



International Civil Aviation Organization

**Fourteenth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/14)**

Bangkok, Thailand, 28 June – 2 July 2004

Agenda Item 5: Regional Airspace Safety Monitoring Advisory Group

**FIRST MEETING OF THE
REGIONAL AIRSPACE SAFETY MONITORING ADVISORY GROUP**

(Presented by the Secretariat)

SUMMARY

This paper presents a summary of the report of the First Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/1).

1. INTRODUCTION

1.1 The establishment of RASMAG was the result of Decision 14/48 of the Fourteenth Meeting of the Asia/Pacific Planning and Implementation Regional Group (APANPIRG/14) held from 4 to 8 August 2003 at Bangkok.

1.2 The First Meeting of RASMAG was held at Bangkok from 26 to 30 April 2004. The meeting was attended by 23 experts from 8 States and 3 International Organizations. Mr. Robert Butcher, Safety Manager, Airservices Australia acted as Chairperson and presided over the meeting throughout its duration.

1.3 The envisaged role of RASMAG should facilitate States implementing and operating safety management services required for the provision of ATS in accordance with ICAO SARPs. Although other regional safety initiatives were underway in a number of forums especially in regard to flight operations, this was the first safety group formed by APANPIRG to provide a centralized oversight for the regional airspace safety and monitoring activities involving flight operations and the air traffic services in the Asia/Pacific Region. Whilst a primary task of the group would be to review the monitoring and safety assessment activities carried out by the regional monitoring agencies established by APANPIRG for implementation and operation of reduced separation minima, other airspace safety matters would also be taken into consideration. A primary task of the first meeting was to establish the RASMAG as a functioning body within its Terms of Reference (TOR).

2. DISCUSSION

2.1 The meeting reviewed its TOR and was of the view that further clarification was required as to the extent to which the Group could make decisions without first obtaining approval or endorsement from APANPIRG as reflected by its status as an Advisory Group.

2.2 The Secretariat advised the meeting that where ICAO provisions, guidance material and policy already exist, RASMAG could endorse or approve adoption by the RMAs. In cases where regional agreements were required such as establishing an RMA, publishing regional guidance material, or

changing the terms of reference, then APANPIRG approval would be required. RASMAG has a task to coordinate and harmonize airspace safety monitoring activities and this would include bringing regional RMA practices in line with other regions in accordance with ICAO requirements.

2.3 The meeting noted that the TOR inferred that RASMAG's work was limited to reviewing only ADS and CPDLC applications of data link. However, one of the objectives for RASMAG as detailed in the TOR was to review regional and global airspace planning and developments in order to anticipate requirements for airspace safety monitoring and assessment activities. The meeting agreed that the task list should be amended to encompass other applications of data link as required. In this regard, the meeting agreed to recommend to APANPIRG/15 a revision to the Terms of Reference of item i) and under the Task List, item c).

Review of Airspace Safety Monitoring Structure and Programmes in the Asia/Pacific Region

Airspace safety management in the Asia Region

2.4 The meeting recognized that Annex 11 required States to implement systematic and appropriate ATS safety management programmes to ensure that safety is maintained in the provision of ATS within airspace and at aerodromes. In this regard, under APANPIRG's regional implementation planning requirements, arrangements were put in place by States to undertake airspace safety assessments and to provide airspace safety monitoring for the introduction of airspace changes and reduction in aircraft separation minima, and for ongoing operations. Various States had accepted the responsibility to provide regional and sub-regional safety assessment and monitoring services as described below. In regard to the need for an acceptable level of safety for the international en-route airspace, APANPIRG established a target level of safety (TLS) of 5×10^{-9} fatal accidents per flight hour per dimension (vertical and horizontal).

2.5 The meeting reviewed the present structure and service providers for airspace safety monitoring and safety assessments for the international airspace in the region.

Reduced vertical separation minimum (RVSM)

- a) Pacific Approvals and Monitoring Organization (PARMO) operated by the US Federal Aviation Administration (FAA) for the Pacific Region (previously included the Asia Region); and
- b) Monitoring Agency for the Asia Region (MAAR) operated by AEROTHAI of Thailand for the Asia Region (took over responsibility from APARMO for the Asia Region on 2 September 2003); and

RNP 10 operations and reduced lateral separation

South China Sea route system (RNP 10/60 NM lateral spacing)

- a) no monitoring group is established, however, for the initial implementation, the Civil Aviation Authority of Singapore (CAAS) collected and collated the safety data and Airservices Australia performed the safety assessment. CAAS continues to provide data collection services and presents the information to the ICAO Regional Office for further action;
- b) oversight of the safety arrangements for the South China Sea area is provided by the Southeast Asia ATS Coordination Group (SEACG); and

- c) formal arrangements to establish a safety monitoring group to carry out monitoring services and safety assessments for implementation and operation of reduced horizontal separation were required.

EMARSSH route structure including Bay of Bengal area (RNP 10/50 NM lateral spacing)

- a) no safety monitoring group is established. Airservices Australia carried out the safety assessment services for the implementation using safety data provided by States and coordinated by the Regional Office;
- b) oversight responsibility was transferred from the EMARSSH project team to the Bay of Bengal ATS Coordination Group (BBACG), and
- c) formal arrangements to establish a safety monitoring group to carry out monitoring services and safety assessments for implementation and operation of reduced horizontal separation were required.

ADS/CPDLC services for the Bay of Bengal area

- a) Central Reporting Agency (CRA) for the assessment of data link system performance to be operated by Boeing on behalf of the Bay of Bengal States;
- b) oversight is provided by the FANS Implementation Team (FIT) and BBACG; and
- c) formal arrangements to establish a safety monitoring group to carry out monitoring services and safety assessments for implementation and operation of reduced horizontal separation were required.

Airspace Safety Management in the Pacific Region

2.6 The meeting reviewed the airspace safety monitoring services established by the States concerned under the Informal Pacific ATS Coordination Group (IPACG for the North/Central Pacific) and the Informal South Pacific ATS Coordinating Group (ISPACG).

2.7 It was noted that, in order to ensure the appropriate level of ATS data link system performance, to plan and test operations that would enable benefits, and to resolve system problems, it is necessary to perform monitoring, coordination, testing, and problem research tasks. To address these concerns, dedicated sub-teams, called CRAs, have been established. The meeting noted that the data link performance monitoring services, e.g. ADS and CPDLC were being provided by CRA Japan for the Tokyo FIR. For the remainder of the Pacific Region, Boeing operates the CRA. Airservices Australia provides RVSM monitoring and other airspace safety services for the Melbourne and Brisbane FIRs, and specifically RVSM monitoring and assessment for the international airspace over the Indian Ocean contained within those FIRs. ATS coordination activities in the Pacific Region are reported to APANPIRG.

2.8 The meeting agreed that the work of IPACG and ISPACG in regard to the safety management programmes operated by these groups for the Pacific Region should be reviewed by RASMAG. Accordingly, the United States agreed to coordinate with IPACG and ISPACG to ensure that reports of their meetings, and reports from the CRAs and FITs operating under these groups, were provided to RASMAG.

Need for additional monitoring and safety assessment services

2.9 The meeting considered the nomenclature used within ICAO and regional documentation to describe entities that carry out airspace safety services, e.g., monitoring for RVSM, RNP, data link services, and to perform safety assessments for the reduction in separation minima for international airspace. In regard to RVSM, ICAO has adopted the term RMA described in the RVSM Manual (Doc 9574), and the establishment of an RMA was by regional agreement. In the North Atlantic the term Central Monitoring Agency (CMA) was adopted for the body undertaking the safety work for the route structure, initially in the horizontal dimension and later also for RVSM, whereby it performs the function of an RMA. The Middle East Central Monitoring Agency (MECMA) is the RMA for that region. In regard to data link monitoring there are three CRAs operating in the Asia/Pacific Region. The CAAS who carries out the monitoring services for the SCS RNP 10 routes is referred to as a Monitoring Authority.

2.10 In consideration of the need to assign service providers to perform safety services within sub-regions of the Asia/Pacific Region, the meeting agreed that it was desirable to use a different term than that used for established groups described above. The traditional names would continue to be used for groups providing identical services. However, it was recognized that there was a need to appoint service providers on a sub-regional basis to provide safety services, e.g. for RNP, reduction in separation and ATC application of data link services (technical performance monitoring and analysis are carried out by a CRA) that did not fall within the accepted understanding of the roles of these other groups. Accordingly, the meeting agreed to recommend to APANPIRG that the term Safety Monitoring Agency (SMA) be adopted for this purpose.

2.11 In regard to RVSM safety management programmes, the meeting recognized that ICAO provisions provide clear guidance on the requirements and arrangements to be put in place for RVSM implementation and ongoing operations. In the case of the safety arrangements for horizontal safety management, ICAO provisions were not so clear and there were no specific requirements to establish a regional monitoring agency for RNP and data link applications. However, when the overall ICAO provisions for safety monitoring programmes and related guidance material were taken into account, formalized safety monitoring programmes and safety assessment were required on a regular basis.

2.12 The meeting agreed that it was necessary to establish safety monitoring groups to undertake safety management programmes for the application of RNP, data link services and related separation minima. The following areas were identified as requiring a safety monitoring group to be established for airspace safety monitoring services and safety assessments in the Asia/Pacific Region:

- a) South China Sea area –for the safety assessment of the RNP 10 route structure and reduced horizontal separation, and application of data link services;
- b) RNP 10 routes across the Bay of Bengal area – for the safety assessment and monitoring of the routes, reduced horizontal separation, and application of data link services;
- c) RNP 10 routes from Southeast Asia to the Middle East – for the safety assessment and monitoring of the routes, reduced horizontal separation, and application of data link services;
- d) Melbourne/Brisbane FIRs covering the southern Indian Ocean – establishment of an RMA for RVSM and safety monitoring group for reduced horizontal separation and data link services (Airservices Australia providing the services but not designated as an RMA); and
- e) Some FIRs in the Pacific Region required further investigation to determine the safety services to be established.

2.13 The meeting was informed that at the combined FIT-BOB/3 and BBACG/14 (February 2004), in follow-up to BBACG/13, Thailand informed the meeting that AEROTHAI with experience in operating the RVSM RMA since 2 September 2003, was in a position to carry out the safety assessment work to support ADS/CPDLC operations involving a reduction in aircraft separation in the Asia Region. To expand its work to include this task, MAAR would require funding. Further, FIT-BOB/3 recognized that RASMAG would be assessing airspace safety requirements including establishment of safety monitoring groups in the Asia/Pacific Region, and agreed to refer the matter to RASMAG. The meeting agreed that under its TORs, RASMAG could recommend to APANPIRG an appropriate service provider to provide safety monitoring services.

2.14 The meeting noted the safety assessment services provided by Airservices Australia for the implementation of the South China Sea routes and the EMARSSH routes in the Asia Region. The meeting considered the establishment of safety monitoring group for the areas identified above and agreed that further information was required on the funding arrangements to operate the safety monitoring groups and details of the services to be provided. In this regard, the meeting agreed that the ATS providers concerned should prepare a detailed proposal for the operation of a safety monitoring group outlined above to be presented at the next meeting of the RASMAG on 4 – 8 October 2004.

2.15 In regard to the safety services provided by Airservices Australia, the meeting agreed that they were already performing the function of an RMA and safety monitoring group, and should be formally appointed by APANPIRG to integrate their activities into the regional safety management programmes for international airspace. In this regard, the meeting made a recommendation to APANPIRG/15 to appoint Airservices Australia to be an SMA for the international airspace in the western part of the Melbourne and Brisbane FIRs.

ADS/CPDLC operational trial in the Bay of Bengal area

2.16 The meeting reviewed the establishment of the CRA for the Bay of Bengal operational trial which commenced on 19 February 2004. It was noted that for ADS reporting some States were using high reporting intervals and this placing an unreasonable burden on operators. The meeting agreed that the States involved in the trial be requested to review their procedures for operating their ADS systems, and where applicable adjust the reporting rate in line with the procedures in the FANS Operations Manual (FOM). For technical testing of data link performance, the meeting recognized that higher reporting rates may be used for limited periods to test system capability. In this regard, ATS providers should inform operators when the system would be on test.

2.17 In regard to the application of separation, the ADS reporting rate would be determined by the maximum reporting interval requirements applicable to the separation minima. For example, in the case of 50 NM longitudinal separation based on RNP 10, PANS-ATM, Doc 4444 requires the maximum reporting interval to be 27 minutes. The meeting agreed that ADS reporting intervals should be set as necessary for the air traffic service being provided.

Review and Develop Requirements for Airspace Safety Monitoring

2.18 The meeting was informed of a lack of altimetry system error (ASE) stability observed in aircraft height-keeping performance monitoring results from the North Atlantic and Europe. An apparent cause for this lack of stability appeared to be related to a gradual degradation in the performance of certain avionics components of air data computers. While it was noted that the magnitude of height-keeping errors observed through monitoring was not an immediate cause for concern, the lack of altimetry system error stability, evidenced as a gradual increase in error magnitude over time for a particular airframe, would eventually lead to height-keeping performance failing to comply with requirements. As a result, monitoring should continue at present levels until remedies for the lack of altimetry error stability were identified and shown to be effective.

2.19 The meeting was advised by MAAR that the RVSM/TF/21 meeting (27-31 October 2003) carried out a 90-day review of RVSM implementation in the Bay of Bengal and Beyond, and had discussed the requirements for ongoing long term monitoring post RVSM implementation in the Asia Region. It was noted that ICAO had not established a global policy for long-term monitoring. The meeting was informed that the ICAO long term monitoring policy was a subject being examined by the Separation and Airspace Safety Panel (SASP) under its Project Team 2.

2.20 In regard to the minimum monitoring requirements (MMRs) for implementing RVSM, the guidance was provided in the ICAO Draft RMA Handbook prepared by SASP, which was in the process of being adopted by ICAO and expected to be published in 2005. It was pointed out that the RVSM Manual (Doc 9574) allowed for the monitoring requirements to be established regionally, which could result in different requirements between the regions where issues specific to a region were taken into account. In light of the handbook guidance, all regions should not establish requirements less than those recommended by ICAO. The PARMO had adopted the MMR recommended in the Handbook, and the meeting agreed that this should be the minimum requirement for the Region.

Review of Airspace Safety Performance in the International Airspace of the Asia/Pacific Region

RVSM safety review in the Asia Region

2.21 MAAR had carried out the safety assessment updates for the one-year review of RVSM implementation in the West Pacific (WPAC) and South China Sea (SCS) area, which took into account the usage of the modified single alternate flight level orientation scheme (FLOS) on ATS routes A1/P901, and for the 90-Day review of implementation in the Bay of Bengal area, which used the conventional single alternate FLOS.

2.22 For the post RVSM implementation in WPAC/SCS, the technical risk was 6.17×10^{-11} fatal accidents per flight hour. The total risk attributed to all causes was 1.92×10^{-9} . Both estimates satisfy the agreed TLS value of no more than 2.5×10^{-9} for the technical risk and 5.0×10^{-9} fatal accidents per flight hour due to the loss of a correctly established vertical separation standard of 1,000 ft for risk due to all causes.

2.23 Although the risk estimates using the modified CRM indicated that it had been safe for the RVSM to be implemented in the WPAC/SCS airspace, there were a number of large height deviations (LHDs) that occurred after the implementation in October 2002. This greatly influenced the operational risk. Hence, careful monitoring of the LHD occurrences in WPAC/SCS was very important and inevitably required for the annual review of safety oversight for the RVSM implementation.

2.24 The meeting noted the concern of MAAR and PARMO regarding States failing to report LHDs, and encouraged States to provide such reports to MAAR, PARMO and other RMAs in a timely manner.

Risk Estimated for 4 Months Post RVSM Implementation in Bay of Bengal area

2.25 The RVSM/TF agreed that it would be necessary to collect new traffic sample data to accurately represent the traffic volume for the one-year review after RVSM was implemented in Bay of Bengal. Therefore, MAAR requested the States concerned to provide a one month traffic sample data for the month of July 2004 to be submitted to MAAR via email no later than 31 August 2004. The one-year review of safety oversight for the RVSM implementation in BOB would be presented to the RVSM/TF/23 meeting planned for November 2004.

RVSM safety review in the Pacific Region

2.26 The United States provided information on a periodic reporting process aimed at comparing actual performance to safety goals related to the RVSM implementation in Pacific airspace. The PARMO had created the report presented to this meeting, which was the first of what were planned to be quarterly reports from the PARMO. This report contained a summary of large height deviation reports received by the PARMO for the year 2003. In addition, an update of the vertical collision risk for Pacific airspace was presented. The vertical collision risk estimate for this period was roughly a factor of 30 below the TLS of 5.0×10^{-9} fatal accidents per flight hour. However, this estimate was based on a composite of old parameters combined with recent traffic counts and was not representative of a complete calendar year of large height deviation reporting. Future reports would contain estimates of risk with increasing confidence as the PARMO expands the automated analysis tools used to estimate the collision risk model parameters.

Harmonization of the Modified Single Alternate FLOS with the Single Alternate FLOS

2.27 The meeting was informed that at the RVSM/TF/16 meeting (September 2002), discussions were held regarding harmonization of the modified single alternate FLOS used for the SCS route structure with the single alternate FLOS used in adjacent RVSM airspace outside of the SCS area. It was considered by the Task Force that “ultimately a single alternate flight level orientation scheme should be adopted”, and studies would be made in preparation for any transition plan to a single alternate FLOS.

2.28 At the RVSM/TF/18 meeting (one-year review, July 2003) noting the studies undertaken by States, it was recognized that there were many issues to be resolved and at this stage, in view of the short time frame to implement RVSM in the Bay of Bengal and Beyond on 27 November 2003, it was decided to continue with the modified single alternate FLOS for the WPAC/SCS areas, with a view to reviewing the FLOS when the study by States concerned was completed. Hence, MAAR planned to request States concerned to collect traffic sample data at the RVSM/TF/22 meeting. The period of the proposed TSD would be based on the requirement of that meeting.

2.29 Further, the RVSM/TF/18 agreed that it would be beneficial to prepare a safety assessment based on the traffic sample data collected after RVSM was implemented in October 2002 to assist in the decision making process for the use of single alternate FLOS in the Western Pacific/South China Sea area.

2.30 The meeting was also advised that Japan and Korea were planning to implement RVSM in the Incheon, Naha and Tokyo FIRs on 9 June 2005 and this would have an impact on the traffic flows in the WPAC/SCS area. The matter would be raised at the SEACG/11 meeting on 24-28 May 2004. Also, the RVSM/TF was planning to hold a meeting to resolve this matter in September 2004.

2.31 The meeting recognized that the operational situation on the SCS route system was complex and required the safety studies to be completed before the matter could be resolved. In view of the plans in place to address this matter, the meeting was not in a position to address it further, and agreed it was best left to the RVSM Task Force to resolve the matter with the States and other parties concerned. The meeting further recognized that there were a number of safety related matters concerning RVSM operations that were being addressed by the SEACG and RVSM/TF. RASMAG would review the issues concerned in due course following submission of the reports of these groups.

Review Regional and Global Airspace Planning and Implementation Developments Related to Requirements for Airspace Safety Monitoring Services

Regional planning

2.32 It was agreed that RASMAG would be kept informed of developments in the regional planning process by the Secretariat. Also, the Group would be kept informed of developments arising from the ICAO Global Aviation Safety Plan and other regional safety initiatives of interest to the Group.

2.33 In the near term, the meeting noted that planning for implementation of 30 NM horizontal separation using ADS in the Pacific Region was underway and safety related issues would be brought to RASMAG for review through the reports of the ATS coordination groups responsible for implementation. Also, ADS-B was becoming a major implementation consideration, and SASP was presently developing separation minima to be applied using this system. RASMAG would be kept informed of developments.

AIDC services

2.34 The meeting was informed by Japan that AIDC service provision between Tokyo ACC and Oakland ARTCC were initiated in 1998 and has been providing the controllers with a message exchange service scheme regarding oceanic flights transiting both FIRs.

2.35 With increasing demand for implementation of AIDC services in many States in the world, Japan considered it was important to know how to evaluate the performance of AIDC operations between ATS facilities in an appropriate manner, in order to ensure safe application of the AIDC service. The meeting was informed of the experience of Japan with the AIDC service, an approach to AIDC performance monitoring, and on one of the possible evaluation methods of AIDC performance data.

Inter-Regional Coordination Arrangements and Practices

2.36 The meeting noted that ad hoc inter-regional coordination arrangements were in place in the region, and meetings with adjacent regions were arranged as circumstances required. The inter-regional coordination activities were reported to APANPIRG. RASMAG would in the course of its work need to coordinate with similar groups in other regions, and review the coordination activities between the RMAs and safety monitoring groups. It was recognized that harmonization of safety activities between the regions was an important consideration and it would be given appropriate priority.

Development of safety management systems in the region

2.37 In considering the elements to be taken into account in monitoring programmes and safety assessments, the meeting recognized that considerable attention was given to the technical aspect of system performance, e.g. for RVSM operations, aircraft height-keeping performance was a key element and for RNP, aircraft navigation accuracy. Monitoring programmes were well developed and reliable for gathering data on system technical performance. The use of collision risk modeling provided a means to quantify technical risk in regard to a TLS, and this was relatively straightforward to calculate. However, in the case of air traffic service performance and in particular human factors, the meeting was of the view that this was much less developed and more difficult to quantify. To gain an overall assessment of the total risk present in the ATM system, it would be necessary to undertake a thorough risk analysis of all factors contributing to risk. The meeting noted work being carried out by ICAO to address total ATM system performance, and recognized that this was a very complex subject that required considerable further work to make use of this concept.

2.38 The meeting expressed concern that, because the Annex 11 provision on safety management programme only came into effect on 27 November 2003, there was little lead time for States

to establish safety management systems and to develop safety assessment expertise to address complex airspace environments where reduced separation minima was being implemented and operating. It was recognized that States who had implemented safety management systems and used a systematic approach to evaluating operational risk and managing ongoing operations, were much better equipped to deal with airspace safety matters. States that had little experience with safety management systems and had not put in place arrangements specifically to deal with ATS safety matters, would find it difficult to manage complex airspace and reduced separation that required safety assessments to be performed.

2.39 The meeting agreed that more attention needed to be given to education, and a start could be made by holding an ATS safety management workshop on the matters described above with an emphasis on practical hands-on experience. The meeting was advised that for the workshop to be effective, it was essential that the desired target group was identified, and States sent participants that could make real contribution to their organizations' safety activities. Also, it was highly desirable that some kind of follow-up activity was carried out to provide support to the participants.

2.40 The Secretariat informed the meeting that an ATM Safety Management Seminar was in the Regional Office programme for this year and was tentatively scheduled for November. In light of the discussion at this meeting, a workshop could be arranged to meet the objectives outlined above. The meeting agreed that RASMAG should undertake the planning for the workshop and to hold its next meeting to follow-on from the workshop. This would enable RASMAG experts to participate in the workshop and minimize cost to States to support both events. The next RASMAG meeting was scheduled on 4-8 October 2004, and it was agreed to split the period into two parts of two and half days to include the workshop.

2.41 The meeting was of the opinion that ICAO should emphasize to States in the Asia/Pacific Region the importance of being cognizant of the provisions in Annex 11 regarding implementation of systematic and appropriate ATS safety management programmes. This was particularly important when implementing airspace changes involving requirements to conduct safety assessments and monitoring programmes, including follow-up activities. This information could be included in a letter to States.

Airspace Safety Monitoring Documentation and Distribution Requirements

Draft Guidance Material for End-To-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data Link Systems in the Asia/Pacific Region

2.42 The United States presented draft text for consideration as *Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data Link Systems in the Asia/Pacific Region*. The draft text was developed in May 2003 by the Asia Pacific Airspace Safety Monitoring Task Force. The guidance material was intended to provide a set of working principles for ATS data link system performance monitoring that would be applied by all States implementing these systems, as well as providing detailed guidance on the requirements for establishing and operating a FANS-1/A Interoperability Team and CRA. It was intended that this guidance material would help promote a standardized approach for monitoring the performance of ATS data link systems within the Region.

2.43 The meeting agreed that the guidance material would assist with the setting up and operation of a CRA and would be adopted by RASMAG and developed further. Information would be included for ATS providers to monitor AIDC end-to-end performance. Further material would be developed and presented to the next RASMAG meeting. The meeting agreed that the guidance material would be brought to APANPIRG to be approved as regional guidance material when appropriate.

Reporting requirements

2.44 The United States presented to the meeting a prototype version of what was intended to be quarterly safety monitoring reports from the PARMO relating to the ongoing oversight of RVSM in the Pacific. The meeting also considered information on the South Pacific FIT reporting. The meeting recommended that all safety monitoring groups in the Asia/Pacific Region should adopt a standard report style. The meeting agreed to prepare a model format for the Asia/Pacific Region, and that all reports by the authorized groups related to safety management activities carried out for the international airspace of the Asia/Pacific Region should be made available to the RASMAG.

2.45 RASMAG would review the reports and present a consolidated annual report to APANPIRG on the state of the safety of the international airspace in the region. The meeting agreed that RMAs should provide quarterly reports covering traffic sampling and operational errors with an annual assessment report of the achieved level of safety and results of monitoring activity. Reporting for organizations involved in RNP monitoring should be on a six monthly basis. Reporting from organizations such as CRAs and FITs should be in accordance with their current reporting schedules to their coordinating groups.

2.46 In regard to the above, the meeting agreed that the ICAO Regional Office should inform RMAs, safety monitoring groups, CRAs and FITs in the Asia/Pacific Region to submit reports on their activities to RASMAG through the Regional Office, and to include information on the establishment of RASMAG and its role.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the role, activities and progress of the work being established by RASMAG;
- b) note the action being taken to establish safety monitoring groups (Safety Monitoring Agencies) for the international airspace where monitoring is required;
- c) consider any additional issues that need to be considered by RASMAG to facilitate the future work of the Group.

—END—