional data collection, analysis and information sharing system for aviation safety in the APAC region. States/Administrations and industry organizations that are interested to participate in the demonstration project, are encouraged to attend a Coordination Meeting on December 8-9 in Tokyo. MITRE/Flight Safety Foundation will provide more details on the Coordination Meeting at APRAST/9.

Target: 50% of APAC air operators, with aircraft of mass 27,00kg and above, participating in flight data sharing initiative by 2016

	Update at APRAST/8	Update at APRAST/9
APAC air operators, with aircraft of mass 27,000kg and above	No information available	4.5% (IATA FDX) (15 out of 335)*

**Table 2.13:** Participation of APAC air operators, with aircraft of mass 27,00kg and above, in flight data sharing initiative

\* IATA provided these statistics in Aug 2016.

2.13 According to IATA, 4.5% of APAC airlines are participating in IATA’s Flight Data Exchange (FDX), 15 out of the 335 airlines in the ICAO APAC region.

Target: APAC States to provide assurance that predictive risk management is fully effective by 2027

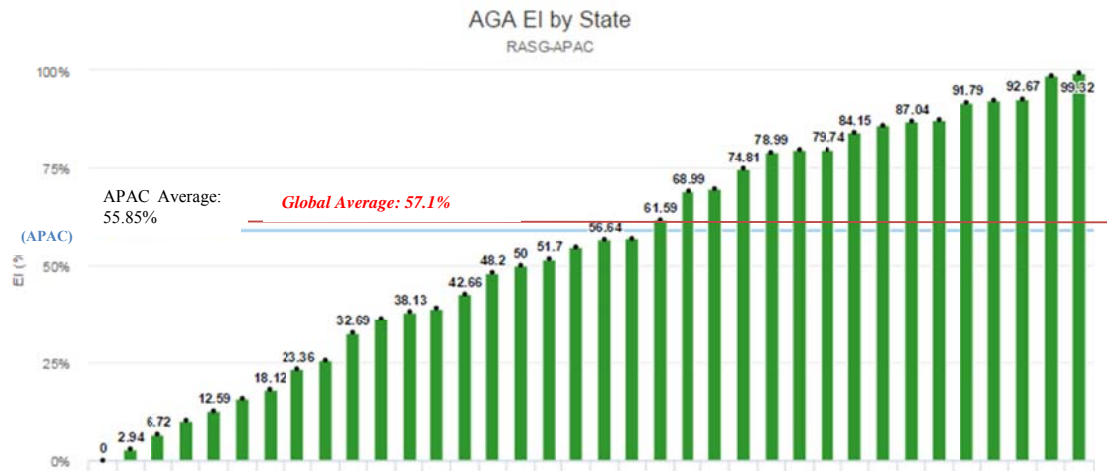
2.14 There is no change to the update at APRAST/8. APRAST will continue to identify suitable metrics to monitor this development and propose changes to this target. At this point, the ICAO GASP does not provide any definition on what is meant by predictive risk management. As this target is also found in the global priorities and targets in the ICAO GASP, APRAST will take reference from further guidance from ICAO.

***Regional Priority 5: Enhanced Aviation Infrastructure***

Target: Implement structures between RASG and APANPIRG to facilitate collection and sharing of ATM data by mid-2017

2.15 Since RASG-APAC/5, Secretariat has linked up the AP-SRP WG with the APANPIRG’s Regional Airspace Safety Monitoring Advisory Group (RASMAG), to aid coordination on exploring the best mechanism/structure to facilitate the collection and sharing of ATM data. Invitations were also exchanged between AP-SRP WG and RASMAG for attendance of meetings to exchange safety information. RASMAG representatives from China Regional Monitoring Agency and ICAO APANPIRG Secretariat updated SRP WG at APRAST/8 in April 2016. As more time will be required for further discussion with APANPIRG, RASG-APAC/6 approved the extension of deadline from end 2015 to mid-2017, in time for an update at RASG-APAC/7 (ref **Appendix B** for Decision RASG-APAC 6/4). SRP WG is determining the information to be shared between RASMAG and ASIAs and will provide an update at APRAST/9.

Target: States to achieve at least 60% EI in AGA of USOAP CMA by 2017



**Chart 2.16:** Ascending AGA EI scores by APAC States

2.16 Compared to the update given at APRAST/8, the number of audited APAC States which have attained at least 60% EI in AIG dropped from 18 to 16 out of 36 (44.44%). The APAC average AIG EI has dropped since APRAST/8 from 58.33% to 55.85%, and it is below the global average AGA EI (57.1%).

Target: Promote runway safety through workshops and seminars at least yearly

2.17 A number of workshops were conducted in 2016:

- a. An ICAO Regional workshop on Annex 14 Volume II – Heliports was conducted by ICAO APAC Office, in cooperation with Airports of Thailand Public Company Limited, on 18-22 April 2016 in Bangkok, Thailand.
- b. Another ICAO workshop on Implementation of Aerodrome Operational Procedures to enhance aerodrome certification was conducted by ICAO APAC Office on 12-14 July 2016 in Bangkok, Thailand.
- c. In conjunction with APRAST/9 in November 2016, a workshop focusing on specific runway safety elements such as runway excursions, implementation of runway safety teams and wildlife management would be organised.

Target: All aerodromes in APAC region that are used for international operations to have Runway Safety Teams (RSTs) by 2017

	Update at APRAST/8	Update at APRAST/9
Aerodromes in the APAC region that are used for international operations and have RSTs	30% (18 out of 59)	30% (37 out of 123)
No of States/Administrations that have provided information	11	16

**Table 2.18:** Percentage of Aerodromes in the APAC region that are used for international operations with RSTs

\* Statistics are based on the 16 States/ Administrations (Australia, Bhutan, Fiji, Hong Kong China, Japan, Lao PDR, Macao China, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Samoa, Singapore and



Thailand) that responded to the survey to update on the implementation of Regional Safety Priorities numbers 3 and 5. Cases where the regulator cannot validate the implementation of RSTs are excluded from these statistics.

2.18 The percentage of RST implementation among aerodromes in the APAC region remains the same, although more information is collected since APRAST/8. A State letter T 6/8.6 – AP063/16 (FS) dated 25 May 2016, was sent to inform States/ Administrations of the online monitoring of the total number of aerodromes and availability of RSTs for aerodromes involved in international operations. States and Administrations are encouraged to register their RST(s) established in aerodromes involved in international operations at <http://www.icao.int/safety/RunwaySafety/Pages/Runway%20Safety%20Team%20Register.aspx>, to build a comprehensive database for the monitoring of this target.

### **3. ACTION BY THE MEETING**

3.1. The Meeting is invited to:

- a) strongly encourage States/ Administrations and Industry to make efforts to attain the APAC Regional Aviation Safety Targets, under the five priority areas, noting the upcoming deadlines in 2016 and 2017 that are applicable to States/ Administrations and Industry;
- b) strongly encourage States/Administrations and Industry to provide information to Secretariat on the APAC Regional Aviation Safety Targets; and
- c) direct the Secretariat to obtain required information from States/ Administrations and Industry to aid the monitoring of the progress of the APAC Regional Aviation Safety Priorities and Targets.

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**RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)**

	<b>Regional Aviation Safety Priorities</b>	<b>Action</b>	<b>Regional Aviation Safety Targets</b>
1.	<p><b>Reduction of operational risks</b></p> <p>According to the APAC Annual Safety Report, the percentage of global fatal accidents attributed to the APAC region has increased from 11% in 2008 to 25% in 2011. The report has also identified Loss of Control In-flight (LOC-I), Controlled Flight Into Terrain (CFIT) and runway safety related accidents as the main contributing factors to fatal accidents in the APAC region, which is in line with the analysis in the ICAO Global Aviation Safety Plan.</p> <p><b>Metric:</b></p> <ul style="list-style-type: none"> <li>Number of fatal accidents irrespective of the volume of air traffic in the APAC region.</li> </ul>	<p><b>Implement priority Safety Enhancement Initiatives (SEIs)</b></p> <ul style="list-style-type: none"> <li>RASG-APAC should continue its focus on the development of the current SEIs to address the priority areas of LOC-I, CFIT and Runway Safety.</li> <li>RASG-APAC should continue to provide implementation support to States and industry.</li> <li>States and industry should likewise accord priority to the implementation of these SEIs.</li> </ul>	<ul style="list-style-type: none"> <li>RASG-APAC to complete the development of currently identified priority SEIs by end 2016.</li> <li>States and industry to complete the implementation of all priority SEIs in RASG-APAC work programme by 2018.</li> <li>[RPD] Reduction in the number of fatal accidents in 2018 compared to 2014 irrespective of the volume of air traffic in the APAC region.</li> </ul>
2.	<p><b>Improvements to safety oversight and compliance</b></p> <p>Recognizing that the APAC region has one of the fastest air traffic growth rates and that effective safety oversight systems are crucial in ensuring high standards of safety, States should enhance their safety oversight system as a high priority.</p> <p><b>Metric:</b></p> <ul style="list-style-type: none"> <li>APAC States' ICAO USOAP CMA effective implementation rate.</li> </ul>	<p><b>Enhance safety oversight systems through capacity building</b></p> <p>Capacity building is an important element to enhance safety oversight capabilities. Considering that ICAO's last comprehensive systems approach audit cycle showed that the highest lack of effective implementation (52%, please see Figure 1 below) was in the area of CE 4 "qualified personnel", programmes should be initiated to increase the number of qualified inspectors in the region. A dedicated task force should be established by APRAST to develop an action plan on capacity building.</p> <p><b>Resolve Significant Safety Concerns (SSCs)</b></p> <p>States should accord the utmost priority to the resolution of any SSCs identified by the ICAO Universal Safety</p>	<ul style="list-style-type: none"> <li>Task force (to be formed by APRAST) to develop an action plan on capacity building by June 2016.</li> <li>[RPD] States to resolve any SSCs identified by the ICAO USOAP CMA programme promptly within the timeline specified in the corrective action plan and</li> </ul>

**RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)**

	Regional Aviation Safety Priorities	Action	Regional Aviation Safety Targets
		<p>Oversight Audit Programme Continuous Monitoring Approach (USOAP CMA) programme. States with SSCs should draw on the necessary resources available, including technical assistance from other States and regional programmes such as COSCAPs, where necessary, to resolve the SSCs promptly.</p> <p><b>Use of the IATA Operational Safety Audit (IOSA) and the IATA Standard Safety Assessment (ISSA)</b></p> <p>IOSA registered carriers have demonstrated safety performance more than 2 times better than that for non-registered operators for the period between 2008 and 2013. IOSA can be utilised as an effective tool for States to evaluate operational capability and to establish level of confidence of air operators. Airlines are encouraged to pursue IOSA registration as a means to strengthen their safety management and compliance. States should consider various options to leverage IOSA from including recognition of IOSA to encouraging IOSA registration for all applicable operators. ISSA is a new safety programme, applicable to smaller operators whose aircraft or business model does not meet the eligibility criteria of IOSA. States are also encouraged to promote ISSA registration for all applicable operators.</p> <p><b>Use of the IATA Safety Audit for Ground Operations (ISAGO) to improve ground safety</b></p> <p>Aircraft ground damage is a significant APAC issue and contributes to a global figure of nearly US\$ 4-billion annual loss in terms of damage and injury. ISAGO aims</p>	<p>agreed to by ICAO.</p> <ul style="list-style-type: none"> <li>• [RPD] States to achieve at least 60% EI in USOAP CMA by 2017.</li> <li>• Maintain at least 60% of applicable APAC airlines to be IOSA certified by the end of 2017.</li> <li>• Achieve at least 15% of applicable APAC airlines to be ISSA certified by the end of 2017.</li> <li>• Pursue at least a 50% increase in ISAGO registrations by end of 2017.</li> </ul>

**RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)**

	<b>Regional Aviation Safety Priorities</b>	<b>Action</b>	<b>Regional Aviation Safety Targets</b>
		to improve safety oversight of ground service providers, promptly identify ground operation activities with higher risks and reduce the number of accidents related to ground operations. With these aims in mind, operators are encouraged to pursue ISAGO registration for ground service providers for enhancement in aviation safety.	
3.	<p><b>Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)</b></p> <p>The growing air traffic in the APAC region and the increasingly complex operating environment necessitate the involvement of both industry and States in ensuring high levels of safety. During the period between 2008 and 2012, 27% of APAC accidents involved deficiencies in safety management while 33% of the accidents in APAC involved deficiencies in regulatory oversight. Effective implementation of SMS is essential for the industry to identify hazards and resolve safety concerns. The robust implementation of the SSP also enables States to focus their safety oversight resources where they are most needed.</p> <p><b>Metrics:</b></p> <ul style="list-style-type: none"> <li>Number of organizations that have implemented SMS as a percentage of the number of organizations required to implement SMS.</li> </ul>	<p><b>Support robust implementation of SMS and SSP</b></p> <ul style="list-style-type: none"> <li>RASG-APAC should facilitate the sharing of best practices amongst States in the region on SMS and SSP.</li> <li>States should accord priority to the implementation of SMS and SSP to achieve an acceptable level of safety in aviation operations.</li> <li>APAC COSCAPs should focus on assisting States in the implementation of SMS and SSP.</li> </ul>	<ul style="list-style-type: none"> <li>[RPD] Industry, particularly airlines, aviation training organizations, maintenance and repair organizations, airport operators, air navigation service providers, organizations responsible for the type design or manufacture of aircraft and aviation service providers to implement SMS by 2017.</li> <li>[RPD] States to implement the full ICAO SSP by 2022</li> </ul>

**RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)**

	<b>Regional Aviation Safety Priorities</b>	<b>Action</b>	<b>Regional Aviation Safety Targets</b>
4.	<p><b>Predictive risk management and advanced regulatory oversight</b></p> <p>The evolution from reactive to predictive safety management and data-driven regulatory oversight systems hinges on the availability of high quality safety data. Proper risk management and oversight is also reliant on the effective investigation of accidents and incidents in order to prevent recurrence.</p> <p>Many APAC States have yet to fully implement ICAO Annex 13 requirements for accident investigation (53% - please see Figure 2 below). AIG AWG recommendations offer guidance to States to at least meet the minimum requirements. Implementation of these recommendations would help to improve each State’s capacity to effectively investigate accidents and serious incidents and should also enhance the level of reporting by States to assist in the identification of regional safety issues and trends.</p> <p>Furthermore, APAC States often lack the resources and expertise to manage and collect data on a State level and there are currently no formal mechanisms in place that allow for the sharing and benchmarking of information at the regional level.</p> <p>Finally, while many air operators in APAC have Flight Data Analysis Programmes, many have yet to fully incorporate the data into their risk management decision-making and few are leveraging on the valuable information available from external data-sharing platforms such as the IATA Flight Data Exchange (FDX) or the FAA Aviation Safety Information Analysis and Sharing</p>	<p><b>Implementation of AIG AWG recommendations to address Annex 13 requirements</b></p> <p>States should consider it a priority to implement the APAC AIG’s recommendations.</p> <p><b>Establish a structure for safety data collection, analysis and sharing</b></p> <p>RASG–APAC should establish an action plan that facilitates the use of standardized taxonomies for data collection in the region. Standardized taxonomies, for example in the description of safety occurrences, ramp inspection outcomes and definitions of audit findings, would facilitate the benchmarking and sharing of data among States. In the longer term, RASG-APAC should put in place a structure for the collection, analysis and sharing of safety and operational data in the region in support of predictive risk management.</p> <p><b>Establish a mechanism for regional data collection and sharing</b></p> <p>RASG-APAC should facilitate initiatives to develop regional data collection, analysis and sharing systems, including collaboration with existing data sharing systems ASIAS and IATA FDX programmes, with support from States and industry.</p> <p><b>Enhance the protection of aviation data information</b></p> <p>RASG-APAC should encourage States/ Administrations to adopt safety information protection protocols.</p>	<ul style="list-style-type: none"> <li>• [RPD] States to achieve at least 60% EI in AIG of USOAP CMA by 2017.</li> <li>• To develop regional mechanism for data collection, analysis and sharing by 2017.</li> <li>• 50% of APAC air operators with aircraft of mass 27,000kg and above, participating in flight data sharing initiative by 2016.</li> <li>• APAC States to provide assurance that predictive risk management is fully effective by 2027</li> </ul>

RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)

	Regional Aviation Safety Priorities	Action	Regional Aviation Safety Targets
	<p>(ASIAS) programmes.</p> <p><b>Metrics:</b></p> <ul style="list-style-type: none"> <li>States' ICAO USOAP CMA EI rate for AIG module</li> </ul>		
5.	<p><b>Enhanced Aviation Infrastructure</b></p> <p><b>Air Traffic Services</b></p> <p>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. 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.</p> <p><b>Aerodrome Facilities</b></p> <p>Particular attention should be paid to runway safety. Most aerodromes in the region are not certified due to lack of capacity of their respective regulatory authorities. The aerodrome and ground aids (AGA) CMA module has one of highest levels of lack of effective implementation (39%, see Figure 2 above). In 2012, 13% of APAC accidents included threats that were related to the malfunction or unavailability of ground based navigation aids. During the period between 2008 and 2012, 30% of the accidents in APAC were runway excursions.</p>	<p><b>Coordination with APANPIRG</b></p> <ul style="list-style-type: none"> <li>Support the implementation of ASBU and ensure their implementation accounts for and properly manages existing and emerging risks (i.e. approaches with vertical guidance (APV) to mitigate CFIT and runway excursion).</li> <li>Jointly develop the proper structures to sustain the collection and sharing of regional ATM data.</li> </ul> <p><b>Promotion of Effective Implementation of AGA</b></p> <ul style="list-style-type: none"> <li>RASG-APAC should promote effective implementation of AGA, with focus on runway safety programmes that support the establishment of Runway Safety Teams (RSTs) and implementation of inter-organizational SMS and Collaborative.</li> <li>Decision making schemes.</li> </ul>	<ul style="list-style-type: none"> <li>Implement structures between RASG and APANPIRG to facilitate collection and sharing of ATM data by mid-2017.</li> <li>[RPD] States to achieve at least 60% EI in AGA of USOAP CMA by 2017.</li> <li>Promote runway safety through workshops and seminars at least yearly.</li> <li>All aerodromes in APAC region that are used for international operations to have RSTs by 2017.</li> </ul>

**RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.0)**

	Regional Aviation Safety Priorities	Action	Regional Aviation Safety Targets
	<p><i>Metrics:</i></p> <ul style="list-style-type: none"> <li>• Structures in place to collect and share regional ATM data.</li> <li>• States' ICAO USOAP CMA EI rate for AGA module.</li> <li>• Number of runway safety seminars, workshops or other events at APRAST or RASG-APAC.</li> <li>• Number of aerodromes with RSTs in APAC region that are used for international operations.</li> </ul>		



**APRAST CONCLUSION ON THE PROPOSED CHANGES TO THE REGIONAL  
AVIATION SAFETY PRIORITIES AND TARGETS**

**Decision RASG-APAC 6/4:**

That, the deadline for the Regional Aviation Safety Target “Implement structures between RASG and APANPIRG to facilitate collection and sharing of ATM data” is revised from end 2015 to mid-2017.

— END —