



**Asia-Pacific  
Economic Cooperation**

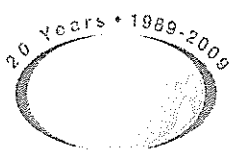
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**2009/TPTWG32/HOD1**

**32nd APEC TPT-WG Aviation Safety  
Experts Subgroup (AEG-SAF):  
Final Report**

Purpose: Information

Submitted by: United States



**Asia-Pacific  
Economic Cooperation**





**32<sup>ND</sup> APEC TRANSPORTATION WORKING GROUP MEETING**  
Raffles City Convention Center  
Singapore, 27-30 July 2009



**32nd APEC TPT-WG Aviation Safety Experts Subgroup (AEG-SAF): Final Report**

**1. Welcome and Introductions**

1.1 - The Chair, Emily White (United States), and the Co-Chair, Qi Gang (China), opened the meeting and welcomed participants to the Aviation Safety Experts Subgroup meeting. The following economies participated and each was introduced to the meeting: Brunei Darussalam, Indonesia, Japan, Korea, Peru, Philippines, Singapore, Chinese Taipei, Thailand, and the United States.

**2. Review, Modify, and Adopt Agenda**

The agenda was reviewed and modified to add the following items:

- Addition on discussion on Non-member attendance at technical meetings/workshops
- Presentations at Agenda item 4 will be presented at the July 28 meeting
- Data Sharing/IASDEX presentation is deferred to TPTWG 33
- Presentation by China added at Agenda item 5.7
- Presentation by Korea added at Agenda item 5.8

After brief discussion, the agenda was approved as modified.

**3. Review Status of TMM5 work plan items and TMM6 statement**

3.1 – The Chair noted that within the TMM6 statement, economies need to review and note paragraphs 22 & 23 with respect to work development from the ICAO Universal Safety Oversight Audit Program (USOAP), and to review paragraphs 43 through 45, with respect to information sharing initiatives.

3.2 - The Chair led the group in a review of the TMM5 Work Plan. The status of each work plan item is identified below:

- Pursue second new technologies workshop: Workshop conducted in June 2009. **Item closed.**
- Pursue workshop on SMS: ICAO continues to conduct workshops in the region. Implementation date for SMS extended to CY2011. **Item closed.**
- Pursue workshop on licensing/validation (safety/security): Regional presentations conducted throughout the year. **Item closed.**
- Pursue workshop for implementation of ICAO Language Proficiency: Economies pursuing ways to implement ICAO Annex 1 requirements. ICAO conducted workshops in each ICAO region in 2008 and attended by APEC Economies. **Item closed.**

- Establish a register for transport safety training: Register developed and currently functioning on APEC website. **Item closed.**
- Harmonization of ramp inspection program: Different Economies shared ramp inspection checklists. Three APEC Economies share ramp data through IASDEX program. **Item closed.**
- Pursue information on IATA fuel efficiency gap program. IATA provided requisite information to CAAs and air carriers within the APEC economy countries. **Item closed.**
- Review outcomes of ICAO 36<sup>th</sup> assembly: Economies reviewed outcomes of ICAO assembly and determined no new initiatives are necessary. **Item closed.**

3.3 – The Chair noted that with the work of the ICAO in the region, there is no need for APEC economies to duplicate efforts. As such, APEC will not undertake any activities if ICAO has already planned concurrent activities. If APEC is developing a program/activity that would be of interest to ICAO member states that are non-APEC member economies, a consensus of the group is needed.

After short discussion, the group agrees, in principle, to invite other ICAO member states that are non-APEC members to technical workshops or other events, under the auspices of APEC, as circumstances warrant. For each event, a list of invitees would be given to the group for consideration through the normal APEC process.

#### **4. AEG-SAF Project Updates and Reports**

4.1 APEC New Aviation Technologies Workshop II – Thailand reported on the activities of the June 17-19, 2009 workshop, co-hosted by AEROTHAI, USTDA and FAA. The workshop was well attended by all 21 APEC economies, as well as participation by ICAO and the Indian Director General of Civil Aviation. Topics discussed included NextGen activities, technology implementation in air traffic management, status of ADS-B, operations policy and guidance procedures for new technology authorizations. The organizers distributed and conducted a survey that will assist organizers of future workshops to plan and execute comprehensive agenda items.

4.2. SMS Just Culture: Report on Survey and Next Steps – Peru presented an overview of its work to complement ICAO SMS/SSP activities to achieve a Safety Culture (“Just Culture”) within the regulatory activities of a civil aviation authority. This activity included the implementation of management theory methodologies, the use of surveys to obtain necessary data for analysis, the use of human resource/organizational tools, sensitize managerial staff, and the use of case studies, that will lead to a cultural change within an organization.

The Chair asked Peru to update their project proposal with survey data, and provide the updated proposal to the Chair for distribution to APEC economies to review and solicit co-sponsors. China commented that it is extremely interested in the subject and asked Peru to also provide more information regarding the subject, to include specific plans on implementation strategies of a safety strategy within an organization.

*Note: Copies of the presentations can be found on the APEC website.*

## **5. AEG-SAF Information Sharing**

5.1 APEC Economies ICAO USOAP audit results review – The United States presented an overview of the ICAO eight critical elements which demonstrated the lack of effective implementation between the average APEC Economies against 119 audited states. This presentation gave examples of actual findings for APEC Economies for the highest number of discrepancies per critical element area. Applicable annexes were referenced for each finding.

5.2 CAA Surveillance Obligations: Work Tracking System – This was a live demonstration of a system the United States/FAA developed which allows databases to capture inspector work activities such as surveillance, enforcement, and certification. The system includes activity codes, airline codes, and allows comments to be added for each activity. The database also acts as a repository for the complexity of AOC, AMO, & ATO's in an economy. Reports can be generated for any record that is inputted into the system.

5.3 Qualified Technical Personnel Training – The United States delivered a presentation on a inspector training system that FAA developed which allows an economy to plan and execute training for flight standards inspectors including initial, recurrent and on-the-job training. This training program is based on the ICAO requirements, which obligates an economy to staff their organization with qualified personnel capable of accomplishing a wide range of aviation safety technical duties and inspection activities.

5.4 Overview of Airport Safety Initiatives – The United States delivered a presentation on airport safety initiatives in the United States. The presentation included discussion on Runway Incursions, FAA Runway Safety Initiatives, Implementation of Runway Safety technologies, purpose of SMS in airport safety activities, implementation of ICAO airport safety standards, implementation of runway safety areas, Engineered Materials Arresting System (EMAS), wildlife hazard mitigation, aircraft rescue and firefighting, and new technologies for Foreign Object Damage (FOD) detection.

5.5 Civil Aviation SMS and FSOP Developments in China: China presented an update on the development and implementation of key activities in China, particularly in the areas of Safety Management Systems, Flight Safety Oversight Programs, and developments in Aviation Language Proficiency Certification, particularly the implementation of the Pilot English Proficiency Examination Program of China (PEPEC).

5.6 Korea ICAO USOAP Activity – Korea briefed the group on its preparations for the USOAP audit that was conducted by ICAO in May 2008, including presenting a history of Korean civil aviation activities after the first ICAO Safety audits. After years of hard work, Korea received the highest effective implementation score of any Civil Aviation organization during the recent round of audits conducted under the comprehensive systems approach under USOAP.

*Note: All presentations can be found on the APEC website.*

## **6. New Proposals for New AEG-SAF Work Plan**

A new two-year work plan was discussed in accordance with the 6<sup>th</sup> APEC Transportation Ministerial Statement on the Liberalization and Facilitation of Transport Services, Seamless

Transportation Systems, Aviation Safety and Security, Sustainable Transport, and Information Sharing.

To further develop the plan, the Chair proposed and the group adopted the following:

- Subdividing TMM6-22 to reflect separate working arrangements within APEC Economies to show specific work that addresses the eight critical elements of an effective safety oversight system.
- The group agreed to track implementation of Aviation Language Proficiency from the ICAO website. All APEC Economies will pursue specific implementation strategies individually.
- Each APEC Economy will report at each TPTWG on the status of effective implementation of ICAO standards in Safety Management Systems.
- The Co-Chair suggested an alternative way to implement data sharing activity while certain APEC Economies continue to pursue ramp data activities under IASDEX. A possible way forward is creating stronger ties among APEC Economy CAAs to ensure points of contacts are established for different issues.
- The group agreed that all APEC Economies will track their status of ADS-B and PBN implementation and report at each TPTWG meeting. The Philippines suggested that the group discuss ways to share resources to assist all APEC Economies to implement the new technologies.
- The group agreed to pursue a project proposal by Indonesia to host an Airport Safety Oversight and Advanced Technology Workshop for APEC Economies in Bali, Indonesia. The draft is currently under review by the Indonesian Director General of Civil Aviation, and the progress will be reported at the next TPTWG.
- The group agreed to pursue an on-going proposal by Peru to develop “Just Culture” methodology strategies for APEC Economies. Peru will continue to develop the proposal and look for co-sponsors, and report the progress at the next TPTWG.

## **7. Final Report and Work Plan**

The SAF agreed to the final report and work plan, found in Attachment One to this report.

## **8. Election of new Chair/Co-Chair**

The SAF agreed to extend the term of the United States as Chair, and China, as Co-Chair, for another two-year period.

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AVIATION SAFETY SUB-GROUP (AEG-SAF)

WORK PLAN 2009 - 2011

Attachment 1

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
<b>TMM6-16.</b> We support the Working Group's initiatives to enhance seamless interconnectivity among the various modes within the transportation system to ensure effective, safe, secure and efficient movement of people and goods while improving the conservation of natural resources and mitigating environmental impacts. This includes efforts to address congestion and intermodal issues.	TBD				
<b>TMM6-20.</b> We instruct the Working Group to build upon the work of relevant regional and international multilateral organizations and to avoid duplication of their efforts.	ICAO Seminar on Testing of Navigation and Surveillance facilities and Validation of Flight	Aug 5 – 7, 2009 in Bangkok	Equip Economies with the capability to implement ICAO requirements.	All Economies	

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
	Procedure ICAO Seminar on Aerodrome Certification for Inspectors ICAO Meteorology/Air Traffic Management Seminar 46 <sup>th</sup> Asia Pacific DG Conference ICAO High-level Safety Conference	Nov 3-5, 2009 in Hong Kong Nov 18-20, 2009 in Bangkok Osaka, Japan October 12-16, 2009 March 2010 in Montreal, Canada			
<b>TMM6-22.</b> Taking into account the different stages of economic development among member economies, we instruct the Working Group to ensure the efforts in the area of aviation	Reviewed ICAO USOAP Reports of APEC Economies and reviewed common deficiencies.	TPTWG 32 – July 28, 2009	Equip Economies with the capability to implement ICAO requirements.	All Economies	United States

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
safety to continue to complement the work of ICAO including conducting a review of the recent Universal Safety Oversight Audit Program (USOAP) outcomes to help identify for member economies common deficiencies and reconciling any differences from ICAO standards with the aim to improve compliance.					
Critical Element 1: Primary Aviation Legislation	Presentation on Model Regulations	TPTWG 33	Equip Economies with the capability to implement ICAO requirements.	All Economies	
Critical Element 2: Specific Operating Regulations	Presentation on Model Regulations	TPTWG 33	Equip Economies with the capability to implement ICAO requirements.	All Economies	
Critical Element 3: Civil Aviation System and Safety Oversight Functions	TBD				
Critical Element 4: Qualification and Training	Presentation on FAA Inspector	TPTWG 32 – July 28,	Equip Economies with the capability to	APEC Economies,	United States

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
of Technical Staff	Training System	2009	implement ICAO requirements.	Civil Aviation Authorities, industries; and the APEC traveling public.	
Critical Element 5 Procedures and Technical Guidance	TBD				
Critical Element 6: Licensing and Certification Obligations	TBD				
Critical Element 7: Surveillance Obligations	Presentation on FAA WTS System	TPTWG 32 - July 28, 2009	Equip Economies with the capability to implement ICAO requirements.	APEC Economies, Civil Aviation Authorities, industries; and the APEC traveling public.	United States
Critical Element 8: Resolution of Safety Concerns	TBD				
<b>TMM6-23.</b> Member economies are encouraged to implement ICAO standards in English proficiency	Track progress from ICAO website	By TPTWG 33	Equip Economies with the capability to implement ICAO requirements.	All Economies	All Economies report at each TPT
<b>TMM6-23.</b> Member	Project Proposal	By TPTWG	Equip Economies with	All	Peru

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
economies are encouraged to implement ICAO standards in Safety Management Systems	from Peru  Presentation from China on SMS	33	the capability to implement ICAO requirements.	Economies	China
<b>TMM6-23.</b> Member economies are encouraged to share aviation safety data.	IASDEX meeting	Honolulu, Hawaii, September 1-3, 2009	Equip Economies with the capability to share data.	All Economies	United States
	Development of template for sharing points of contact	By TPTWG 33			China
<b>TMM6-38.</b> The Working Group should continue the implementation of Performance Based Navigation (PBN) and Automatic Dependent Surveillance-Broadcast (ADS-B), both of which aim to result in more efficient fuel utilization.	NAVARUS PBN Summit  Track status of implementation by country	Oct 1-2 in Seattle, Washington		All Economies	United States  All Economies list and track compliance
<b>TMM6-43.</b> Information sharing is one of the most effective means for	Calendar of Activities to be placed on	By TPTWG 33		APEC Economies, Civil Aviation	United States and all Economies

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
learning best practices. In enhancing better cooperation and partnership between and among member economies, we instruct the Working Group to consider the possibility of providing a platform for a virtual forum in real time through the Working Group website with linkages to web-based tools available from international organizations.	APEC website  Korea Presentation on USOAP preparation and availability of computerized Safety Management Information System (SMIS) to track ICAO SARP compliance	TPTWG 32, July 2009		Authorities, industries, and the APEC traveling public.	Korea
<b>TMM6-44.</b> Skills are important to support the development of effective transportation systems. The continuous upgrade of the ability of the workforce to develop, manage and safely implement existing and emerging technologies is essential to the on-going facilitation of trade in the	List all presentations on APEC website			APEC Economies, Civil Aviation Authorities, industries, and the APEC traveling public.	APEC SAF Chair

<i>Ministerial Directive/Para</i>	<i>Activity</i>	<i>Time frame</i>	<i>Benefits</i>	<i>Beneficiaries</i>	<i>Lead Economy</i>
APEC region. We instruct the Working Group to promote the institutionalization, dissemination and implementation of best practices and technologies to enable more people to benefit from such technologies.					
<b>TMM6-45.</b> We also desire broader cooperation arrangements for sharing best practices on the latest development in airports safety.	<p>Presentation on Airport Safety Initiatives</p> <p>Runway Safety Summit</p> <p>Indonesia Airport Certification Project</p>	<p>TPTWG 32 – July 28, 2009</p> <p>Dec 1-3, 2009 in Washington, DC</p> <p>By TPTWG 33</p>	Equip Economies with the capability to implement ICAO requirements.	<p>APEC Economies, Civil Aviation Authorities, industries, and the APEC traveling public.</p>	<p>United States</p> <p>United States</p> <p>Indonesia</p>

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