International Civil Aviation Organization

TWELFTH MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM (APRAST/12)

Bangkok, Thailand, 28 May to 1 June 2018

Agenda Item 4: Update, Discuss and Review of Progress of APRAST Activities

OUTCOMES OF THE REVIEW OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY PRIORITIES AND TARGETS

(*Presented by AP-RASPAT ad-hoc Working Group*)

SUMMARY

This Paper reports on the outcomes of the review of the APAC Regional Aviation Safety Priorities and Targets by the Ad-hoc Working Group of the Asia Pacific Regional Safety Priorities and Targets (AP-RASPAT) in accordance with Decision RASG-APAC7/5 and Conclusion APRAST 11/1.

Action by the meeting is at Paragraph 3.1 of this Working Paper.

1. INTRODUCTION

1.1 The APAC Regional Aviation Safety Priorities and Targets were approved at RASG-APAC/4 in 2014. The progress and achievement of the APAC Regional Aviation Safety Targets is monitored at APRAST meetings, and reported at the annual RASG-APAC meeting. To achieve greater alignment with the ICAO Global Aviation Safety Priorities and Targets outlined in the Global Aviation Safety Plan (GASP), taking into account latest industry developments and current and emerging issues, RASG-APAC/7 agreed that it was necessary to review the Asia Pacific Regional Aviation Safety Priorities and Targets and to complete the review by RASG-APAC/8 in 2018 (Decision RASG-APAC7/5 – Update on Asia Pacific Regional Priorities and Targets (WP/5)).

1.2 For this purpose, APRAST/11 established an Asia Pacific Regional Aviation Safety Priorities and Targets (AP-RASPAT) ad-hoc Working Group comprising States/ Administrations and Industry (see **Appendix A** for list of members), with support from ICAO APAC office, to review and propose updates to the Asia Pacific Regional Aviation Safety Priorities and Targets at APRAST/12 with a view to seek approval at RASG-APAC/8 (Conclusion APRAST 11/1 – Revision of Regional Priorities and Targets (WP/7) and Proposed Review of Asia-Pacific Aviation Safety Regional Priorities and Targets (WP/15)).

2. DISCUSSION

Key proposed changes to Priorities and Targets

2.1 The AP-RASPAT ad-hoc WG has since completed the review in accordance with the agreed key considerations for the review (as stated in WP/15 – see **Appendix B**). The ad-hoc WG was also of the view that after having successfully completed the development of Safety Enhancement Initiatives (SEIs) and other guidance materials in the past few years, it would be appropriate for APRAST to focus on ensuring the proper implementation of these initiatives over the next three years. The following main reference sources were used in the review:

a) Draft ICAO GASP Edition 2020-2022 – Goals, Targets and Indicators;

b) 2018 Beijing Declaration (previously known as 'APAC Ministeral Declaration') – Goals and Targets;

c) APAC Annual Safety Reports (2014 to 2017);

d) Report of 4th APANPIRG-RASG Coordination Meeting;

e) Global Forum on RASGs and PIRGs held on 13 December 2017 at ICAO Headquarters; and

f) ICAO iSTARS.

2.2 The proposed tracked revisions to the existing Priorities and Targets, as well as their accompanying rationales and reference sources, are at **Appendix C**. The highlights of the changes are as follows:

a) Adding of an overarching strategic safety objective, i.e. the new GASP aspirational goal to achieve zero fatalities in scheduled commercial operations, i.e. no fatalities recorded on scheduled commercial flights in a given year, by 2030. This is accompanied by a short foreword to provide the context to the rationale behind the structure and contents of Regional Aviation Safety Priorities and Targets, and how the progress of APAC State/Administration and Industry Organisations in achieving the targets are monitored;

b) Updating of Regional Aviation Safety Priorities and respective Metrics to support this aspirational goal and the objectives of the GASP. For example, to better align with ICAO's safety performance indicators, the number of fatal accidents per million departures in the APAC region will be tracked, in addition to the original indicator of number of fatal accidents irrespective of the volume of air traffic. Several new metrics that will be introduced in ICAO GASP Edition 2020-2022, of which the sharing of best practices and development of guidance materials on a regional basis will benefit APAC States, have also been incorporated. These include the number of States having implemented an effective SSP (i.e. having achieved Level 4 progress in SSP Implementation), the number of States having developed a national aviation safety plan, and the number of certified aerodromes in APAC region that are used for international operations.

c) Updating of Actions to fulfil their associated Priorities. For example, to reduce operational risks in the APAC region, APRAST should continue its focus on the development of the current SEIs to address the global priority areas, as well as other priority areas as identified for the APAC region, which include emerging risks. RASG-APAC and APRAST should step up to provide implementation support to States and industry through the development of better guidance materials, and promote regional government and industry collaboration for sharing of best practices as well as the organisation of workshops on SEI implementation, as well as in the newer areas of safety management, and development of national aviation safety plans. Conversely, completed Actions have been removed, such as the initiation of programmes to increase the number of qualified inspectors in the region, and the establishment of a dedicated task force by APRAST to develop an action plan on capacity building.

d) Updating of Regional Aviation Safety Targets and timelines to support their associated Actions. For example, given that APRAST should focus on implementation of SEIs and the tracking thereof in the next few years, all States/Administrations and industry should update the online monitoring mechanism on their status of implementation of all applicable priority SEIs in RASG-APAC work programme by end-2019. The effectiveness of SEI implementation will be reflected in maintaining a decreasing trend of fatality risk in the APAC region. In line with the 2018 Beijing Declaration target to progressively enhance the safety oversight capability of APAC States/ Administrations, APAC States/ Administrations will endeavour to have no Significant Safety Concerns (SSCs) under the USOAP Continuous Monitoring Approach (CMA), and to resolve any future SSCs within the time frame agreed with ICAO. The APAC region will also aim to achieve an average overall USOAP EI score, as well as in the areas of AIG and AGA, higher or equal to the global average by 2022. To ensure that the APAC region is well prepared to meet the draft GASP Edition 2020-2022 targets, all APAC States/ Administrations will work towards developing national aviation safety plans by 2025, and certifying all aerodromes used for international operations by 2020. Completed Targets which have been removed include the development of an action plan on capacity building by June 2016, the development of currently identified priority SEIs by end-2017, and industry to implement SMS by 2017.

Future reviews of Priorities and Targets

2.3 It is proposed that there is no need to form a permanent Working Group for future reviews of the APAC Regional Aviation Safety Priorities and Targets, and that it would be appropriate for the Secretariat (ICAO APAC Office) to be the custodian of the Asia Pacific Regional Aviation Safety Priorities and Targets. This will allow APRAST the flexibility to configure an ad-hoc "task-force"-type mechanism to assist the Secretariat in the review process, and for the rotation of members of this task-force among APAC States/ Administrations and Industry Organisations. However, a permanent mechanism and frequency for the review should be determined, and a progress report should continue to be presented by the APRAST Co-Chairs at every APRAST meeting.

3. ACTION BY THE MEETING

3.1. The Meeting is invited to:

a) discuss and endorse the proposed revisions to the Regional Aviation Safety Priorities and Targets proposed by the AP-RASPAT ad-hoc Working Group, as described in paragraph 2.2 and **Appendix C** of this paper; and

b) endorse the proposed mechanism for future reviews as described in paragraph 2.3 of this paper;

with a view to seek approval at RASG-APAC/8.

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AD-HOC WORKING GROUP OF THE ASIA PACIFIC REGIONAL SAFETY PRIORITIES AND TARGETS

STATES/ ADMINISTRATIONS		
1. CHINA	1.	Capt. Zeng Ming Deputy Director, GA Flight Standards Division, Flight Standards Department Civil Aviation Administration of China (CAAC)
	2.	Capt. Li Ye Deputy Director, Safety Information Division Aviation Safety Office Civil Aviation Administration of China (CAAC)
2. HONG KONG, CHINA	3.	Mr. LAU Sai Lung Michael, Acting Chief, Flight Standards
	4.	Ms. FONG Lilian Senior Operations Officer (Strategic Safety)
3. MACAO, CHINA	5.	Mr. PUN Wa Kin (Stanley) Acting Director – Flight Standards & Licensing
4. INDIA	6.	Mr. Maneesh Kumar Director Air Safety
	7.	Mr. Rahul Agarwal Air Safety Officer
5. PAKISTAN	8.	Mr. Hasan Mujahid Senior Joint Director (Ops) Pakistan Civil Aviation Authority
6. PHILIPPINES	9.	Mr. Luciano R. Macuse Chief, RSSD, of the Aerodrome and Air Navigation Safety Oversight Office (AANSOO) Civil Aviation Authority of the Philippines
7. SINGAPORE	10.	Mr. Tan Kah Han Senior Director (Safety Regulations) / Director (Airworthiness / Flight Operations) Safety Regulation Group Civil Aviation Authority of Singapore
	11.	Mr. Ang Ruiyi Manager (Strategy & Intelligence) Safety Policy & Licensing Division Civil Aviation Authority of Singapore
8. UNITED STATES	12.	Mr. Brian Hutchins Asia Pacific Regional Coordinator International Program Division Flight Standards Service Federal Aviation Administration 600 Independence Ave, SW Washington, DC 20597
	13.	Mr. Chad Brewer CAST International Representative – Asia Pacific Federal Aviation Administration 800 Independence Avenue, SW Washington, DC 20591

INDUSTRY ORGANISATIONS		
1. Airports Council International (ACI)	14.	Mr. SL Wong Head - Technical & Industry Affairs ACI Asia-Pacific Hong Kong International Airport Hong Kong, China
2. International Air Transport Association (IATA)	15.	Mr. Gerardo Hueto Assistant Director, Safety and Flight Operations-ASPAC

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KEY CONSIDERATIONS FOR THE REVIEW OF ASIA-PACIFIC AVIATION SAFETY REGIONAL PRIORITIES AND TARGETS (APRAST 11 WP/15)

The review of the Regional Aviation Safety Priorities and Targets focused on the following aspects:

a) Ensure alignment of the existing Regional Aviation Safety Priorities and Targets to ICAO's objectives including the GASP. Take into account tentative Targets and Indicators that the GASP Study Group (GASP-SG) is proposing to be included in the next edition (2020-2022) of the GASP, outcomes of the review of USOAP methodology processes and tools by the Group of Experts for a USOAP Structured Review (GE USR), as well as the APAC Ministerial Conference Declaration 2018.

b) Take into account the current safety performance of the APAC region. Considering the continued strong growth in air traffic in the APAC region, it is necessary that the APAC region step up its commitment to improve its safety oversight capability.

c) Most regional Priorities remain valid, based on the assessment of the APAC region's current safety performance. However, the Actions and Targets should be updated and enhanced, based on the progress made and the experience gained thus far. For example, the Target, 'Task force (to be formed by APRAST) to develop an action plan on capacity building by June 2016' under the Priority, 'Improvements to safety oversight /Industry safety audits' has been achieved and should be removed;

d) Consider the need to align the terminologies for consistency in reporting and measurement of progress. For example, the Metric, 'Number of fatal accidents irrespective of the volume of air traffic in the APAC region' under the Priority, 'Reduction of operational risks' should be aligned to ICAO Indicators which measure fatalities instead of fatal accidents;

e) Provide for more realistic target setting by ensuring that Targets and associated deadlines set should be implementable for Industry and States/Administrations, while Target Indicators should also be based on data that are easily available or supportable; and

f) Ensure a balance of targets that focus on organisational or systemic improvements, and targets that address operational safety risks. To this end, Industry should play an active role in setting targets for its implementation.

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ROPOSED REVISIONS TO RASG-APAC REGIONAL AVIATION SAFETY PRIORITIES AND TARGETS

Colour codes for reference sources

(i) Draft ICAO GASP Edition 2020-2022 – Goals, Targets and Indicators;
(ii) 2018 Beijing Declaration (previously known as 'APAC Ministeral Declaration') – Goals and Targets;
(iii) APAC Annual Safety Reports (2014 to 2017);
(iv) Report of 4th APANPIRG-RASG Coordination Meeting;
(v) Global Forum on RASGs and PIRGs held on 13 December 2017 at ICAO Headquarters; and
(vi) ICAO iSTARS.

RASG-APAC Regional Aviation Safety Priorities and Targets (Version 2.~~0~~1)

Considering the continued strong growth in air traffic in the APAC region, it is necessary that the APAC region step up its commitment to improve its safety oversight capability, which relates to the reduction of regional operational risks and improvement in safety oversight capabilities of States. For this purpose, the APAC Regional Priorities and Targets were developed at APRAST/5 (September 2014), taking into account the discussions at APRAST/3 and the then-newly adopted ICAO Global Aviation Safety Plan (GASP), and approved at RASG-APAC/4.

The underlying objective of the APAC Regional Aviation Safety Priorities is rooted in the GASP aspirational goal to achieve zero fatalities in scheduled commercial operations, i.e. no fatalities recorded on scheduled commercial flights in a given year, by 2030. The APAC Regional Aviation Safety Priorities support this aspirational goal and the objectives of the GASP, and primarily stem from the analysis presented in the APAC Annual Safety Report, which identifies safety-related challenges and the prioritisation of areas that require action to enhance safety in the APAC region.

The APAC Regional Aviation Safety Priorities are grouped into 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

Arising from the Priorities are Actions that serve to fulfil their associated Priorities. Targets that support the Actions are selected to ensure a balanced focus on organisational or systemic improvements and addressing operational safety risks.

The region's progress in attaining the APAC Regional Aviation Safety Targets is continuously monitored at APRAST meetings, and reported at the annual RASG-APAC meeting. The implementation of SEIs is monitored through the implementation of their outputs as updated by States/Administrations on an online monitoring mechanism.

The APAC Regional Aviation Safety Priorities and Targets, and associated timelines, are updated periodically to remain aligned to the ICAO Global Aviation Safety Goals, Targets and Indicators outlined in the revised Global Aviation Safety Plan (GASP). The current Version 2.1 of the APAC Regional Aviation Safety Priorities and Targets incorporates tentative targets of the GASP Edition 2020-2022 and the APAC Ministerial Declaration 2018, otherwise known as the Beijing Declaration.

	Regional Aviation Safety Priorities	**Action**	**Regional Aviation Safety Targets**

	Reduction of operational risks According to the APAC Annual Safety Report 2017, ~~the percentage of global fatal accidents attributed to the PAAC region has increased from 11% in 2008 to 25% in 2011,~~ the accident and fatal accident rates attributable to States/Administrations in the APAC region improved from 3 and 0.28 respectively in 2014 to 1.69 and 0.16 respectively in 2016. The report has also identified Loss of Control In-Flight (LOC-I), and 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~~ similar to the analysis in the ICAO Global Aviation Safety Plan. ***Metric:*** • Number of fatal accidents irrespective of the volume of air traffic in the APAC region, and number of fatal accidents per million departures ~~(fatality risk)~~.	**Implement priority Safety Enhancement Initiatives (SEIs)** • RASG-APAC should continue its focus on the development of the current SEIs to address the global priority areas of LOC-I, CFIT and Runway Safety and other priority areas as identified for the APAC region, which may include~~ing~~ emerging risks such as UAS, aircraft network security, dangerous goods, global flight tracking and space transportation. • ~~APAC~~ States/ Administrations should use data driven methodologies to identify high risk categories of occurrences, and implement collaborative solutions to reduce accident rates and fatalities in the region. • RASG-APAC should continue to provide implementation support to States and industry, including through the development of better guidance materials as well as the organisation of workshops to provide assistance and guidance to APAC States e.g. on SEI implementation. • States/ Administrations and industry should likewise accord priority to the implementation of these SEIs.	• ~~RASG-APAC to complete the development of currently identified priority SEIs by end-2017.~~ • All States/Administrations and industry to ~~update the online monitoring mechanism on their status of completeion of the~~ implementation of all applicable priority SEIs in RASG-APAC work programme by end-2018~~2019~~. • [Regional Performance Dashboard] ~~Reduction in the number of fatal accidents in 2018 compared to 2014~~Maintain a decreasing trend of ~~fatality risk~~ accidents per million departures, ~~irrespective of the volume of air traffic in the APAC region~~, with a view to achieve an aspirational target of zero ~~accidents~~ fatalities by 2030.

Comment [A5]: This should be contextualised to APAC instead of only global priorities.

Comment [A11]: Most of the priority SEIs would have been completed by 2020 already; also, we do not know how many new SEIs will be raised from now until 2020. APRAST should focus more on implementation during this period.

Comment [A6]: U.S. CAST: Please see our comments above in regards to prioritizing ...

Comment [A7]: Have inserted a caveat tha ...

Comment [A8]: CAA Macau: Should it b ...

Comment [A9]: Suggest to retain as States ...

Comment [A12]: Some States/ ...

Comment [A13]: CAA Macau: End-2018 ...

Comment [A14]: Updated to allow for mo ...

Comment [A1]: FAA: In this context, wou ...

Comment [A2]: Suggest to adhere to ...

Comment [A3]: U.S. CAST: Please see ou ...

Comment [A4]: Have removed the term ...

Comment [A15]: U.S. CAST: Please see (...

Comment [A16]: Have removed the term ...

Comment [A10]: CAA Macau: Suggest to ...

Comment [A17]: ACI: Should the ...

Comment [A18]: That is correct, have ...

Comment [A19]: DGCA India: Zero fatal ...

Comment [A20]: Suggest to adhere to GA ...

Comment [A21]: Effectiveness of ...

	Improvements to safety oversight /Industry safety audits 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. ***Metric:*** • APAC States' ICAO USOAP CMA effective implementation rate ~~and safety margins~~. • Number of service providers participating in the corresponding, ICAO-recognized industry assessment programmes.	~~**Enhance safety oversight systems through capacity building**~~ ~~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.~~ **Resolve Significant Safety Concerns (SSCs)** States should accord the utmost priority to the resolution of any SSCs identified by the ICAO Universal Safety 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. **Use of the IATA Operational Safety Audit (IOSA) and the IATA Standard Safety Assessment (ISSA)** 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	• ~~Task force (to be formed by APRAST) to develop an action plan on capacity building by June 2016.~~ • [*RPD*] States to progressively enhance safety oversight capability to achieve at least ~~60~~75% EI in USOAP CMA, ~~by 2017~~ and to achieve an APAC average overall USOAP EI score higher or equal to the global average by 2022. • [*RPD*] 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. • Endeavour to have no Significant Safety Concerns (SSCs) under the USOAP Continuous Monitoring Approach (CMA), and to resolve any future SSCs within the time frame agreed with ICAO. • By 2020, (1) increase the number of IOSA registered APAC airlines by 50% over end-2016 figures; • ~~By 2020, (2) increase the number of ISSA registered APAC airlines by 15% over end-2016 figures.~~

Comment [A27]: The APAC Capacity Building Taskforce completed its work in 2017.

Comment [A26]: This work has been completed by the Capacity Building Taskforce.

Comment [A22]: FAA: Should this be a metric? It is our understanding that this metric is still being debated within the GASP working groups due to reasonable concerns, and the U.S. shares the same concern. We recommend possibly tabling this metric until decisions are made by the ANC.

Comment [A23]: Have removed this metric since there are no corresponding targets/indicators in the right-hand column.

Comment [A24]: DGCA India: Operating international flights.

Comment [A25]: Suggest to adhere to the same language of the indicator in the GASP 2020-2022 Edition.

Comment [A28]: The baseline is set at 82 as at RASG-APAC/6 in Jul 2016 – this had increased by 15% to 94 as at RASG-APAC in Aug 2017. As at Jan 2018, the figure is 100.

Comment [A29]: FAA: We have the same thought as above to consider if this indicator is relevant and necessary. We understand the importance of the programme, but on the RASG level is it more relevant to focus on the IOSA piece first, and then introduce the ISSA target in future revisions?

Comment [A30]: Have removed this target/ indicator accordingly.

Comment [A31]: The baseline is set at 6 as at RASG-APAC/6 in Jul 2016 – this had increased by 17% to 7 at RASG-APAC in Aug 2017. This number has however dropped to [...]

		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. **Use of the IATA Safety Audit for Ground Operations (ISAGO) to improve ground safety** 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 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.	• By 2020, (3) pursue 50% increase in ISAGO registrations over end-2016 figures.

Comment [A32]: The baseline is set at 51 as at RASG-APAC/6 in Jul 2016 – this had increased by 16% to 59 at RASG-APAC in Aug 2017. As at Jan 2018, the figure is 61.

	Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP) 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. In addition, States should develop national aviation safety plans detailing an operations roadmap to address operational challenges and mitigate operational and organizational safety risks, so as to achieve a continuous reduction of regional operational risks and improvement in safety oversight capabilities of States~~operational and organizational safety risks~~. ***Metrics:*** • ~~Number of organizations that have implemented SMS as a percentage of the number of organizations required to implement SMS.~~ • Number of States having achieved Level 4 progress in SSP Implementation. • Number of States having developed a national aviation safety plan.	**Support robust implementation of SMS and SSP** • Promote regional government and industry collaboration for sharing of best practices in safety management through RASG-APAC ~~RASG-APAC should facilitate the sharing of best practices amongst States in the region on SMS and SSP~~. • States should accord priority to the implementation of SMS and SSP to achieve an acceptable level of safety in aviation operations. • RASG-APAC and APRAST should focus on assisting States in the implementation of SMS and SSP, and in the development of national aviation safety plans.	• ~~[*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.~~ • [*RPD*] All States to implement the full ICAO SSP by 2025 • All States to develop national aviation safety plans by 2025.

Comment [A41]: Draft GASP 2020-2022 Edition already assumes that SMS has been implemented globally.

Comment [A42]: CAA Macau: As we still have the 1st Metric "Number of organization that have implemented SMS as a precentage .....", should we keep this Target since thet last report at RASG/7 was 77% only. However, if this target to be removed, the first Metric "Number of organization that have implemented SMS as a precentage ....." should be removed as well. For consideration.

Comment [A43]: Omitted to remove the metric earlier. Have removed it.

Comment [A33]: Remove since SSP and SMS development/ implementation is already a key part of ICAO GASP and applies to all Contracting States.

Comment [A40]: Based on the Global Forum on PIRGs and RASGs, the expectation seems to be more on RASGs and APRAST t...

Comment [A34]: FAA: Recommending using the revised wording proposed earlier in the document – "regional operational risks a...

Comment [A35]: Have amended accordingly.

Comment [A36]: CAA Macau: See the comments made in the first removed target"...

Comment [A37]: Removed accordingly.

Comment [A38]: FAA: For clarity on the metric, what is the difference between a national aviation safety plan and a State's SS...

Comment [A39]: The differences between NASP and SSP, and the interaction between the two, has been clarified by ICAO in its dr...

	~~Predictive risk management and advanced~~Data-driven regulatory oversight 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. 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. 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. 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 (ASIAS)~~ programmes. ***Metrics***: • States' ICAO USOAP CMA EI rate for AIG module	**Implementation of APAC AIG ~~AWG~~ recommendations to address Annex 13 requirements** States should consider it a priority to implement the APAC AIG's recommendations. **Establish a structure for safety data collection, analysis and sharing** 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~~ a comprehensive approach to risk management. **Establish a mechanism for regional data collection and sharing** 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. **Enhance the protection of aviation data information** RASG-APAC should encourage States/ Administrations to adopt safety information protection protocols.	• [*RPD*] States to achieve at least ~~60~~75% EI in AIG of USOAP CMA, ~~by 2017~~and an APAC average USOAP EI score in AIG higher or equal to the global average by 2022. • To develop regional mechanism for data collection, analysis and sharing by ~~2017~~2020. • By 2020, pursue 50% increase in participation in flight data sharing initiatives by APAC air operators, with aircraft of mass 27,000kg above, over end-2016 figures. • ~~APAC States to provide assurance that predictive risk management is fully effective by 2027.~~

Comment [A44]: HKCAD: Given the changes in the GASP objectives / goals in the draft GASP 2020-2022 Edition, the title of the goals "Predictive risk management and advanced regulatory oversight" be changed to "Data driven regulatory oversight". This seems to align more with the Beijing Declaration which calls for using data driven methodologies to identify risk.

Comment [A45]: While the draft GASP 2020-2022 Edition has toned down its emphasis on predictive risk management to focus more on safety oversight and SSP/SMS for the mid-term, APAC should nonetheless continue its efforts in AP-SHARE in view of the long-term future.

Comment [A50]: In 2017, APAC States' EI in AIG was 44.8%, the lowest scoring USOAP area, and far from the 60% target. Suggest, like ICAO, to extend the deadline. Regional targe ...

Comment [A51]: Lapsed; AP-SHARE GB and WG meetings have already commenced, and the Demonstration Project may commence by end-2018. Development would include th ...

Comment [A48]: U.S. CAST: The importance of reactive data and proactive data (i.e. incident data) should be included since ...

Comment [A49]: Suggest no need to specify the type of data (i.e. reactive vs pro-active), and to retain a more generic description. Hav ...

Comment [A46]: DGCA India: The Data is already being shared with FDX. ASIAS may be removed.

Comment [A47]: Removed.

Comment [A52]: Suggest to remove since the draft GASP 2020-2022 Edition has toned down its emphasis on predictive risk ...

	Enhanced Aviation Infrastructure **Air Traffic Services** 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. **Aerodrome Facilities** Particular attention should be paid to runway safety. Most aerodromes in the region are not equipped with the appropriate infrastructure to support safe operations, and/or 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~~ lowest EI levels ~~of lack of effective implementation~~ (~~39~~54.7%, ~~see Fig 2. above~~). In ~~2012~~2016, ~~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 APC were runway excursions~~ runway safety was one of the top two accident categories for APAC region, and runway excursions were amongst the top three accident categories in the region over the last five years (from 2012 to 2016). ***Metrics***: • Structures in place to collect and share regional ATM data.	**Coordination with APANPIRG** • 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). • Jointly develop the proper structures to sustain the collection and sharing of regional ATM data; and the sharing and resolution of safety issues. **Promotion of Effective Implementation of AGA** • 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 Safety Teams (CSTs). • Decision making schemes. • RASG-APAC and APRAST should focus on assisting States in the implementation of air navigation and airport core infrastructure elements.	• Implement structures between RASG and APANPIRG to facilitate ~~collection and~~ sharing and resolution of ATM-related safety issues by mid-201~~7~~9. • [*RPD*] States to achieve at least ~~60~~75% EI in AGA of USOAP CMA, ~~by 2017~~and an APAC average USOAP EI score in AGA higher or equal to the global average by 2022. • Promote runway safety through workshops and seminars at least yearly. • Certify a~~A~~ll aerodromes in APAC region that are used for international operations ~~to have RSTs~~ by 201~~7~~20.

Comment [A56]: Following the 4th APANPIRG-RASG Coordination Meeting, several changes were effected to improve communication and coordination between both groups. For example, SRP WG determines the information to be shared between RASMAG and ASIAP.

However, there remains scope for enhancing coordination between subsidiary bodies of APANPIRG and RASG-APAC, in addition to reporting OPS (Annex 6) deficiencies listed under ATM air navigation deficiencies from PIRG to RASG and vice versa. For example, safety representatives from States and Industry could be encouraged to attend meetings of ...

Comment [A55]: These issues include OPS (Annex 6) deficiencies listed under ATM air navigation deficiencies; the sharing of experience on runway incursion and excursion prevention, as well as the exchange of information and analysis of runway incursions and excursions at APAC States' airports

Comment [A57]: Similar to the 60% target for AIG, the 2017 APAC States' EI in AGA was 54.7%, the second lowest scoring USOAP area, and relatively far from the 60% target. Suggest to extend the deadline. Regional target and deadline are adapted from the Beijing Declaration.

Comment [A53]: "Certified" means fulfilling ICAO Annex 14 requirements

Comment [A54]: Certification of aerodromes is to ensure compliance with ICAO Annex 14, and should be conducted by the regulator for the aerodrome operator. Regarding infrastructure, this should also be related to Annex 14 and current ANS deficiencies recorded and tracked by APANPIRG are on items, such as: ...

	• States' ICAO USOAP CMA EI rate for AGA module. • Number of runway safety seminars, workshops or other events at APRAST or RASG-APAC. • Number of certified aerodromes ~~with RSTs~~ in APAC region that are used for international operations.		

– END –