



International Civil Aviation Organization

**Fifth Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/5)**  
*(Bangkok, Thailand, 15-19 September 2014)*

**Agenda Item 4: Update of proposed Regional Priorities and Targets**

**DEVELOPMENT OF REGIONAL PRIORITIES AND TARGETS**

(Presented by APRAST Co-chairs)

**SUMMARY**

This paper proposes the revised draft of the RASG-APAC regional safety priorities and targets after taking into account the comments received from RASG-APAC members.

Action by the meeting is at Paragraph 3.

**1. DISCUSSION**

1.1 At the APRAST/4 meeting held in Manila, the Philippines, on 22-25 April 2014, the meeting discussed the proposed regional safety priorities and targets, with the view to finalise at the RASG-APAC/4 meeting in 20-21 November 2014. The Secretariat subsequently circulated the proposed regional safety priorities and targets to RASG-APAC members for comments in a State Letter dated 7 May 2014 (T 6/13.11.1 - AP070/14 (FS)). RASG-APAC members were requested to provide their comments to the Secretariat not later than 15 June 2014 (Decision APRAST 4/5 refers).

1.2 As at 20 June 2014, Australia, Hong Kong, Macao, Samoa, Singapore, Pakistan and Thailand have provided their comments. Please see **Attachment A**.

1.3 Taking into consideration the comments received from the RASG-APAC States and ICAO, the APRAST Co-chairs have revised the regional safety priorities and targets, as presented in **Attachment B**. The key revisions are summarised as follows:

- a. A revision was made under the section “III. Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)” to better reflect the need for aviation training organisations and also maintenance and repair organisations to also implement SMS by 2017. This is in line with ICAO Annex 19 standard 3.1.3 (as shown in **Attachment C**).
- b. A revision was made under the section “V. Enhanced Aviation Infrastructure” to provide consistency on the use of the different terms relating to ATM data. The term “ATM data” is proposed to allow for the collection of a broader scope of ATS information and not to preclude any specific data at this point. This broader scope would be helpful to support the development of a comprehensive safety information database that could be used for the enhancement of aviation safety in the region. Details of the type of ATM data to be shared could be further determined by RASG-APAC and APANPIRG.

- c. Revisions were made to reflect the challenges in achieving some of the proposed targets due to the tight deadlines. The affected targets and their revisions are:
  - i) RASG-APAC to complete the development of currently identified priority SEIs by end ~~2015~~ 2016;
  - ii) 50% of APAC air operators participating in flight data sharing initiative by ~~2015~~ 2016
  - iii) Implement mechanisms between RASG and APANPIRG to facilitate collection and sharing of ATM data by ~~2014~~ 2015.
- d. Revisions were made to a few targets and metrics to ensure consistency with the global priorities and targets being tracked by ICAO and for clarity.

1.4 There were also comments relating to conduct of safety oversight and SSP/SMS training for States. These comments can be taken into account by the proposed task force to be set up by APRAST to develop an action plan on capacity building by 2015. Nevertheless, at this APRAST/5 meeting, workshops would be held to assist States in the implementation of SEIs.

## **2. ACTION BY THE MEETING**

2.1 The meeting is invited to review the revised regional safety priorities and targets in **Attachment B** of this paper, and finalise them for approval at RASG-APAC/4.

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**COMMENTS RECEIVED FOR REGIONAL PRIORITIES AND TARGETS FOR THE APAC REGION**

States/Administrations	Received Date	States Comments	Response by Co-chairs
1. Australia	17 June 2014	<p><b>i. Reduce operational risks</b></p> <ul style="list-style-type: none"> <li>- Australia agrees with the action to implement the priority SEIs however we believe to complete the development by 2015 may be ambitious.</li> <li>- Australia welcomes the RASG-APAC continuing to provide support to States and Industry.</li> <li>- Whilst Australia agrees with the goal of a reduction in the number of fatal accidents irrespective of the volume of traffic in the APAC Region we believe the metric may be difficult to meet given the predicted significant traffic growth.</li> <li>- Australia believes the APRAST would benefit from guidance in determining the order in which SEI's are selected for implementation.</li> </ul> <p><b>ii. Improve safety oversight and compliance</b></p> <ul style="list-style-type: none"> <li>- Australia is participating in the ICAO USOAP-CMA program</li> <li>- The current overall effective implementation (EI) rate for Australia is 82.67% across the eight critical elements of the safety oversight system. The global average is currently 61.68%.</li> <li>- Australia does not have any Significant Safety Concerns (SSCs).</li> </ul>	<p>Noted. Propose to complete the development of currently identified priority SEIs by end 2016 instead of 2015 to give APRAST more time to complete the implementation of the priority SEIs.</p> <p>Noted. Propose to maintain the metric of reduction in the number of fatal accidents and fatalities irrespective of the volume of air traffic, as it is meant to be a stretch target.</p> <p>Noted. The RASG-APAC yearly and standing work programme can provide APRAST the guidance in determining the priority for implementation of SEIs.</p>

States/Administrations	Received Date	States Comments	Response by Co-chairs
		<ul style="list-style-type: none"> <li>- With reference to the ISAGO, Australia believes use of the word ‘requiring’ is problematic. In Australia, the regulator can only ‘require’ something through legislation. Any legislation which would require an operator to participate in the IOSA program may invite accusations of conflict of interest against the regulator. In addition any regulatory requirement compelling an operator to participate in the IOSA would necessitate the regulator to audit IATA’s IOSA program.</li> <li>- Australia recall that an issue was raised at APRAST/4 that membership of IATA was voluntary and that meeting these targets would be difficult given there was no way to enforce them.</li> </ul> <p><b>iii. Consistent and effective SSM and SSP</b></p> <ul style="list-style-type: none"> <li>- The Australian SSP is publically available.</li> <li>- Australia recalls that at APRAST/4 several States indicated they believed that an SSP must be established before an SMS. Furthermore, Australia believes that to establish an SSP and an SMS concurrently may risks complicating the process, particularly for states with limited resources.</li> <li>- Australia has already met the second target of full implementation of SSP by 2022.</li> </ul> <p><b>iv. Predictive risk management and advanced regulatory oversight</b></p> <ul style="list-style-type: none"> <li>- Australia recalls that during APRAST/4, the</li> </ul>	<p>Agreed. Propose to replace ‘requiring’ with ‘encouraging’.</p> <p>Noted. The targets are aspirational and can serve to encourage the industry to voluntarily consider joining IOSA and ISAGO.</p> <p>Noted. The current targets and metrics allow States the flexibility to start the development of the SSP early before the targeted date for SMS implementation. Also to note, ICAO Annex 19 currently requires service providers to implement SMS.</p> <p>Noted. The IAT will provide proactive and predictive data analysis. However,</p>

States/Administrations	Received Date	States Comments	Response by Co-chairs
		<p>meeting indicated that although an APAC Information Analysis Team (IAT) was proposed, publication of predictive and proactive analysis was proscribed. i.e. the IAT will not provide proactive or predictive analysis in its Annual Safety Review.</p> <ul style="list-style-type: none"> <li>- Australia believes predictive risk management and advanced regulatory oversight pose an interesting question. Firstly, this has an implication that inspectors should be checking to see if FDAP data is incorporated into SMS. Secondly, Australia is concerned many inspectors throughout the region would be unaware of FDX or ASIAS. Australia recalls that at APRAST/4 a number of States representatives were uncomfortable with using a metric that could not be enforced given that participation in FDX is voluntary.</li> <li>- Australia's ICAO USOAP-CMA effective implementation rate for accident and incident investigation is currently 96.97%.</li> <li>- Australia believe that, given the push for predictive risk management, earlier sections of this plan are perhaps overly outcome focused (CFIT/Runway Excursions etc.) possibly resulting in uncoordinated effort and direction.</li> </ul>	<p>the proactive and predictive data will not be published in the Annual APAC Safety Report. A statement will instead be used to provide reference for the information quoted.</p> <p>Noted. These issues could be reviewed by APRAST in future work.</p> <p>The proposed regional priorities and targets on CFIT, LOC and runway safety were identified by ICAO and the AP-SRP as the top three categories of accidents in the region and remain relevant. Nevertheless, a review of the accident precursors can be done when predictive risk management systems are available for the region.</p>

	States/Administrations	Received Date	States Comments	Response by Co-chairs
			<p><b>v. Enhanced aviation infrastructure</b></p> <ul style="list-style-type: none"> <li>- Australia believes that given the MH370 accident and the recent ICAO Global Tracking meeting outcomes, a review of the APANPIRG SAR reporting and State-to-State coordination procedures be undertaken.</li> <li>- Australia commends the RASG promotion of runway safety programmes that support the establishment of Runway Safety Teams (RSTs) and the implementation of inter-organisational SMS and Collaborative Decision Making schemes throughout the region.</li> <li>- Airservices Australia has done a lot of work to establish local RSTs at each of the 28 towered aerodromes in Australia.</li> </ul>	Noted. Propose to include for discussion with APANPIRG.
2.	Hong Kong, China	16 June	<p>Hong Kong, China wishes to thank the ICAO-APAC Office and APRAST Co-chairs for their efforts in developing the draft regional priorities and targets, in support of the newly adopted ICAO Global Aviation Safety Plan.</p> <p>In regard to the draft, Hong Kong, China has only one comment to make concerning the target on "Enhanced Aviation Infrastructure". While it is noted that RASG-APAC has set a target of end 2014 to implement mechanisms between RASG and APANPIRG to facilitate collection and sharing of ATM data, to accomplish this target, RASG-APAC may need to submit a paper to seek endorsement from APANPIRG at its forthcoming meeting in September 2014 on the proposed establishment of these mechanisms.</p>	Agreed. Propose for the deadline for this target to be shifted to end 2015.

	<b>States/Administrations</b>	<b>Received Date</b>	<b>States Comments</b>	<b>Response by Co-chairs</b>
3.	Macao, China	14 Jun 2014	No comments	
4.	Samoa	27 May 2014	No comments	
5.	Singapore	12 June 2014	<p>Singapore fully supports the proposed regional safety priorities and targets. The proposal, which is also in line with the ICAO Global Aviation Safety Plan, will provide greater focus for the long term enhancement of aviation safety in the APAC region.</p> <p>We note that Item V of the proposed priorities and targets mention coordination with the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG). Specifically, one of the targets is to “Implement mechanisms between RASG and APANPIRG to facilitate collection and sharing of ATM data by end 2014”.</p> <p>However, in APANPIRG’s priorities and targets as shown in State Letter AN 3/3 – AP079/14 (AGA) dated 30 May 2014, there was no mention of collection and sharing of ATM safety data. Further engagements and collaborations between APRAST/RASG-APAC and APANPIRG should take place to ensure that both regional bodies are aligned.</p> <p>Considering the need for engagement with APANPIRG, and that the RASG-APAC/4 Meeting would only conclude in November 2014, it may be challenging to have to implement mechanisms between RASG-APAC and APANPIRG to facilitate the collection and sharing of ATM data by end 2014. We therefore suggest that the deadline for implementing such mechanisms be</p>	<p>Noted. The Co-chairs have coordinated with ICAO Secretariat to organise the meetings between RASG-APAC, APANPIRG and APRAST in September 2014.</p> <p>Agreed. Propose for the deadline for this target to be shifted to end 2015.</p>

	<b>States/Administrations</b>	<b>Received Date</b>	<b>States Comments</b>	<b>Response by Co-chairs</b>
			<p>amended to end 2015 instead.</p> <p>We also suggest that the term ATM data be used in both the action and targets in Item V for consistency. This standardized term would allow for the collection of broader information such as radar data and not restrict it only to ATM safety reports.</p>	<p>Agreed. Propose to use the term ‘ATM data’ for both the action and targets in Item V for consistency and to indicate the broader scope of information that could be collected.</p>
6.	Thailand	18 Jun 2014	No objection to proposal.	Noted.
7.	Pakistan	18 June 2014	<p><b>a) Enhance Safety Oversight Systems through Capacity Building</b></p> <p>Three points may be added to the above mentioned para:</p> <ul style="list-style-type: none"> <li>• Training, Workshop, Seminars and knowledge sharing station/session should be started among regional States and joint action plan should be formulated for effective and practical implementation of SSP/SMS;</li> <li>• Smart software should be jointly developed with the help of data management, risk management and data warehousing experts from commercial software industry. The software should be tested by the States with the help of two to three operators from each State.</li> <li>• The SSP/SMS trainer should be from the specific trade like ATCO should only train ATC and aerodrome experts. Pilots and engineers should train airline operators, MROs, operational training centres and design and manufacturing organizations.</li> </ul>	<p>Noted. Propose for the proposed task force to be set up by APRAST to develop an action plan on capacity building by 2015 to consider the comments.</p>

States/Administrations	Received Date	States Comments	Response by Co-chairs
		<p>Targets may also include:</p> <ul style="list-style-type: none"> <li>• Industry, airline operators, MROs, operating training centres, aircraft manufacturers, ATCOs, aerodromes and other service providers to implement SMS by 2017 with complete data management software.</li> </ul> <p><b>b) Use of IATA Operational Safety Audit:</b></p> <ul style="list-style-type: none"> <li>• It is not possible within our State regulations to recognize or demand an audit by a commercial organization i.e. IATA unless it has no financial implication.</li> </ul> <p><b>c) Use of IATA Audit for Ground Operations (ISAGO) to Improve Ground Safety</b></p> <p>Same as Para 2 (b) above.</p> <p><b>d) Predictive Risk Management and Advance Regulatory Oversight:</b></p> <p>First para under this heading may be replaced by:</p> <ul style="list-style-type: none"> <li>• Advance regulatory oversight functions has to have a smart software for 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.</li> </ul>	<p>Noted. Target is revised to specifically mention MROs and ATOs. This is also in line with Annex 19 standard 3.1.3. States have the discretion whether to require the service providers to implement data management tools.</p> <p>Agreed. Propose to replace 'requiring' with 'encouraging'.</p> <p>Noted. The move towards predictive safety management and data-driven regulatory oversight systems would require States to use advanced tools, including advanced software, to carry out their functions such as analysing the safety data. Hence the intent of the suggestion is already incorporated in the existing paragraph.</p>



## PROPOSED RASG-APAC PRIORITIES AND TARGETS

### I. **Reduce operational risks**

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.

#### **Action – Implement priority Safety Enhancement Initiatives (SEIs)**

- 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.
- RASG-APAC should continue to provide implementation support to States and industry.
- States and industry should likewise accord priority to the implementation of these SEIs.

#### **Targets:**

- RASG-APAC to complete the development of currently identified priority SEIs by end 2015 2016.
- States and industry to complete the implementation of all priority SEIs in RASG-APAC work programme by 2018.
- Reduction in the number of fatal accidents in 2018 compared to 2014 irrespective of the volume of air traffic in the APAC region

#### **Metric:**

- Reduction in the number of fatal accidents irrespective of the volume of air traffic in the APAC region.

### II. **Improve safety oversight and compliance**

Recognising 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.

#### **Action – 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.

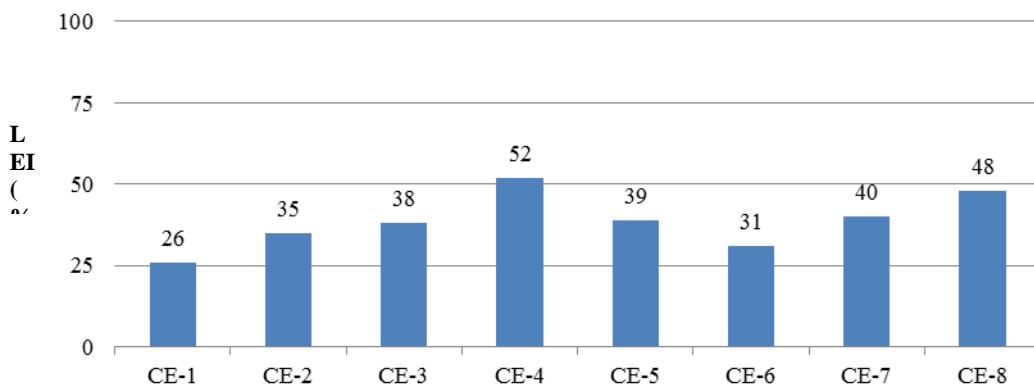


Figure 1 LEI by CE – APAC region

**Action – 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.

**Action – 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 recognition of IOSA to requiring 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.

**Action – 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.

**Targets:**

- Task force (to be formed by APRAST) to develop an action plan on capacity building by December 2015.
- 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
- States to achieve at least 60% EI in USOAP CMA by 2017.
- Maintain at least 60% of applicable APAC airlines to be IOSA certified by the end of 2017.
- Achieve at least 15% of applicable APAC airlines to be ISSA certified by the end of 2017.
- Pursue at least a 50% increase in ISAGO registrations by end of 2017.

**Metrics:**

- Increase in APAC States' ICAO USOAP CMA effective implementation rate
- Increase in registration rate for IOSA and ISAGO

**III. 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.

**Action – Support robust implementation of SMS and SSP**

- 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
- APAC COSCAPs should focus on assisting States in the implementation of SMS and SSP.

**Targets:**

- 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
- States to implement the full ICAO SSP by 2022

**Metrics:**

- Reduction in the number of accidents involving safety management and/or regulatory oversight deficiencies
- Number of organisations that have implemented SMS as a percentage of the number of organisations required to implement SMS
- Number of States that have implemented SSP

**IV. Predictive risk management and advanced 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.

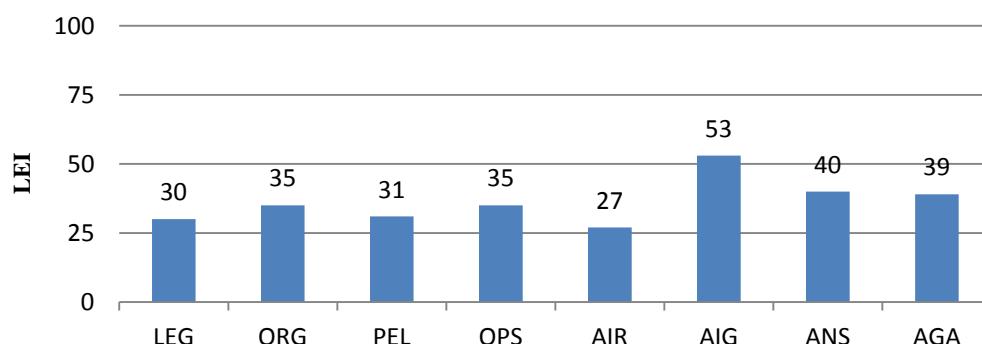


Figure 2 LEI by area - APAC region

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.

**Action – Implementation of AIG AWG recommendations to address Annex 13 requirements**

States should consider it a priority to implement the APAC AIG's recommendations.

**Action – Agree to standard taxonomies for safety data sharing**

Benchmarking and sharing of data among States could be facilitated if States agree to standardise taxonomies, for example in the description of safety occurrences, ramp inspection outcomes and definitions of audit findings.

**Action – Establish a structure for safety data collection, analysis and sharing**

RASG-APAC should establish an action plan that facilitates the use of standardised taxonomies for data collection in the region, and in the longer term, 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.

**Action – 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.

**Targets:**

- States to achieve at least 60% EI in AIG of USOAP CMA by 2017
- To develop regional mechanism for data collection, analysis and sharing by 2017.
- 50% of APAC air operators participating in flight data sharing initiative by 2015 2016.
- APAC States to provide assurance that predictive risk management is fully effective by 2027

**Metrics:**

- Increase in States' ICAO USOAP CMA EI rate for AIG module
- Reduction in recurring accident types (e.g. runway excursions)

**V. 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 characterised 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 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.

#### **Action – 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 ~~ATS~~ ATM data.

#### **Action – 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-organisational SMS and Collaborative Decision Making schemes.

#### **Targets:**

- Implement structures between RASG and APANPIRG to facilitate collection and sharing of ATM data by end 2014 2015
- States to achieve at least 60% EI in AGA of USOAP CMA by 2017
- Promote runway safety through workshops and seminars at least yearly
- All Aerodromes in APAC region, that are used for international operations to have local RSTs by 2017

#### **Metrics:**

- Structures in place to collect and share regional ~~ATS~~ ATM data
  - Increase in States' ICAO USOAP CMA EI rate for AGA module
  - Increase in Number of runway safety seminars, workshops or other events at APRAST or RASG-APAC
  - Increase in Number of local RSTs at aerodromes with RST in APAC region, that are used for international operations.
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**Annex 19**

3.1.3 As part of its SSP, each State shall require that the following service providers under its authority implement an SMS:

a) approved training organizations in accordance with Annex 1 that are exposed to safety risks related to aircraft operations during the provision of their services;

b) operators of aeroplanes or helicopters authorized to conduct international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, respectively;

*Note.— When maintenance activities are not conducted by an approved maintenance organization in accordance with Annex 6, Part I, 8.7, but under an equivalent system as in Annex 6, Part I, 8.1.2, or Part III, Section II, 6.1.2, they are included in the scope of the operator's SMS.*

c) approved maintenance organizations providing services to operators of aeroplanes or helicopters engaged in international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, respectively;

d) organizations responsible for the type design or manufacture of aircraft, in accordance with Annex 8;

e) air traffic services (ATS) providers in accordance with Annex 11; and

*Note.— The provision of AIS, CNS, MET and/or SAR services, when under the authority of an ATS provider, are included in the scope of the ATS provider's SMS. When the provision of AIS, CNS, MET and/or SAR services are wholly or partially provided by an entity other than an ATS provider, the related services that come under the authority of the ATS provider, or those aspects of the services with direct operational implications, are included in the scope of the ATS provider's SMS.*

e) operators of certified aerodromes in accordance with Annex 14.

— END —