

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Second Meeting of South China Sea Major Traffic Flow Review Group (SCS-MTFRG/2)

FINAL REPORT

Table of Contents

No		Item	Page
1	Introduction		
2	Officers & Regional Sub-Office		1
3	Opening of the Meeting		1
4	Documentation and Working Language		1
5	Meeting Repo	ort	2
6	Agenda Item1	: Adoption of Agenda	2
7	Agenda Item 2	2: Review of SEACG/22 Conclusions and TOR of SCS-MTFRG	2
8	Agenda Item 3	Review of the existing MTF Route structure in SCS Airspace and identifying priorities	3
9	Agenda Item 4	4: Review of the current and planned CNS/ATM capabilities and identifying associated horizontal separations	5
10	Agenda Item :	5: Discussion on PBN Routes Development and FLAS/FLOS Optimization.	7
11	Agenda Item	6: Review and update of the task list of SCS-MTFRG	10
12	Agenda Item '	Decisions/Recommendations to SEACG/23 and/or ATMSG/3	10
13	Agenda Item 8	8: Any Other Business	10
14	Closing of Me	Meeting	
15	Appendix 1:	List of Participants	
16	Appendix 2:	List of Meeting Papers	
17	Appendix 3:	Meeting Agenda	
18	Appendix 4:	Terms of Reference – SCS MTFRG	
19	Appendix 5	SCS MTFRG Task List	
20	Attachment 1	Proposed Parallel Tracks for A1 and A202	
21	Flimsy 01:	Manila FIR FLAS/FLOS	
22	Flimsy 02:	Proposal - Direct Cat Bi to Haikou Route	
23	Flimsy 03:	Proposal - Direct Kuala Lumpur to Cebu Route	
24	Flimsy 04:	Proposal - Alternative Kota Kinabalu - Hong Kong Route	
25	Flimsy 05:	Proposal – More Direct Kota Kinabalu to Taipei Route	

REPORT

1. INTRODUCTION

- 1.1 The Second Meeting of South China Sea Major Traffic Flow Review Group (SCS-MTFRG/2) was held in Haikou, China, from 22 to 24 July 2015
- 1.2 This group was inaugurated as the South China Sea Major Traffic Flow Review Group (SCS-MTFRG). However, due to ICAO using the term "Major Traffic Flow" in a different context, the group has made a **Draft Decision** to change the name to **South China Sea Traffic Flow Review Group** with the acronym being **SCS-TFRG**. However, to accurately track the number of meetings held, the series number would be continued. This proposed change will be tabled at SEACG/23.
- 1.3 The SCS-MTFRG/2 was attended by 32 participants from 7 States and administrations, and 2 International Organizations. The participants were a mix of ATM managers, airspace users and operational officers from ANSPs, Regulators and International Organisations. The relevant presentations and documents are available at http://www.icao.int/APAC/RSO-Beijing. The list of participants is contained in Appendix 1.
- 1.4 The SCS-MTFRG/2 was convened by ICAO, with support from ATMB of CAAC, China, who kindly hosted the meeting in Haikou, China

2. Officers & Sub-Regional Office

Mr Liu Song and Mr Pehrinba Renganathan from the ICAO APAC Regional Sub-Office, Beijing moderated the meeting and acted as secretaries.

3. **Opening of the Meeting**

Mr Liu Song, Regional Officer, APAC RSO commenced proceeding by welcoming everyone. He highlighted remarks made by the newly appointed Director of ICAO's Air Navigation Bureau (DANB) during a recent visit to the APAC RSO, where the DANB emphasised that the only way forward to achieve the various goals set by ICAO and its member states was through implementation of policies, standards and recommended practises. Mr Liu Song then invited Mr. Su Hang, Deputy Director, ATC Division, Air Traffic Management Bureau of the Civil Aviation Administration of China to say a few words.

Mr Su wished a very good morning and a warm welcome to all participants to the meeting. He also wished that the meeting would be fruitful in achieving its goals. He requested the participants not to hesitate to contact ATMB personnel if they required any assistance during their stay in Haikou.

The participants then did self-introduction, after which the obligatory group photo was taken.

4. **Documentation and Working Language**

The working language of the meeting and all documentation was English. A total of 9 Working Papers (WP) and 7 Information Papers (IP) were considered by the meeting. The list of papers deliberated is included as Appendix 2 to this report.

5. **Meeting Report**

5.1 **Introduction**

- **5.1.1** Mr Pehrinba Renganathan, and Mr Liu Song, Regional Officers from the APAC RSO moderated the meeting. They highlighted that this was a working level meeting and requested that participants be prepared to roll up their sleeves and get down to some real work which would be very necessary if this review group was to produce tangible results.
- **5.1.2** The moderators then informed that the group's parent body, the **South East Asia Coordination Group (SEACG)** at its 22nd meeting held during the first quarter of 2015 reviewed the TOR that was adopted during SCS MTFRG/1 in Kuala Lumpur early this year. These amendments to the TOR would be discussed as IPO2 under Agenda Item 2.

5.2 Agenda Item 1:Adoption of Agenda

5.2.1 The provisional agenda as listed in WP01 was adopted unanimously by the meeting without any changes. The Agenda for the meeting can be found in <u>Appendix 3</u> to this report.

5.3 Agenda Item 2: Review of SEACG/22 Conclusion and TOR of SCS-MTFRG

IP02:Terms of reference for SCS MTFRG

- **5.3.1** The Secretariat presented IP02, which contained SEACG/22 endorsed Terms of Reference (TOR) for the SCS-MTFRG. Whilst presenting the outcomes of SCS MTFRG/1 to SEACG/22, the TOR decided during SCS-MTFRG1 was reviewed by SEACG/22, which then decided that not only should the SCS-MTFRG focus on resolving current problems but should also focus on future planning to optimize airspace capacity in the longer term. In this regard, SEACG/22 revised and endorsed the TOR contained in IP02.
- **5.3.2** The Secretariat highlighted that since SCS-MTRFG was a working group, it should focus on implementation according to the revised TOR. The participants acknowledged the objectives and tasks in the TOR and the meeting agreed to take relevant action according to the TOR. The revised TOR is attached as Appendix 4 to this report.

WP09 Proposal to Discuss Applicability of MTF in the Group's Name [South China Sea Major Traffic Flow Review Group (SCS MTF/RG)]

- **5.3.3** The term "Major Traffic Flow" is used by ICAO to describe flows between an area/region containing a collection of busy airports to another such area/region served by the same or proximate flight trajectories. A **Routing Area:** is defined as an area encompassing one or more major traffic flows. In the case of the SCS, there is one such MTF, named AR-9 to capture flows between South East Asia and East Asia,
- **5.3.4** After considering the following terms, namely **Significant, High Volume** and **High Density**, the general consensus was that a distinction based on numbers of traffic was not necessary as even a route a with lesser flow can have a major impact. It was then unanimously decided that the term "major" be dropped from the title. The new name proposed is "**South China Sea Traffic Flow Review Group**" and the acronym would be **SCS-TFRG**. The running number would be maintained. This proposal will be tabled as a

Draft Decision to the next SEACG Meeting. Until this proposed name change is endorsed by SEACG, the current name **SCS-MTFRG** would be maintained. The TOR would be amended to reflect this change in due course if the name change is endorsed. (**SCS MTFRG/2 Draft Decision 01** refers)

5.4 Agenda Item 3: Review of the existing MTF Route structure in SCS Airspace and identifying priorities.

WP 02 Traffic Flows in WPAC/SCS Airspace

- **5.4.1** Thailand, through MAAR presented a visualization of traffic flows in the WPAC/SCS area based on 2014 Traffic Sample Data (TSD) collected by MAAR to assist SCS-MTFRG in reviewing the density of traffic flows and to identify routes that carried significant volumes of traffic presently. The traffic flow analysis was presented in pictorial form with the thickness of the lines indicating the volume of traffic flying on each route, with colour coding to indicate direction of the flights.
- **5.4.2** The traffic flows were further analysed and the number of crossing pairs on adjacent flight levels within a 15 minute window was also shown. However, this was only an indicative figure as some of the TSD was based on FPL data and would not be a good reflection of real-time same-level crossing conflicts that would have been subjected to ATM intervention.
- **5.4.3** The third chart showed numbers of LHD Occurrences involving the same airspace to see if there was a correlation between traffic density and LHDs. Thailand/MAAR also grouped busy routes and produced a bar-chart that showed average number of flights per day by Flow in these groupings.
- **5.4.4** The members thanked MAAR for their effort. Members felt that groupings of busy routes would require some modification. Hong Kong suggested that the groupings, by similar direction, for instance A1 and A202, may be more useful. Singapore suggested that the grouping be done based on user ANSP requirements.
- **5.4.5** The meeting decided that these groupings should be decided after further deliberation. For starters, it was decided A1/A202 would be one grouping and L642/M771 as another grouping. No final decision was made on the other groupings.
- **5.4.6** The secretariat also highlighted that CAAS/ATMRI were doing a similar analysis through the EU-AATIP. The secretariat sought Singapore' assistance to get ATMRI to present relevant data from this effort to the SCS MTFRG in the future. Singapore agreed to explore the possibility with ATMRI.

IP03: Large Height Deviation Occurrences in the Kota Kinabalu FIR

- **5.4.7** IP03 from Malaysia highlighted some LHD issues which occurred at transfer points with their neighbouring FIRs, including the South China Sea area
- **5.4.8** Malaysia explained that despite safety assessments, training and putting in place various mitigating measures, LHD occurrences between States adjacent to Kota Kinabalu FIR

had not been reduced significantly and some were on the upward trend. Malaysia attributed LDHs originating from the Kinabalu FIR to mainly human factors as the Kinabalu FIR had full surveillance coverage.

5.4.9 This paper was presented to draw the attention of all States about some grey areas where there were no surveillance coverage and the compelling need to implement AIDC, Surveillance Data Sharing and/or ADS-B with VHF Communications. However, Malaysia felt that the best solution was to revise the present FLOS/FLAS System to minimise the need for transitioning, which was the primary reason for LHDs into or out of the Kinabalu FIR.

IP04:Major Traffic Flow in Sanya FIR

- **5.4.10** China provided statistical data and relevant analysis on the traffic flows within Sanya FIR based on the actual number of flights. The top 2 high density routes were A1 and A202. The number of movements on route A1 was on average 293 per day and peaking at 371 movements. The number of movements on route A202 was about 216 per day and peaking at 303 movements. Another 2 major routes were L642 and M771 which carried daily averages of 121 and 92 movements respectively and with peaks of 176 and 132 movements. Based on the analysis of traffic data over the last 5 years, the annual average growth rate of flights on route A202 was 13.6%, A1 was 12.7%, L642 was 11.6% and M771 was 4.1%
- **5.4.11** In order to facilitate this traffic flow, Sanya FIR applies 30NM separation minima on A1/A202 and 50 NM on L642/M771. As there was adequate radar and VHF coverage within Sanya FIR, they had the capability to reduce the longitudinal separation to their normal radar separation minima of 10 Km.. Another important measure to expedite traffic and reduce delays was Sanya FIR's implementation of a "Collaborative Flight Delivery Management" which was launched in January 2015 as part of the use of ATFM/CDM in civil aviation transportation.
- **5.4.12** IATA opined that traffic analysis to identify peak hours could be an important reference for airlines. China expressed that they were willing to provide more details on these data at the next meeting.
- **5.4.13** Viet Nam requested a side meeting with China to discuss operational issues in relation to the ATFM measures which required aircraft to hold in Viet Nam's airspace.

IP07:Review of South China Sea Flows

- **5.4.14** IATA presented IP07 to the meeting proposing short and long term strategies for efficiencies in the South China Sea (SCS) airspace.
- **5.4.15** The short term measures (2015-17) proposed are:
 - Capacity enhancement measures should be continued and temporary delegation of high seas routes considered where capability exists from an adjacent provider.
 - RNP4 as an interim step to RNP2 to encourage harmonization
 - Accelerate and expand data sharing between states
 - M771 and L642 : 20nm longitudinal for the whole route
 - Realignment of M771 and L642 as previously requested (the new Hong Kong China ATM system may provide an opportunity to review this request)

- Request update on Philippines' ADS-C/CPDLC and/or ADS-B to provide capability for M767 and N884 to enable at least 30nm longitudinal to be applied
- **5.4.16** Longer term measures (beyond 2017), based on the APAC Seamless ATM plan are:
 - SCS airspace designated RNP2
 - Re-designate routes using RNP2 Nav Specs
 - Implement additional parallel routes for M771 and L642
 - Crossing routes currently under FLAS implement unidirectional parallel routes to allow access to more optimal flight levels
- **5.4.17** Hong Kong said that they were unable to agree to 20NM longitudinal separation on M771 and L642 at this juncture, because they could only evaluate the impact when their new ACC was commissioned. Hong Kong also pointed out that the current 50 NM longitudinal on these two routes was reasonable and a reduction to 30NM or less longitudinal separation could be consideration after finishing the evaluation.
- **5.4.18** China accepted Hong Kong's position and suggested to reduce the separation in a phased manner. The first step could be 30NM longitudinal separation minima. China also expressed that their surveillance and communications capabilities would allow them to apply 20NM separation anytime the other ANSP were ready. Viet Nam was also ready to apply the 20 NM longitudinal as they too had sufficient surveillance and VHF communications capabilities. Taking the above sentiments into account, the meeting suggested that timelines be set a for a phased approach to reducing separation on L642/M771.
- **5.4.19** To a request from IATA for an update on ADS-C/CPDLC capabilities, Philippines informed the meeting that they had commenced ADS-C/CPDLC trial operations in the East Oceanic Airspace of the Manila FIR with HF as the primary means of communications and CPDLC as the secondary means. If this initial phase proved satisfactory, they would implement the next phase whereby CPDLC will be the primary means of communications, and HF would be the secondary means.
- 5.5 Agenda Item 4: Review of the current and planned CNS/ATM capabilities and identifying associated horizontal separations

WP 03 Review of Communications and Surveillance Coverage in SCS

- **5.5.1** The availability of CNS is the cornerstone for any airspace review leading to route and/or airspace capacity enhancements. To further the work of the SCS MTFRG, a relook at existing communications and surveillance data over the SCS, with a view to obtaining the latest infrastructure updates is crucial.
- **5.5.2** The secretariat highlighted that surveillance and communications coverage were compiled and presented by two states during the APSAPG meetings. The Automatic Dependent Surveillance Broadcast (ADS-B) Study and Implementation Task Force (ADS-B SITF) and the South East Asia Sub-Regional ADS-B Implementation Working Group (SEA ADS-B WG), among others, had also collected, compiled and presented this data.

- **5.5.3** The secretariat presented data collected by the SEA ADS-B WG. This data was about 3 years old and was not very accurate as it did not reflect the facilities available in Vietnam. Hong Kong reported that its surveillance capabilities towards the South West of their FIR was unsatisfactory.
- **5.5.4** The meeting took note of the importance of compiling the latest information on surveillance and communications capabilities. Thailand, through MAAR volunteered to compile this data for the SCS MTFRG. The meeting decided that each member state appoint a focal point of contact for Thailand/MAAR to liaise with to get the latest information on surveillance and communications capabilities. (SCS MTFRG/2 Decision 02 refers)

IP05: Coordination between Sanya and Adjacent Control Units

- **5.5.5** China presented IP05 to introduce the longitudinal separation minima available when radar or ADS-B surveillance was available in Sanya FIR and the separation at transfer points with Hanoi FIR, Ho Chi Minh FIR and Hong Kong FIR. The separation on PBN routes, during Large-Scale Weather Deviation and Mach Number Technique (MNT) were also mentioned in this paper.
- **5.5.6** China highlighted that coordination between Sanya and neighbouring ACCs had been smoother in recent years. LOAs between Sanya and Hanoi, Ho Chi Minh, Hong Kong and, Manila had been reviewed and revised several times. China pointed out that a harmonious collaborative environment was of great importance to enhance the safety and efficiency of civil aviation in this area. China also presented a chart depicting the level assignment scheme used within their FIR. The meeting noted that the FLAS chart provided a clearer picture of the transfer levels between Sanya and adjacent control units. The moderator suggested again that every State should consider preparing similar charts for comparison as Hong Kong did in the first meeting of SCS-MTFRG.

IP06: General Situation of ATC Support Capability at South China Sea Area

- **5.5.7** China presented the general situation of CNS capabilities within the Sanya FIR which included full surveillance and VHF DCPC. They pointed out that A202, A1, G221, L642, M771 and N892 were significant ATS routes connecting Southeast Asia to Northeast Asia, and were provided with safe and efficient ATM services through the use of these capabilities when within the Sanya FIR.
- **5.5.8** China also informed the meeting that they were studying the possibility of upgrading A1 from a conventional route to PBN parallel routes, with RNP4 a possible preferred navigation specification.
- **5.5.9** Thailand expressed appreciation for China's efforts and informed the meeting that they were proposing PBN parallel routes all the way from Bangkok to Hong Kong and beyond. This proposal had already been discussed in a Mekong Delta Sub-Regional Group Meeting. Thailand hoped that all the States along this route could work together towards the implementation of this proposal.

- **5.5.10** Hong Kong China reminded the meeting that they were unable to accommodate any new changes before the upcoming new ACC was commissioned, and that they would need adequate time to study the implications of the proposed realignment in Hong Kong FIR.
- 5.6 Agenda Item 5: Discussion on PBN Routes Development and FLAS/FLOS Optimization.

IP01:PBNICG/2 Meeting Outcomes

- **5.6.1** The Secretariat presented IP01 to inform the meeting of the outcomes of PBNICG/2, relevant to the work of this review group, particularly those related to PBN route implementation. Two supporting material for implementation of PBN was highlighted and States were encouraged to use these tools when planning and implementing new PBN routes. They are 'PBN in a Page' and a 'Safety Assessment Checklist for PBN Route Implementation'.
- **5.6.2** The meeting was informed that the 'PBN in a Page' was being reviewed by ICAO HQ and an approved version was expected to be ready by the end of July. The meeting was also informed that the Safety Assessment Checklist would be available on the Regional Office's website. States with any questions on the use of these material were encouraged to approach the APAC RSO for assistance.
- **5.6.3** The IP also highlighted the fact that ICAO had recently published guidance material on RNP2 Ops Approval and would deliver PBN Operational Approval Training material by September 2015 and material for the delivery of training by December 2015.

WP05 Unidirectional Eastbound and Westbound Parallel Route Structure in the South China Sea

- **5.6.4** Malaysia highlighted to the meeting that M758 and M761 were the only two trunk routes connecting Malaysia's two FIRs and M758, a bidirectional route carried, a total of 742 movements a week into the South China Sea. In view of this very high volume of traffic Malaysia suggested that this route should be accorded a higher priority than in the past when traffic flows were not so heavy. Malaysia informed the meeting that bilateral discussions with Singapore on establishing this new parallel route has been ongoing for some time.
- **5.6.5** Singapore confirmed that coordination for the implementation was at an advanced stage and will be decided at the upcoming bilateral meeting and was awaiting the decision from Malaysia on the direction of the flow.
- **5.6.6** Malaysia informed that due to implications for Kuala Lumpur TMA operations, the new track towards the North would be East bound and M758 would be the West bound track for this parallel tracks.

WP06 Review of Routes Involving Flights Operating from/through Northeast of Malaysia

5.6.7 Malaysia made some general observations about limitation to flights operating from airports within the Kuala Lumpur FIR, firstly to Kota Kinabalu FIR which had only two routes, currently available, namely M758 and M761 as well as limitations to those operating

to the busy North East Sector. Taking into account the current FLAS/FLOS for major traffic flows in the South China Sea, and leveraging on surveillance and communications capabilities, it is anticipated that the proposed new routings would not increase the complexity of existing routes structure.

- **5.6.8** To facilitate a newly launched flight between WMKC and WBKK, Malaysia proposed the establishment of a new route to connect IKUKO and ENREP.
- **5.6.9** Malaysia also proposed the realignment of R208 to facilitate the establishment of two unidirectional tracks, namely from VKR to BITOD (Eastbound) and IGARI to LASOB (Westbound) to cater for KLIA Operations and the ongoing airspace reorganisation within the Kuala Lumpur FIR.
- **5.6.10** Malaysia, referring to a SEACG/21 presentation, further suggested the establishment of a new route parallel to the existing L642, M771, N892 and L625, and should complement the 4 parallel routes rather than interfere with those routes.

WP 07 Improving Current ATFM Measures During LSWD

- **5.6.11** Malaysia presented a proposal to consider the possibility of setting up some interim measures or methodology to improve the current ATFM measures applied during LSWD due to typhoon or other inclement weather to enable downstream ATM facilities to provide adequate notice to airlines and operators.
- **5.6.12** Hong Kong China shared that they had three entry points and one exit point to Pudong, China. Whenever there were requests from China, they had to scramble to meet the requirements. When the weather deteriorated, the situation was normally beyond anybody's control.
- **5.6.13** China informed the meeting that they were collaborating with the USA for training and have engaged commercial entities to plan and implement ATFM measures to manage the burgeoning traffic flows. They hoped to implement full scale cross border ATFM in the near future.
- **5.6.14** Singapore thanked China for their initiatives and highlighted that collaboration between ANSPs was crucial for the ATFM concept to work. In the case of the Multinodal ATFM Trials, Singapore has contributed the required software, but that each participating ANSP was at a liberty to assess capabilities and select their appropriate participation level.
- **5.6.15** Singapore also opined that resolving choke points would require holistic views and 4-D solutions. There was also the case of peaks and troughs that required capacity and demand balancing. Singapore suggested that this review group should focus on ATM solutions and consider ATFM solutions in the future.
- **5.6.16** The meeting decided that whilst the suggestion from Malaysia had its merits, the scope was beyond the TOR of the SCS MTFRG, and recommended this subject be raised through the ATFM Steering group.

WP 08 Supplementary No PDC Flight Levels For North-South Axis in Viet Nam's Area Of Responsibility

- 5.6.17 The Modified Single Alternate Flight Level Orientation System (FLOS) was devised by the South China Sea RVSM Implementation Task Force in 2002 and the Modified FLOS was developed into a Flight Level Allocation Scheme (FLAS). The Modified FLOS and FLAS were reviewed in 2007 by the South China Sea RVSM Scrutiny Group and the FLAS has been revised for primary and crossing routes, but the modified FLOS concept still remained unchanged up to now.
- **5.6.18** Flight operations along the North-South axis of Viet Nam, involving W1 and W2 had increased five folds since 2002. In addition to that, this North-South axis was also heavily crossed by busy ATS routes such as A202 and A1 on an East West axis which carried 33,197 and 40,706 flights respectively during the first six months of this year.
- **5.6.19** This had led to a situation whereby flights had to operate at levels FL280 and FL 290 and sometimes as low as FL 250. In view of this dire situation, Viet Nam proposed that the meeting considered allocating FL 390/FL400 as additional No-PDC Levels for W1/W2.
- **5.6.20** The meeting took note of the difficulties faced by Viet Nam and agreed to look at this holistically when reviewing the SCS Traffic Flows, especially as there were suggestions to establish parallel tracks in place of A1 and A202.

WP 04 Review of 'Selected Routes from the Asia/Pacific Region ATS Route Catalogue'

- **5.6.21** The secretariat presented selected routes from the APAC Route catalogue that was maintained by the APAC Regional Office, most of which were proposals from IATA, with a view to identifying requests that merited further work by the SCS MTFRG.
- **5.6.22** Many of the proposals had been in the catalogue for long periods and many were direct tracks from point to point which did not take into account the impact of such direct tracks on other airways.
- **5.6.23** IATA volunteered to have a relook at proposals that were generated by their organisation and would revert to a suitable forum with revisions and possibly withdrawing some which were no longer practical due to the changes in flows.
- **5.6.24** Subsequently, the meeting decided to identify routes that the SCS MTFRG should focus on as well as record requests from states for consideration in the future.
- **5.6.25** Thailand presented a proposal that was deliberated by the Mekong Delta Sub-Regional Group to create unidirectional parallel tracks for Airways A1 and A202. (Attachment 01). In view of the tremendous growth of traffic along these routes, the meeting agreed that this request should be given high priority.
- **5.6.26** China informed the meeting that they were studying the possibility of establishing parallel tracks for A1 and would revert to this meeting on progress. Hong Kong China too would study the impact of this parallel track on their ATM system, especially with the current difficulties with their surveillance equipment
- **5.6.27** China took note of the A202 proposal and informed the meeting that the possibility of the realignment of the airways but at this juncture there was only a slim possibility to

accommodate this proposal. However, they informed the meeting that they would need to conduct studies of the impact of this flow on ATM in their Southern Region as well as time to conduct safety assessments.

- **5.6.28** Vietnam informed the meeting that they were upgrading the Cat Bi airport to international status and proposed a direct route from Cat Bi to Haikou. Vietnam could also extend this route to Hanoi domestically. (Flimsy 02)
- **5.6.29** Malaysia presented 3 potential track shortening routes requested by a low cost carrier. The meeting took note of these requests and would analyse the merits of each request at a later stage after work to address issues involving high density flows were settled. (Flimsy 03, 04 & 05)
- **5.6.30** Thailand also brought to the attention of the meeting a request to establish unidirectional routes from their FIR to Kunming in China. The meeting took note of this request but decided that is was outside the scope of the SCS MTFRG. (Attachment 1)
- **5.6.31** IATA requested that this proposal be recorded because such routes can provide alternative access to destinations in China and thus relieve some congestion on the traditional routes.
- **5.6.32** Malaysia proposed the establishment of 3 tracks, namely from IKUKO to ENREP (for flights from WMKC to WBKK), VKR to BITOD [Eastbound] and IGARI to LASOB [Westbound] (for KLIA Operations and ongoing reorganisation within the Kuala Lumpur FIR). Malaysia also requested for a realignment of R208 as well the establishment of a new route parallel to the existing L642, M771, N892 and L625 from Kuala Lumpur to Hong Kong and beyond.
- 5.7 Agenda Item 6: Review and update of the task list of SCS MTFRG
- **5.7.1** The meeting deliberated on the various tasks under the purview of this review group and tabulated them for easy reference. The SCS MTFRG Task List included as <u>Appendix 5</u> to this report.
- 5.8 Agenda Item 7: Decisions/Recommendations to SEACG/23 and/or ATMSG/3
 - 5.8.1 SCS MTFRG/2 Draft Decision 01: The name for this group shall be :"South China Sea Traffic Flow Review Group (SCS TFRG/n) References in the TOR shall be duly amended.
 - 5.8.2 SCS MTFRG/2 Decision 02: Each member state is required to appoint one focal point of contact to provide the necessary Communications and Surveillance capabilities data to Thailand/MAAR who will compile this data for the use of the SCS TFRG.
- 5.9 Agenda Item 8: Any Other Business
- **5.9.1** Philippines presented the various FLAS/FLOS in operation within the Manila FIR and highlighted the many routes that required transitioning as well as the convergences/crossing

tracks that caused choke points. The problem was exacerbated by the airspace structure which had dense flows on a North-South Axis between Hong Kong and Indonesia/Australia and the East-West Axis catering to traffic from Southeast Asia to Northeast Asia. (Flimsy 01:

6. **CLOSING OF THE MEETING**

The meeting reviewed the Draft Report of the SCS MTFRG/2 and accepted it after some minor amendments and editorial corrections.

The Secretariat thanked the participants for their valuable contributions during the busy meeting program. The secretariat was happy that significant progress has been made in meeting the objectives of the review group and was confident further progress would be made in the coming meetings. The secretariat requested that this momentum be maintained by all. They requested that due attention be given to the items contained in the SCS MTFRG Task List (Appendix 5 refers).

The secretariat informed the participants that the decisions and the task list from this meeting will be tabled at the ATMSG/3, due to be held at the beginning of August 2015.

The secretariat proposed that the next meeting be held prior to SEACG/23, and the dates would be determined in due course after the meeting calendar for 2016 was published by the APAC RO. The secretariat anticipated that SCS MTFRG/3 would be held in late January or early February 2016.

The Secretariat, on behalf of all participants and the APAC RSO, thanked the hosts, ATMB-CAAC for their excellent efforts and support in organising this meeting.