INTERNATIONAL CIVIL AVIATION ORGANIZATION

ASIA AND PACIFIC OFFICE

&

MIDDLE EAST OFFICE

REPORT OF THE COMBINED TWELFTH MEETING OF THE ASIA/PACIFIC AIR TRAFFIC FLOW MANAGEMENT TASK FORCE (ATFM/TF/12) AND INTER REGIONAL AFGHANISTAN INTERFACE MEETING (IRAI)

CAIRO, EGYPT, 13 – 17 JULY 2008

The views expressed in this Report should be taken as those of the Meeting and not the Organization

Approved by the Meeting and published by
the ICAO Asia and Pacific Office, Bangkok, and
the ICAO Middle East Office, Cairo

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1.1 Introduction

1.1.1 The combined Twelfth Meeting of the Air Traffic Flow Management Task Force (ATFM/TF/12) and Inter Regional Afghanistan Interface Meeting (IRAI) was held at the ICAO Middle East Regional Office, Cairo, Egypt on Sunday, 13th to Thursday 17th July 2008.

1.2 Officers, Secretariat and Participants

1.2.1 Mr. Andrew Tiede, Regional Officer ATM of ICAO Asia and Pacific Regional Office, acted as the Moderator and Secretary for the combined ATFM/TF/12 and IRAI meetings. He was assisted in conducting the meeting by Mr. Jehad Faqir, Deputy Regional Director, ICAO Middle East Office and Mr. Raza Ali Gulam, Regional Officer CNS, ICAO Middle East Office.

1.2.2 Twenty-two (22) participants from Afghanistan, Malaysia, Pakistan, Singapore, Thailand, Uzbekistan, ICAO, IATA and IACA attended the meeting. An apology was received from Mr. Alami, Deputy Minister, Technical Ministry of Transport and Civil Aviation, Afghanistan who had been called upon to act as the Minister at short notice. Apologies were also received from Iran, India, United States and the European Office of ICAO. A list of participants is in **Attachment 1.**

1.3 Opening of the Meeting

1.3.1 The meeting was opened by Mr. Mohamed Khonji, Regional Director for the ICAO Middle East Office, Cairo who extended a warm welcome to all participants and, in particular, to participants from the States and organizations representing the interests of Afghanistan. He also thanked Asia/Pacific Regional Office, Bangkok for making it possible to hold the Combined ATFM/TF/12 and IRAI Meetings here in Cairo.

1.3.2 Mr. Khonji highlighted the strategic location of the Kabul FIR, which represents the interface between three of the ICAO regions, as extremely important in the civil traffic flow between South East Asia and Europe. Despite the continued and valued efforts made by Afghanistan to accommodate the requirements of civil traffic the limited availability of ATS routes and flight levels across the Kabul FIR continues to remain as a 'bottleneck' in the civil traffic flows. Mr. Khonji hoped that the discussions during this meeting in relation to all aspects of civil aviation operations affecting Afghanistan would result in enhancements to ATS routes, progress with implementation of RVSM, air traffic flow management matters, coordination arrangements between ACCs and updating of ATS operational Letters of Agreement (LOAs). Finally, he thanked all States for their presence and wished the meeting every success in its deliberations.

1.3.3 Mr. Andrew Tiede passed on the warm greetings and best wishes of Mr. Mokhtar A. Awan, Regional Director, ICAO Asia and Pacific Regional Office and welcomed participants to the meeting. He went on to say that this was the first occasion that the Bangkok and Cairo Regional Offices of ICAO had conducted such a joint meeting and he anticipated that the outcomes would be beneficial for both States and ICAO.

1.4 Documentation and Working Language

1.4.1 The meeting was conducted in English. All meeting documentation was in English.

1.4.2 Fifteen (15) working papers and 2 information papers were presented to the ATFM/TF/12 meeting. An additional 3 working papers and 2 information papers were considered by the IRAI meeting. A list of the papers is at **Attachment 2**

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ATFM/TF/12

Agenda Item 1: Adoption of Agenda

1.1 The ATFM/TF/12 meeting adopted the following agenda:

Agenda Item 1: Adoption of Agenda

Agenda item 2: Data Analysis

Agenda item 3: Operational issues

Agenda item 4: Safety and Airspace Monitoring issues

Agenda item 5: Establishment of ATFM Oversight Group

Agenda Item 6: Future Directions and Arrangements

Agenda Item 7: Any other business

Agenda Item 8: Date and venue for the next meeting

Agenda Item 2: Data Analysis

Overall Traffic Analysis

2.1 The meeting noted that 17,510 flights submitted slot requests to BOBCAT in the 11-month period between 5 July 2007 and 5 June 2008, with 94.27 percent (16,506 aircraft) accepting slot allocation.

2.2 The meeting also noted the average of 21% average nightly traffic increase from 38 aircraft in July 2006 to 54 in May 2008 with a peak of 66 aircraft on one recent occasion. The increase in average nightly traffic is also associated with the increase in the number of airline operators participating in the ATFM procedures, now 40 operators as of May 2008.

Traffic Distribution by Airport

2.3 The meeting noted weekly traffic numbers collected from the "Top-5 airports" with departures entering the Kabul FIR during the BOBCAT period between May 2007 and May 2008 shown in **Figure 1** below, based on ATFM data collected from States. While ATFM traffic from Bangkok is more or less stable at around 110 aircraft per week, traffic from Singapore is increasing to the same level as the Bangkok traffic. The meeting noted the trend of Delhi airport traffic increasing from 53 flights per week in May 2007 to 77 flights per week in May 2008. Moreover, the meeting noted stable traffic from Kuala Lumpur and the substantial and increasing traffic from Mumbai.

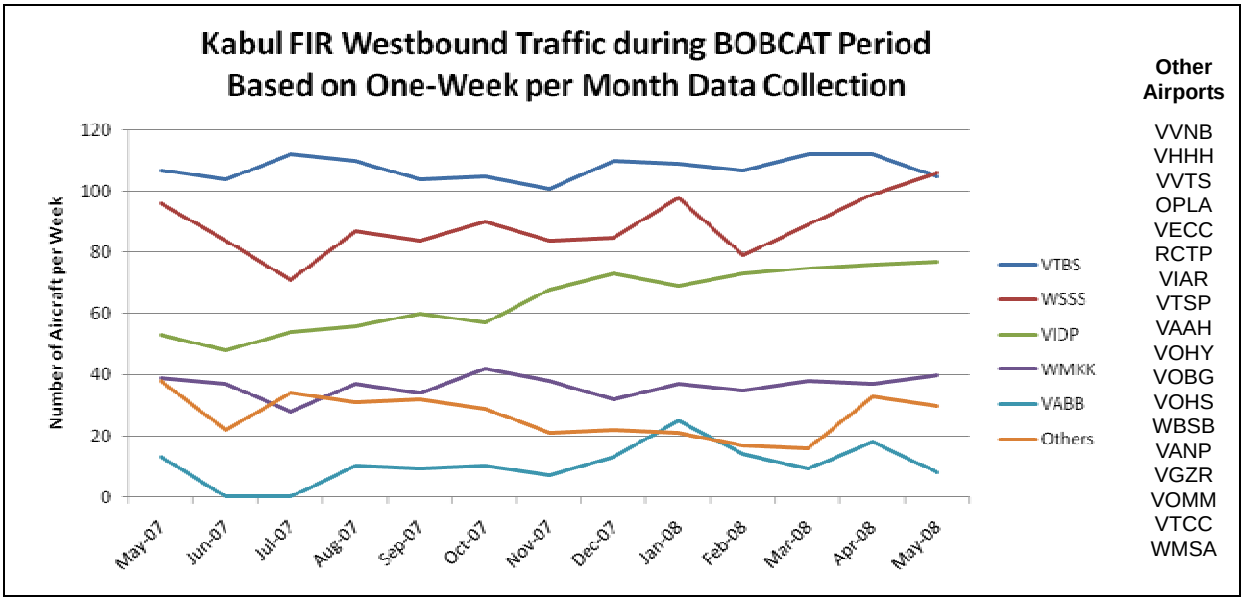


Figure 1: Top 5 Airports

Flights transiting the Kabul FIR at allocated or higher flight level

2.4 The meeting was advised that the percentage of aircraft transiting the Kabul FIR at the slot allocated flight level or higher flight level has declined from a peak prior to October 2007 as shown in **Figure 2** below. The meeting expressed concerns at the apparent deteriorating performance in the respect to the numbers of flights transiting the Kabul FIR at the allocated level or higher flight level. Nevertheless, the meeting was also reminded that during different parts of the year, due to the meteorological circumstances transiting the Kabul FIR at a flight level higher than slot allocation may not be preferable.

Total Weekly Traffic	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08
	346	295	299	331	323	333	319	335	359	325	339	375	366

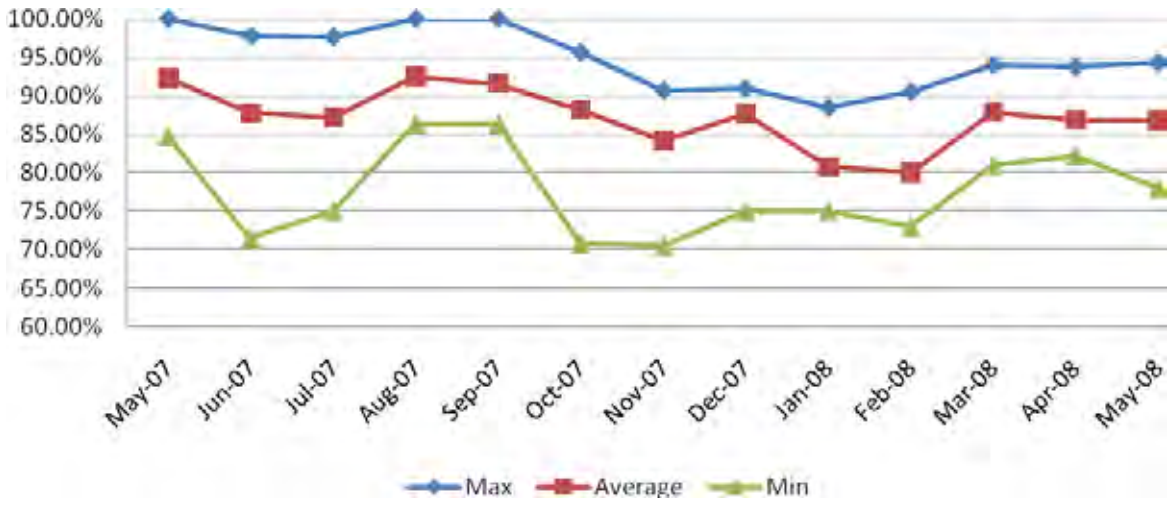


Figure 2: Flights transiting Kabul FIR at allocated or higher flight level

Flights Transiting the Kabul FIR Lower than Slot Allocation Flight Level

2.5 The meeting noted the stable percentage of traffic transiting the Kabul FIR at a flight level lower than slot allocation as shown in **Figure 3** below:

Number of Flights Transiting the Kabul FIR at a Flight Level Lower than Slot Allocation

	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08
Total Weekly Traffic	346	295	299	331	323	333	319	335	359	325	339	375	366
Lower than Slot Allocation	26	30	35	25	23	26	38	28	49	45	26	33	31

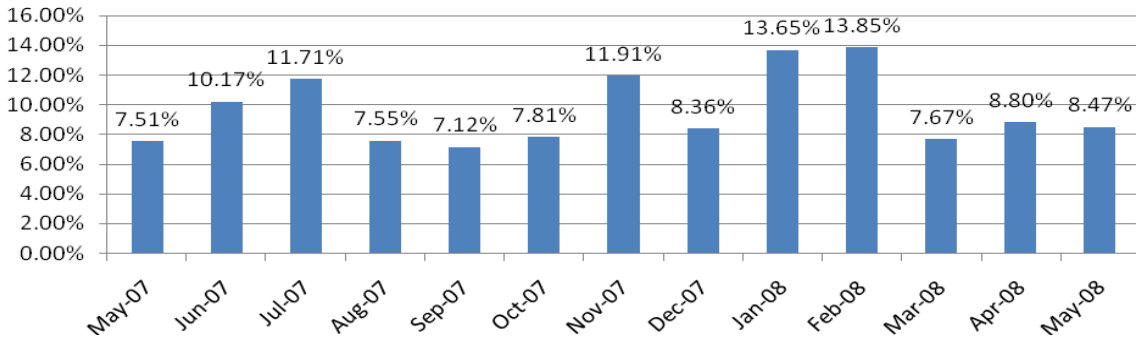


Figure 3: Flights transiting Kabul FIR at lower than allocated flight level

2.6 The meeting also reviewed the breakdown of the traffic transiting the Kabul FIR at a level lower than slot allocation (see **Figure 4**), noting the reasons leading to the undesirable outcomes.

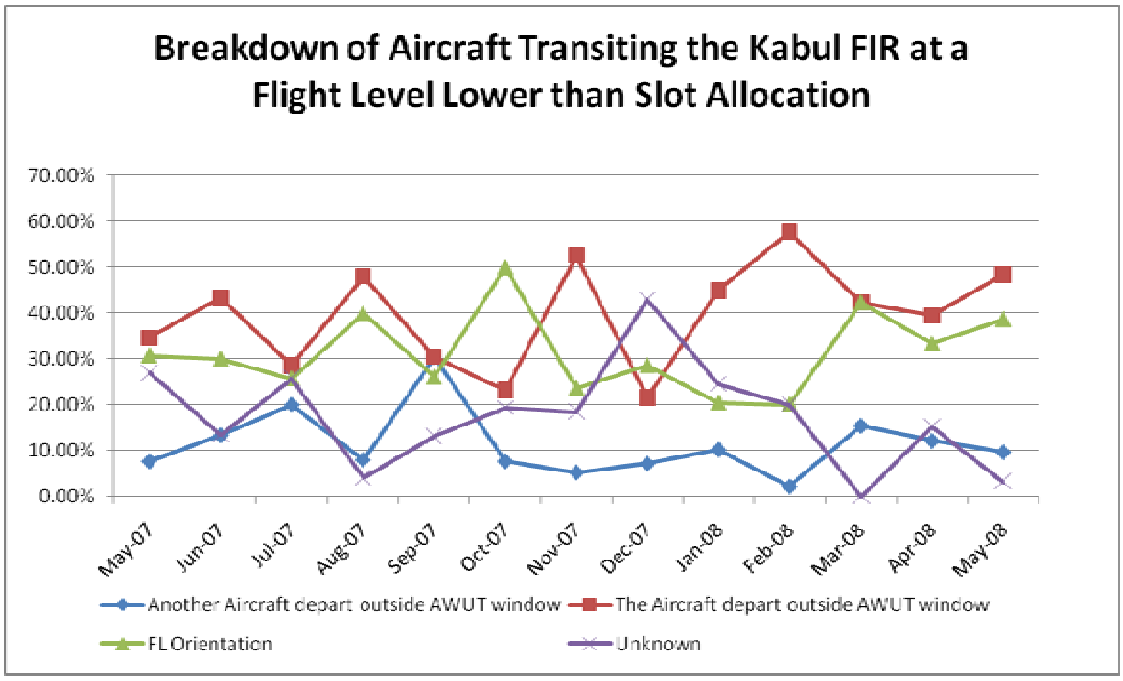


Figure 4: Attribution for transit at lower than allocated flight level.

2.7 The meeting recognized that most of the late departures had been unable to recover sufficient time to enter the Kabul FIR within the slot allocation window. The meeting also noted the relatively large percentage of flights departing a few minutes ahead of AWUT. Regrettably, the data indicated that the majority of these aircraft were also unable to adjust their flight to lose time to enter the Kabul FIR within the slot allocation window.

2.8 Both of these groups - the early and late departures - were major contributors to flight level issues affecting both the early/late flight itself and other flights. It was noted that the primary reason that flights transited the Kabul FIR at a flight level lower than slot allocation was because their own departure time was outside AWUT window i.e. those flights that did not depart on time subsequently transited Kabul FIR at a lower flight level than the slot allocation. The meeting also noted that an additional reason many aircraft transited at a lower level than allocated is attributable to another aircraft departing outside AWUT window i.e. flights that did not depart on time had a detrimental effect on those flights that were on time.

Flight Level complaints to ATFMU

2.9 The meeting was advised of the Bangkok ATFMU's awkward position when it received repetitive complaints from aircraft operators based on the expectation that the ATFMU was physically capable of ensuring that the flight level flown through Kabul by each flight was in accordance with the flight level in the BOBCAT slot allocation, placing undue pressure on ATFMU staff.

2.10 As the ATFMU has no tactical ATFM role and simply utilizes that BOBCAT system to provide a metering outcome in terms of strategic slot allocation, it is clearly the role of ANSPS and aircrew to tactically deliver the desired outcomes. The meeting agreed that an announcement be put on the BOBCAT system website explaining flight level issues and highlighting that the primary reason that flights transited the Kabul FIR at a flight level lower than slot allocation was because their own departure time was outside AWUT window and the Kabul entry fix time window was consequently not met. The announcement would then be linked to the Frequently Asked Questions (FAQ) page showing appropriate educational material explaining the direct relationship between poor on-time performance and the number of flights not achieving slot allocation flight level.

Aircraft without Slot Allocation

2.11 The meeting was advised that the number of aircraft transiting the Kabul FIR without slot allocation has remained low at an average of 1 flight/night for most part of the data collection, with the troubling exception of the months of April 2008 and May 2008 where 15 and 13 flights, respectively, transited Kabul FIR without slot allocation. Nonetheless, the meeting congratulated ANSPs involved in managing traffic in such a way that no aircraft without slot allocation has caused aircraft with slot allocation to transit the Kabul FIR at a flight level lower than slot allocation.

Flights Transiting the Kabul FIR at FL390

2.12 The meeting noted the low number of flights with slot allocation below FL390 but actually transiting the Kabul FIR at FL390. It was highlighted that A380 aircraft transited the Kabul FIR at FL390 on five out of seven days during the data collection week in May 2008.

Poor Departure Timeliness for VIDP (Delhi)

2.13 The BOBCAT development team advised that, due to the lack of data provided by Delhi, departure timeliness analysis can only be performed for February, April and May 2008. Noting the short flight time from Delhi to Kabul FIR entry and using the limited data available, Delhi

departures timeliness can be grouped into the six major groups described below, and depicted as shown in the following **Figure 5:**

a) *> 2 minutes early:* Departures earlier than 2 minutes prior to AWUT;

b) *≤ 2 minutes early:* Departures prior to AWUT but less than or equal to 2 minutes early;

c) *Okay Departure:* Departures inside AWUT window (between AWUT and AWUT + 5 minutes);

d) *≤ 2 minutes late:* Departures later than AWUT window but less than or equal to 2 minutes late (between AWUT + 5 minutes and AWUT + 7 minutes);

e) *> 2 minutes late:* Departures later than 7 minutes after AWUT; and,

f) *No Data / No Slot:* No departure data received or departed without slot allocation.

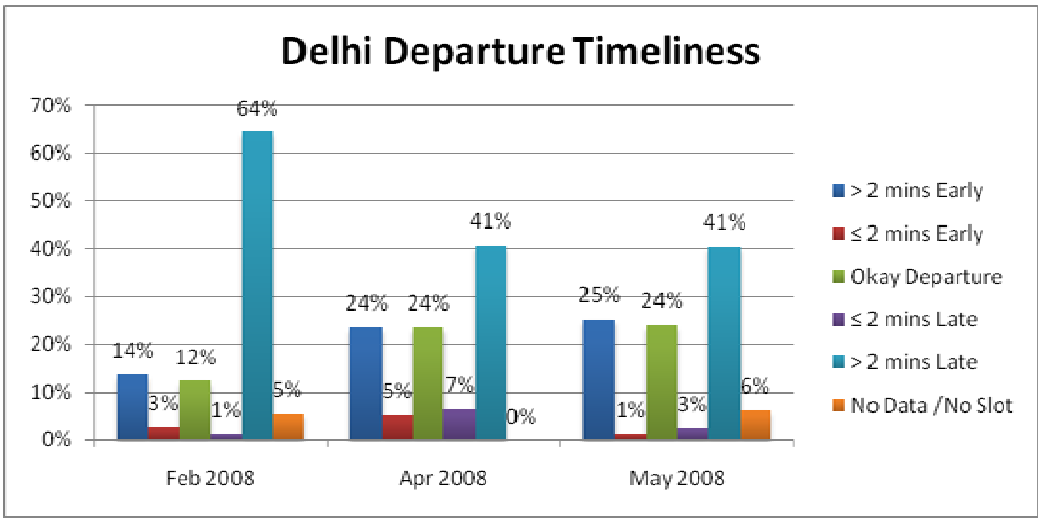


Figure 5: Timeliness of Delhi departures

2.14 Recognizing that the data analysis had previously identified that the primary reason for achieving lower than allocated flight level for the Kabul FIR transit was that of poor on time performance, the meeting expressed serious concern at the poor departures timeliness performance from Delhi. Noting that the other airports contributing large volumes of traffic to the BOBCAT flow (Singapore, Malaysia and Thailand) were reliably achieving departure performance much closer to the AWUT parameters, in the context of weekly traffic increase for Delhi from 53 flights/night in May 2007 to 77 flights/night in May 2008 it was likely that this volume of traffic departing outside the allocated AWUT was contributing significantly to the numbers of overall flights achieving lower than slot allocation flight level.

2.15 The meeting requested that the Regional Office bring these matters to the attention of India and also request urgent remediation and ongoing submission of data.

2.16 In addition, due to unavailability of required data, no analysis has been able to be completed for Mumbai. However, anecdotal information in relation to departures from Mumbai, the fifth most trafficked airport for aircraft entering the Kabul FIR during the BOBCAT period, suggested that investigations should also be made into departure timeliness for flights from Mumbai.

Retain 5 minute buffer

2.17 The meeting noted the disappointing percentage of flights entering the Kabul FIR within the BOBCAT allocated ETO window for the entry fix, as shown in **Figure 6** below.

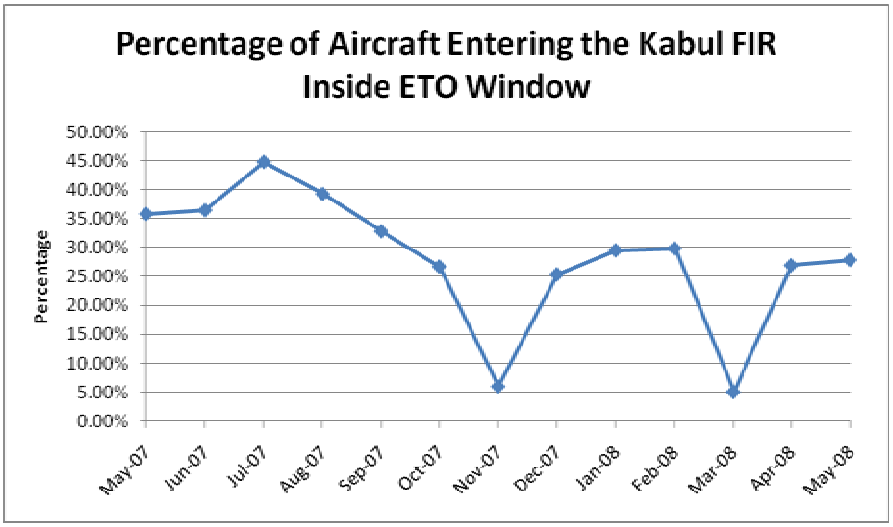


Figure 6: Flights within the ETO window at Kabul FIR entry fix

2.18 The meeting expressed strong concern at the continued poor on-time performance in relation to compliance with Kabul FIR entry fix slot times. An improvement in on-time performance would result in immediate ATFM performance improvement and, if sustained, enable reduction of system buffers. Reduction of system buffers would make more slots available per hour, including more slots during peak hours.

2.19 The meeting recognized that both ANSPs and airlines had important roles to play in improving on-time performance. Clearly, management of the flight by the operating crew had obvious impacts on the on-time performance. Actions taken by ATC in positioning the aircraft at the runway holding point contributed greatly to accurate AWUT compliance. Similarly, ATC actions in the enroute phase of flight involving speed control, vectoring, rerouting or other necessary traffic management activities could make it extremely difficult for the flight to comply with the Kabul entry time.

2.20 Notwithstanding, the meeting considered that varying the ATFM parameters including those relating to system buffer times was not desirable until the underlying factors causing poor on-time performance were better understood. The Task Force would continue to study these issues but agreed that the 5-minute buffer parameter would be retained until improvements in on-time performance justified a reduction in the parameter.

Ongoing data collection

2.21 Noting the valuable and factual information available to the ATFM/TF as a result of the data gathering and analysis, the meeting agreed that continued data collection was essential to improving ATFM performance. The meeting was advised of participation in data collection from November 2007 to May 2008, as shown in **Figure 7** below.

	Nov 2007	Dec 2007	Jan 2008	Feb 2008	Mar 2008	Apr 2008	May 2008
WSFC	7	7	7	7	7	7	7
WMKK	N/A	7	7	7	7	7	7
VTBB	7	7	7	7	7	7	7
VYYY	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOMF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VECF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VABF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VIDF	N/A	N/A	N/A	7	N/A	7	7
OPKR	N/A	7	N/A	N/A	N/A	N/A	N/A
OPLR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OAKX	7	7	7	7	7	7	7

Figure 7: Airports submitting 7 day per month data for ATFMU analysis

2.22 The meeting congratulated the consistent performance of Singapore, Malaysia, Thailand and Afghanistan in submitting adequate data on a timely basis. In the case of the Kabul ACC (which lacked automated equipment) the data collection was done manually and, as every flight went thorough the Kabul FIR, this represented a significant workload. The meeting highly commended the Kabul ACC for this commitment.

2.23 However, the meeting was extremely concerned and disappointed about the lack of data submission from India. The Regional Office would bring the matter to India's attention and seek urgent remediation.

2.24 Pakistan informed the meeting that data had been transmitted regularly, however had apparently not been received. Remedial actions taken during the meeting ensured that the outstanding data from Pakistan was provided to the ATFMU for analysis.

2.25 The meeting agreed that continuation of the existing data collection arrangements was necessary. Accordingly, the 7 consecutive day data collection would continue each month, commencing from the third Sunday of each month inclusive, in accordance with the current arrangements. States were requested to provide the data to the ATFMU as soon as possible after the end of the 7-day period on each occasion, to enable collation and analysis. Unless there were negative trends identified during the monthly analysis which required immediate attention, results would be collated and presented to the periodic meetings of the ATFM/TF.

2.26 In order to improve coordination on ATFM data collection, the meeting agreed that a focal point of contact from each State will need to be established. It was agreed that that participants of the ATFM Task Force meeting would be the best contact focal point and the Bangkok ATFMU would prepare an email address list accordingly. Furthermore, the meeting requested that the Bangkok ATFMU send reminder e-mails prior to the data collection week each month, in order to remind States that the data needed to be collected.

2.27 The meeting was also advised that AEROTHAI continued to research ways to improve the ATFM data collection process to reduce workload and increase accuracy. AEROTHAI would update future meetings on the progress of data collection enhancements as more information becomes available. In order to reduce workload related to data collection, the meeting agreed to simplify the data collection template to exclude fields not used for data analysis. The Bangkok ATFMU would make the necessary adjustments and then circulate the amended template via email.

Agenda Item 3: Operational Issues

Malaysia – Operational Feedback

3.1 Malaysia provided feedback on their experiences involving ATFM flights from January to June 2008 and had frequently experienced "bunching" situations on L759 and P628. There were a total of 3,467 BOBCAT flights that were flight-planned on P628, L759, M770 and M751/L507 in 2008 (January to June) as shown in **Table 1** below.

MONTHS (2008)	P628	L759	M770	L510	M751/ L507	Total Flights
January	254	312	35	3	1	605
February	261	211	21	2	0	495
March	272	282	29	3	0	586
April	246	310	48	1	6	611
May	291	311	27	0	4	633
June	286	226	21	2	2	537
TOTAL	1610	1652	181	11	13	3467
Percentage	*46.46*	*47.66*	*5.22*	*0.31*	*0.37*	*100*

TABLE 1 – Total Number of ATFM Flights Departing from Kuala Lumpur and Singapore

3.2 During the period, bunching occurred 123 times (involving 3 flights each time) along the following ATS routes:

a) P628 – 65 (inclusive of 11 flights diverted to L510)
b) L759 – 58

3.3 On some of these occasions KL ACC tactically resolved the bunching situations by track stretching. On other occasion the affected flights were fortunately able to climb to FL340 within KL FIR.

3.4 When bunching occurs on L759 and when none of the flights are able to climb to FL340, Bangkok ACC has agreed in allowing KL ACC to transfer the affected aircraft at FL260. However, Malaysia is strongly looking forward to the activation of the re-route procedures for L759 and M770 as had been agreed during ATFM/TF/9 (January 2007) as this would assist greatly in alleviating such bunching situations. As for P628, the affected flights were diverted to the new route L510 that had been established by ATFM/TF specifically for this purpose.

3.5 Malaysia noted that a number of flights departed too early or too late in relation to the stipulated AWUT and this had contributed to bunching. On one occasion a flight departing early resulting in bunching and pilot request to reduce to Mach 0.78 was approved to assist the situation.

3.6 On at least 6 occasions flights were planned on P628 when these flights do not transit Kabul FIR - in contravention to the requirement of Malaysian AIP ENR 3.3-8. On three occasions, these flights caused a bunching situation on P628. IATA requested that early information be provided to them on each such occasion so that follow up and remedial action could take place.

Thailand – Operational issues

3.7 Thailand advised the meeting that the occurrence of traffic bunching on L759 has increased over the past several months has culminated in aircraft being held down to FL260. There have also been occasions where aircraft have been required to carry out an orbit in the Bangkok FIR to gain the necessary separation needed outside of radar coverage crossing the Bay of Bengal.

3.8 Thailand reported that the average number of flights on L759 was normally 10-12 flight per night. However, from March to May 2008 the number of flights on some nights increased to 16-18 flights. During this short period 25 cases of bunching were reported on L759 and 9 cases required extensive ATC intervention.

3.9 The meeting recalled that during ATFM/TF/9 (January 2007), Thailand and India agreed in principle to use M770 as an alternate route when a traffic bunching situation occurred on L759. Flights affected by the bunching would be re-routed to M770 and rejoin L759 over India and the coordination procedures have been drafted, as shown in **Appendix A.** However this procedure has still not been implemented despite Thailand's continued efforts to finalize arrangements with India.

3.10 Accordingly, it was Thailand's view that the tactical flexibility of both flight levels and route allocations remained severely limited which often resulted in undesirable cruising levels, increased coordination between ACCs and flights being required to carry out orbits.

3.11 In light of the worsening traffic situation and, despite the previous in-principle agreement, the inability to implement the bunching procedures that had previously been agreed, Thailand requested that the possible use of Reroute in Flight (RIF) procedures be implemented during the ATFM period. The RIF details would be inserted in item 18 of the flight plan by the dispatchers detailing alternate routings and flight levels at anticipated bunching points within the Bangkok FIR. This meant that controllers in affected FIRs would share the same information in advance and be better equipped to collaboratively and tactically mitigate the bunching problems within the concerned FIRs.

3.12 The meeting noted that the Reclearance In Flight (RIF) procedure was published in the ICAO PANS-ATM (Doc.4444), and states that:

> *RIF/ The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to reclearance in flight. Examples: RIF/DTA HEC KLAX; RIF/ESP G94 CLA APPH; RIF/LEMD"*.

3.13 Accordingly, as RIF was to be used for management of flights to a revised destination aerodrome, the procedure was not applicable in the context of the bunching on L759.

3.14 Noting the urgency of the situation, the meeting agreed that:

a) Thailand continue coordination with India (Kolkata FIR) to implement the bypass procedures,

b) The Regional Office bring the matter to the attention of India and seek the urgent implementation of the procedures shown in Appendix A, in accordance with the agreements previously given by India as recorded in the Report of ATFM/TF/9,

c) In the event that the bypass procedures between Bangkok FIR and Kolkata FIR could not be implemented by AIRAC 23 October 2008:

- Thailand would publish NOTAM advising of ATFM bunching issue in Bangkok FIR and requiring flights during the BOBCAT period to include in Field 18 of Flight Plan RMK/ details of alternate route & level acceptable to be flown if flight was affected by a bunching situation.

3.15 The meeting and IATA expressed strong dissatisfaction with the possibility of the arrangements in c) above being implemented and urged India and Thailand to quickly and collaboratively address this matter.

Activation of extended UL333

3.16 Arising from the previous work of the ATFM/TF and discussions held during the RDGE/7 meeting, Afghanistan had agreed to implement an ATS route segment between SERKA and SOKAM. According, Afghanistan had recently published AIP Supplement 01/08 (**Appendix B** refers) which implements route SERKA - SOKAM as an extension to UL333 with effect from AIRAC 28 August 2008.

3.17 The meeting recognised that before traffic could use the route, updated operational Letters of Agreement (LOAs) between Afghanistan and Iran, and between Afghanistan and Pakistan, would need to be signed. The meeting was informed that arrangements were already in place for a meeting between Afghanistan and Pakistan on 21 July 2008 to finalize and sign Letters of Agreement. In the case of the LOA between Afghanistan and Iran, the ICAO Middle East Office will assist in coordinating the signing of the LOA, as detailed in paragraphs 6.13 – 6.15 of the following IRAI meeting report.

3.18 With effect from 28 August, an additional sequencing point at SERKA would be inserted into the BOBCAT software to sequence flights via SERKA/UL333 in the same manner as the other routes crossing Pakistan/Afghanistan. In order to enable BOBCAT sequencing via SERKA, States would need to extend the provisions of the existing AIP Supplement for ATFM procedures to include SERKA/UL333. Once the amended operational LOAs with Afghanistan were signed, the BOBCAT Development Team would enable SERKA as a sequencing point in the BOBCAT software, make required changes to BOBCAT templates and documentation and inform users by way of the BOBCAT Announcements page. The Regional Office would request States via letter to issue an appropriate NOTAM using the model text shown in **Appendix C**.

3.19 The meeting conveyed strong appreciation to Afghanistan for their goodwill and assistance in implementing the extension to UL333. Many challenges had been overcome in arranging the implementation and it was anticipated that this route would bring significant extra capacity and flexibility to civil flights transiting Kabul FIR.

Removal of B466 restriction

3.20 In addition to activation of the extension to UL333, Afghanistan and Pakistan reached agreement that Pakistan would provide 10-minute westbound separation of aircraft converging at waypoint PAROD (in Kabul FIR) in order to enable use of westbound ATS route segment B466 (SERKA-PAROD) as an alternate entry point into the Kabul FIR. Appropriate provisions will be included in Afghanistan-Pakistan LOAs and the activation of B466 will also take place on 28 August 2008, coincident with the activation of the UL333 extension. B466 will be activated for north-westbound traffic only; flights to the south-east will not be permitted. NOTAM/AIP SUP will be

issued for the change and will address the removal of existing restriction (5 hour closure) on the usage of B466.

UL333 and B466 implementation management

BOBCAT Configuration

3.21 In view of the simultaneous activation of UL333 and B466, the meeting agreed that the following actions need to be taken in the BOBCAT configuration:

a) SERKA waypoint established to accommodate SERKA-SOKAM and SERKA-PAROD-CHARN traffic entering the Kabul FIR westbound during the BOBCAT period;

b) Metering waypoint ASLUM changed to PAROD to accommodate SERKA-PAROD-CHARN and ASLUM-PAROD-CHARN traffic; and

c) SERKA and PAROD configured to space aircraft 15 minutes apart (i.e.10 minutes separation + 5 minute buffer).

3.22 The BOBCAT system will need to be re-configured to take into account these route changes and to allow SERKA-PAROD-CHARN aircraft to obtain slot allocation at both SERKA and PAROD. Recognizing that slot request templates utilizing waypoint ASLUM need to be adjusted, the meeting agreed that a BOBCAT Announcement be made on the BOBCAT system so that airlines involved will have time to prepare for the new configuration becoming effective on 28 August 2008.

Bunching – Kuala Lumpur FIR

3.23 Malaysia drew attention to the probable bunching issues that would arise in the Kuala Lumpur FIR (KL FIR) as a consequence of the activation of UL333 and removal of restrictions on B466 in the Kabul FIR. The establishment of UL333 (SERKA/SOKAM) and removal of B466 restriction (SERKA/PAROD) will take effect on AIRAC 28 August 2008. As well as providing significant relief for flights departing from India, these new routes provide an opportunity for flights departing from airports east of India (i.e. Kuala Lumpur and Singapore) to enter Kabul FIR at SERKA.

P628 Issues

3.24 In the case of P628, flights using this route could make their way to SERKA. This would potentially add traffic to P628 in the KL FIR and add to the existing bunching problem. The meeting agreed that P628 should not be used to feed SERKA and therefore a restriction would be added by way of the interface with the BOBCAT system. A dispatcher requesting a slot for P628 would be asked to answer questions along the lines of:

a) Are you coming from eastern side of the Bay of Bengal?
b) Are you planning to go through SERKA?
c) Are you planning to go through P628?

3.25 In the case of ‘Yes’ answers to all three questions, the dispatcher would be advised that a slot can not be issued for this flight planning configuration.

N571/N877 Issues

3.26 As a result of the above restriction on P628, flights are likely to choose a route to the south and therefore adopt N571/N877 to reach SERKA. Currently during BOBCAT hours of operation, flights proceeding to destinations in Europe will normally route on N571 and N571/N877 when these operators decide not to participate in BOBCAT. Consequently these routes already have reasonable traffic loadings of non-BOBCAT flights and the addition of the extra BOBCAT flights is expected to lead to additional examples of the bunching problems previously experienced with other routes in the KL FIR. Therefore access to SERKA via N571/N877 needs to be carefully managed.

3.27 The meeting agreed that suitable traffic management measures should be in place to assist the Kuala Lumpur ATC for traffic originating from Singapore and Kuala Lumpur. Accordingly, NOTAM issued by Malaysia to enable SERKA as a sequencing point (paragraph 3.18 above refers) should notify the temporary restriction that flights transiting through Kuala Lumpur FIR shall not flight plan to enter Kabul FIR via UL333 or track B466 SERKA-PAROD UFN. Malaysia and Singapore will further discuss arrangements to mitigate the bunching issue.

3.28 To manage traffic bunching on N877, flights need to be able to be diverted to L510. This will require the establishment of connector routes at the Malaysia and India ends of L510, respectively. The Regional Office would coordinate with India to establish such a connector route from towards the eastern end of L510 to rejoin N877 over India. Concurrently, Malaysia would implement an appropriate route segment within the Kuala Lumpur FIR. Also, the route segment on N571 between LAGOG to BIKEN should be closed during the BOBCAT hours of operation in order to ensure N571 is unavailable during the period. NOTAM action is required by India (Chennai FIR); Regional Office will conduct the coordination with India to achieve this.

3.29 Noting that access to SERKA via P628 would be managed by the BOBCAT software process as described in paragraph 3.24 above, when the connector routes to L510 were implemented and NOTAM action had been taken to make N571 unavailable west of LAGOG during the BOBCAT period, access to SERKA for flights transiting through Kuala Lumpur FIR would be enabled.

3.30 The meeting noted the importance of fully meeting the conditions in paragraph 3.28 above in order to maximize the benefits of the implementation of UL333. Accordingly the meeting requested that the Regional Office conduct urgent coordination with India and encourage India to fulfill these conditions by AIRAC 28 August 2008, coincident with the activation of UL333 in Kabul FIR.

Pakistan ATS Routes vicinity DI Khan

3.31 Pakistan informed the meeting that good progress had been made with regard to parallel routes in the vicinity of DI Khan for westbound flights entering the Kabul FIR at PAVLO and SITAX. It was anticipated that the internal Pakistan processes would be completed within the next few months and the meeting encouraged Pakistan to go ahead with these and related implementations without waiting for the next meeting of the ATFM/TF.

3.32 In relation to BOBCAT configuration, when the SAMAR-LAJAK and/or BUTOP-JHANG or similar route segments become available eliminating the ‘bottleneck’ at DI, the following actions need to be taken:

a) Implementation of both route segments should occur simultaneously,
b) Waypoint DI removed from the BOBCAT system; and
c) Waypoint SITAX, currently used for A466-bound traffic changed to LAJAK.

3.33 Delta airlines expressed concern that the removal of SITAX as a Kabul FIR access point would result in increased track miles to be flown for their ultra long haul operations ex Mumbai. However, the meeting recognized that the relatively low frequency of these types of operations did not outweigh the overall benefits to be achieved for traffic flows through Pakistan and Kabul FIRs by removal of SITAX. The availability of SERKA – PAROD as agreed during this meeting and the increase in overall capacity by creating two routes out of the existing 'single route' through DI Khan would provide an increase in opportunities for FL310 instead of FL280. Additionally, to enable the transition between airways G325 and M881, Pakistan agreed to create an additional waypoint in the vicinity of Adina to facilitate access to LAJAK.

3.34 It is recognized that while re-configuration workload on the Bangkok ATFMU would be minor, slot request templates using DI will need to be redone. Accordingly airlines involved need to be notified in advance prior to implementation of the change. Publication of Pakistan AIP Supplement for the route changes would trigger the necessary changes in the BOBCAT configuration.

P628 - Minimum Enroute Altitude (MEA) entering Karachi FIR at VIKIT

3.35 The ATFM/TF had previously requested Pakistan to consider lowering the MEA on P628 from VIKIT (Delhi/Karachi FIR Boundary) from FL320 to FL300, especially during ATFM operations. This would be consistent with the position by India under which they would also make FL300 available prior to VIKIT on P628.

3.36 Pakistan advised the meeting that, following study, Pakistan would be able to lower the MEA on P628/G792 to FL300 provided that India (Delhi ACC) was able to treat FL300/FL320 as the same level for transfer of control at VIKIT, in a similar manner to the existing arrangements at VIKIT for FL340/FL360. Regrettably, India was not represented at the meeting, so the Regional Office would assist coordination between India and Pakistan on this matter.

3.37 The meeting also noted that making FL280 available in Kabul FIR after ASLUM would be of assistance in this respect and requested that Afghanistan investigate this possibility.

G792 from Lahore to Karachi FIR

3.38 Pakistan advised that to simplify ATM procedures between Lahore and Karachi FIR in simultaneously operating B466 and G792 during the BOBCAT period, agreement had been reached whereby responsibility of G792 would be reallocated from Lahore ACC across to Karachi ACC so that both routes would be under control of one ACC (Karachi) prior to entering Kabul FIR. These arrangements would commence operationally from 28 August 2008.

Contingency route via TOXEX entering Kabul FIR

3.39 The meeting discussed the regular diversions that had been necessary for flights entering the Kabul FIR from Pakistan on N644. The issue had persisted for some years, however the meeting recognized that the requirements in this situation could change quickly. Nevertheless, the meeting considered that the promulgation of a conditional ATS route would be a more efficient way to manage the traffic and would save workload for pilots and ATCOs as the repetitive coordination and issuing of amended route clearances for this 'standard' diversion would be avoided.

3.40 The meeting agreed that a conditional route from DI Khan in Pakistan, offsetting south to a point about 18 - 20 miles south of PAVLO on the Kabul FIR boundary, then paralleling south of N644 for about 100 miles before turning north to rejoin N644 would be appropriate. Although recognizing that the magnitude of any offset to N644 should be considered in terms of lateral infringement of the adjacent L750 and preferably remain at least 50NM clear of the L750

centreline, Pakistan was in agreement with the proposal. IATA expressed strong support for this proposal.

3.41 The meeting requested Afghanistan to promulgate by NOTAM an appropriate conditional route that addressed these circumstances, using the depiction in **Appendix D** as guidance**.** Afghanistan would study the circumstances and consider appropriate actions.

Agenda Item 4: Safety and Airspace Monitoring Considerations

4.1 The meeting did not identify any safety or airspace monitoring considerations for discussion.

Agenda Item 5: Establishment of ATFM Oversight Group

Future of the ATFM/TF

5.1 During ATFM/TF/11 (November 2007) it was agreed that the Phase 1 implementation program dealing with the management of Kabul FIR transit flights should be considered as completed. The meeting also recognized many aspects of the Phase 2 and Phase 3 implementation objectives described in the terms of reference (TOR) had also been addressed. It was therefore possible that the ATFM/TF could be considered for dissolution in due course. ATFM/TF/11 agreed that the matter should be more fully addressed at the next meeting in July 2008.

5.2 The meeting was informed that the Key Priorities for CNS/ATM Implementation in the Asia/Pacific Region adopted by APANPIRG/18 (September 2007) include ATFM, in which States are to consider and implement aspects of ATFM including:

a) centralized ATFM;
b) inter-regional cooperative ATFM;
c) establishment of ATFM databases;
d) application of strategic ATFM planning;
e) application of tactical ATFM planning; and
f) assessment of economic and environmental impact of the implementation of the ATFM system

5.3 The ATM/AIS/SAR Sub Group Task List identifies the implementation of ATFM as Priority A (tasks of a high priority on which work should be expedited). This task supports Global Performance Indicators GPI/6-Air Traffic Flow Management; GPI/8-Collaborative Airspace Design and Development and GPI/16-Decision Support and Alerting System.

5.4 During ATM/AIS/SAR/SG/18 (June 2008), it was noted that in coordination with Japan the Regional Office had scheduled a 3-day Regional ATFM Seminar/Workshop during October 2008 in Fukuoka to address APANPIRG Conclusion 18/7. Preliminary coordination for the conduct of the ATFM Seminar/Workshop had commenced and venue bookings had been made in Fukuoka, Japan for the three day period Tuesday, 7 October until Thursday, 9 October 2008.

5.5 ATM/AIS/SAR/SG/18 considered that participants at the ATFM Seminar/Workshop would be expected to develop a shared appreciation of the broader context of ATFM as a logical extension of the provision of basic air traffic control (ATC). The Workshop component could be tasked with identifying and recommending appropriate regional objectives to include, amongst other things, a review of the activities of the Bay of Bengal ATFM/TF and consider variations to its TOR.

5.6 Given the expectation that the ATFM Seminar/Workshop will engage in further discussions on the TOR established for the ATFM/TF, and the possibility that revisions may be recommended that will expand the work to include implementation within the Asia/Pacific Region, the meeting considered that it would not be appropriate to recommend dissolution of the ATFM/TF during the deliberations of ATFM/TF/12.

5.7 It was agreed that the outcomes of the October 2008 ATFM Seminar/Workshop and other relevant commentary from APANPIRG/19 (September 2008) should be reviewed by the ATFM/TF prior to making a decision on the future of the ATFM/TF. Accordingly, discussion on the establishment of the BOBCAT Scrutiny Group to oversight ATFM operations would be deferred indefinitely.

Agenda Item 6: Future Directions and Arrangements

Enhancements to BOBCAT System

6.1 Thailand presented details of proposed updates to the BOBCAT system in the areas of Slot Request History, Slot Allocation History and manageability enhancements to the system. Referred to as BOBCAT Version 1.03, the software enhancements are scheduled for availability coincident with the August 28 AIRAC date. Prototype user interfaces for the Slot Request History page (see **Figure 8** below) and Slot Allocation History page (**Figure 9** below) were demonstrated. The Version 1.03 manageability enhancements would further reduce workload in the Bangkok ATFMU as well as enhancing ATFMU reliability such that the ATFMU could now be independently run from any location with internet access.

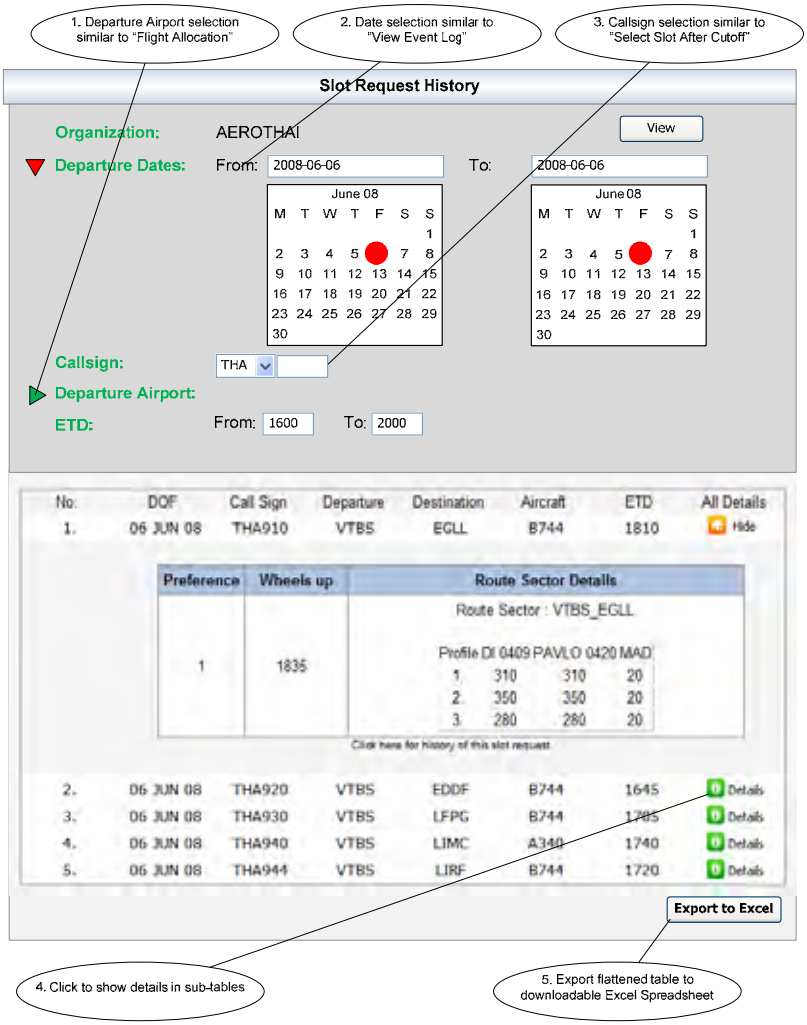
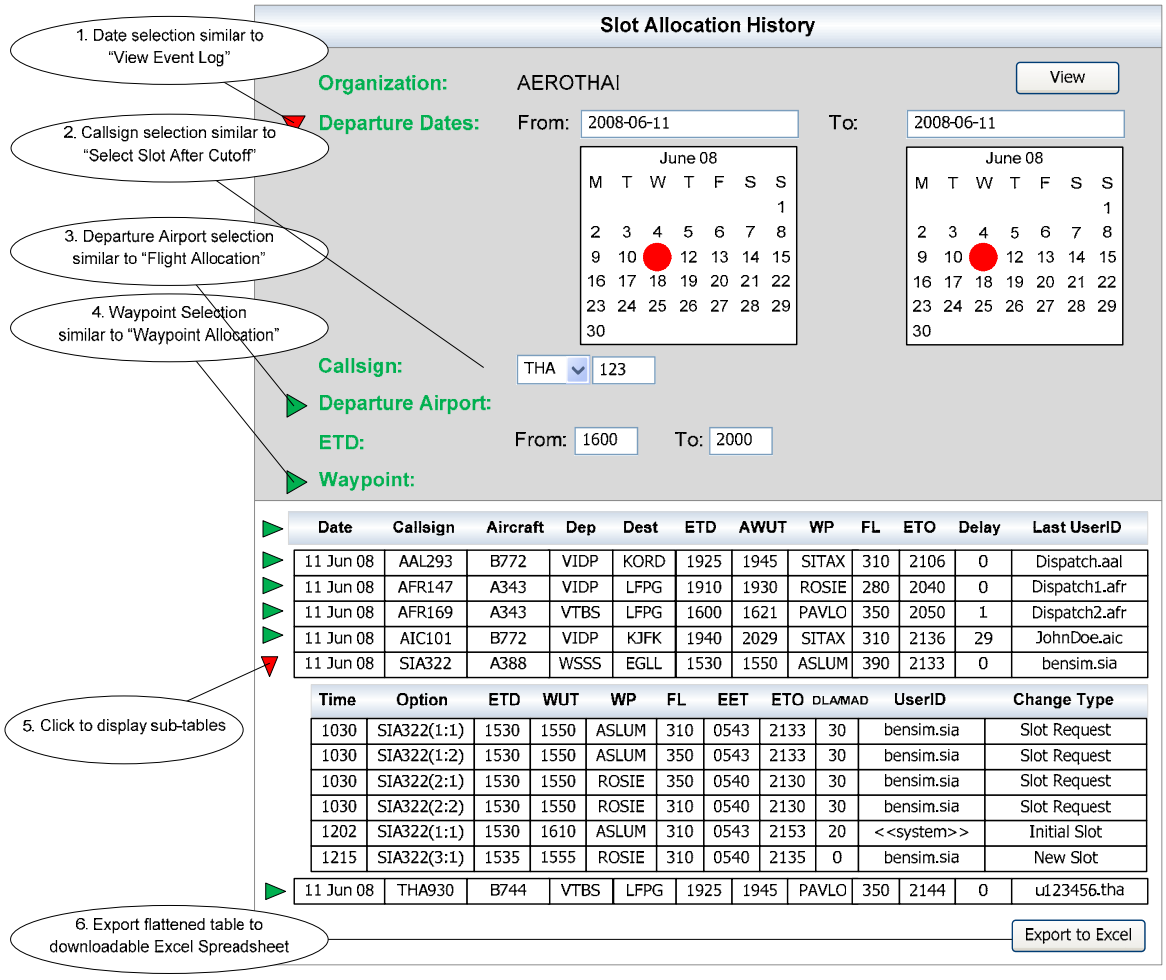


Figure 8: Slot Request History page



Date	Callsign	Aircraft	Dep	Dest	ETD	AWUT	WP	FL	ETO	Delay	Last UserID
11 Jun 08	AAL293	B772	VIDP	KORD	1925	1945	SITAX	310	2106	0	Dispatch.aal
11 Jun 08	AFR147	A343	VIDP	LFPG	1910	1930	ROSIE	280	2040	0	Dispatch1.afr
11 Jun 08	AFR169	A343	VTBS	LFPG	1600	1621	PAVLO	350	2050	1	Dispatch2.afr
11 Jun 08	AIC101	B772	VIDP	KJFK	1940	2029	SITAX	310	2136	29	JohnDoe.aic
11 Jun 08	SIA322	A388	WSSS	EGLL	1530	1550	ASLUM	390	2133	0	bensim.sia

Time	Option	ETD	WUT	WP	FL	EET	ETO DLA/MAD		UserID	Change Type
1030	SIA322(1:1)	1530	1550	ASLUM	310	0543	2133	30	bensim.sia	Slot Request
1030	SIA322(1:2)	1530	1550	ASLUM	350	0543	2133	30	bensim.sia	Slot Request
1030	SIA322(2:1)	1530	1550	ROSIE	350	0540	2130	30	bensim.sia	Slot Request
1030	SIA322(2:2)	1530	1550	ROSIE	310	0540	2130	30	bensim.sia	Slot Request
1202	SIA322(1:1)	1530	1610	ASLUM	310	0543	2153	20	<<system>>	Initial Slot
1215	SIA322(3:1)	1535	1555	ROSIE	310	0540	2135	0	bensim.sia	New Slot

11 Jun 08	THA930	B744	VTBS	LFPG	1925	1945	PAVLO	350	2144	0	u123456.tha

Figure 9: Slot Allocation History page

6.2 The meeting supported the development and adoption of these pages as they would reduce the workload of the Bangkok ATFMU in various aspects. Recognizing that the Slot Request and Slot Allocation History pages developed for use by the Bangkok ATFMU would also be of benefit to the airlines using the system, the meeting agreed that these pages should also be made available to affected airlines involved. Access availability for the airlines would be restricted such that that each airline can only view that airline's slot request and allocation histories, information about other airlines would not be able to be accessed.

Review Task List

6.3 In reviewing the Task List of the ATFM/TF, the meeting was appraised of the status of items considered complete and suitable for closure as well as those remaining open, noting the progress that had been made.

Review priority at FL280

6.4 In considering Action Item 11/9, which called for a review of the BOBCAT priority allocation of FL280 for flights departing India and Pakistan, the meeting requested that the BOBCAT development team conduct suitable simulations based on archival data. Data from a series of high traffic days would be selected and the slot allocation process run offline with the FL280 priority removed. The resulting slot allocations would be compared with the allocations that had actually

made with the FL280 priority enabled. Comparison of the two slot allocation results would enable the impact to be assessed across all the flights in the BOBCAT system, not just flights from India and Pakistan.

6.5 Recognizing that the next task force meeting would not be held for many months, the meeting agreed that an assessment of the simulation outcomes would be made by an oversight group comprising the BOBCAT Development Team, ICAO Bangkok Regional Office and IATA Singapore Office as soon as the simulation results were available. The meeting agreed that depending on the outcomes of the simulations, if considered appropriate by the oversight group a decision to remove the priority at FL280 would be made and actioned in the live BOBCAT platform. Follow up reporting would be made to the next ATFM/TF meeting.

6.6 The meeting agreed that the updated Task List included as **Appendix E** accurately reflected the work programme of the ATFM/TF and urged all parties to take action as soon as possible in relation to progressing all items in the Task List.

Agenda Item 7: Any other business

Nomination for 2008 ATCA Awards

7.1 The meeting was informed of the availability of the United States Air Traffic Control Association (ATCA)'s annual awards programme, which is designed to:

> *"give special recognition to those persons and/or organizations engaged in the development, operation or maintenance of the world-wide air traffic control system for outstanding achievement or outstanding contribution to ATC ... [by adding] to the quality, safety or efficiency of air traffic control."*

7.2 The meeting was advised that upon consultation with ATCA officials, it was possible that implementation of the ATFM procedure for westbound aircraft transiting the Kabul FIR during the busy night time period would fit the definition of the following awards:

a) ATCA Industrial Award: a Medallion Award presented to an industry or a group of industries for outstanding achievement or contribution, which has added to the quality or safety or efficiency of air traffic control; and

b) ATCA Life Cycle Management Award: award recognizing the individual(s) or group whose design, development, maintenance or logistical support had a significant positive impact on the performance or operation of an important ATC system in the previous year.

7.3 Noting the significance of the July 2005 implementation of the international long range ATFM procedures the meeting supported the nomination of the Asia-Pacific Air Traffic Flow Management Task Force for the 2008 ATCA Industrial Award and 2008 ATCA Life Cycle Management Award.

7.4 Notwithstanding the deep involvement of eight core States, ICAO Asia/Pacific Regional Office and IATA and its member airlines, in view that a nominee name as well as contact point was required for the purpose of ATCA Awards nomination, the meeting agreed that the nominee name for the award be Dr. Priti Hetrakul, President, AEROTHAI. The meeting also agreed that Mr. Tinnagorn Choowong, Director of Air Traffic Management Centre, AEROTHAI, be point of contact

for the nomination, given his direct involvement in the ATFM task force from its first meeting as well as his oversight of the Bangkok ATFMU.

7.5 An appropriate submission describing the scope of the ATFM implementation was agreed by the meeting and provided to the ATCA awards committee. ATCA subsequently acknowledged receipt of the ATFM/TF submission.

ATFM Seminar/Workshop, Japan, October 2008

7.6 In coordination with Japan, the Regional Office has scheduled a 3 day Regional ATFM Seminar from 7 – 9 October 2008 in Fukuoka, to address APANPIRG Conclusion 18/7. The JCAB will graciously host the event and venue bookings have been made in Fukuoka, Japan for the three day period Tuesday 7 October until Thursday 9 October, 2008. The initial coordination has concluded that one of the most important outputs of the activity should be some conclusions or recommendations as to how to best progress ATFM matters for the Asia/Pacific Region.

7.7 In this respect, the ATM/AIS/SAR/SG/18 meeting recognized that participants at the Seminar/Workshop should develop a shared appreciation of the broader context of ATFM as a logical extension of the provision of basic ATC - as provided in high traffic/ high technology environments, on the one hand, and in low technology circumstances on the other hand. Existing ATFM issues and capabilities in the Asia Pacific region could be established by the sharing of current traffic management experiences, issues and lessons learnt by regional providers.

7.8 The Workshop component could be tasked with identifying and recommending appropriate regional objectives, for example:

a) Development of a high level ATFM Concept of Operations for the Asia/Pacific Region,

b) Enhancement of the ATFM Communications document referred to above to advance it to a regional guidance material,

c) Recognizing the necessity for accurate data assessment, develop mechanisms for regional data gathering, collation and sharing requirements, and

d) Review activities of the Bay of Bengal ATFM Task Force and consider variations to its Terms of Reference.

7.9 As agreed by ATM/AIS/SAR/SG/18, the United States would assist the Regional Office by leading a small coordination group, working by correspondence, to update the draft programme (**Appendix F** refers) that had been prepared by the Regional Office. Assistance is sought from States and International Organisations with experience in ATFM to provide appropriate expert presentations during the Seminar/Workshop.

ATFM Terminology

7.10 The meeting recalled that APANPIRG/18 (September 2008) had reviewed an *Interim Guideline for ATFM Communication* that was in use between Japan and the United States for operations associated with the North Pacific Route structure (NOPAC), for consideration for development as regional guidance material. APANPIRG/18 supported this initiative, and encouraged Japan and the United States to continue this work and present the documentation to the ATM/AIS/SAR/SG/18 meeting in 2008 in accordance with the established procedure of APANPIRG.

7.11 Following a review of the *Interim Guideline*, ATFM/TF/11 (November 2007) recognized the value of having a standardized regional guidance material of this nature and noted the well thought out format and general text of the document. However, the ATFM/TF/11 meeting considered that in order to be useful as a regional guidance material the phraseologies used in the examples should be aligned more closely with ICAO and proposed a number of changes in this regard, along with some additional editorial suggestions.

7.12 Information was presented to the meeting on behalf of the United States comprising a reworded draft document, now titled *ATFM Communication Manual for the Asia Pacific Region* (**Appendix G** refers) which incorporated the feedback that had been provided by ATFM/TF/11. The United States and Japan expressed their appreciation to the ATFM/TF for the time and effort put forth to provide detailed recommendations for improving this document and recognized that further discussion and amendment will be required.

7.13 In conducting a review of the updated document, the meeting recognized that there was limited capacity within the ATFM/TF to provide further enhancement to the document. The work of the ATFM/TF was primarily focused on the application of strategic flow management metering by a single ATFMU in a specific circumstance associated with traffic flows through the Kabul FIR. Conversely, the activities described in the *Communication Guideline* related to the day to day tactical interactions between two or more operational ATFM units. Accordingly, the meeting considered that further work in developing this document would be more usefully undertaken in forums where significant ATFM tactical expertise would be available.

7.14 The meeting agreed that the ATFM Seminar/Workshop (October 2008, Japan) would provide a suitable venue to continue this work and urged States to participate in this event.

Caribbean/South American ATFM Concept of Operations

7.15 The Secretariat forwarded information that had been provided to the ATM/AIS/SAR/SG/17 meeting (July 2007) regarding the on-going ATFM initiatives in the Caribbean and South American areas. This work had led to the development, in conjunction with the Mexico and Lima Regional Offices of ICAO, of a formal ATFM Concept of Operations for these areas, a draft version of which had been considered by ATFM/TF/11.

7.16 In circumstances similar to those expressed in paragraph 7.13 above, the meeting recognized that the very specific focus of the ATFM/TF did not provide appropriate expertise to assist in modifying the CAR/SAM CONOPS to form an Asia/Pacific guidance material. The meeting considered that the ATFM Seminar/Workshop provided the best opportunity for this work to be progressed.

Agenda Item 8: Date and venue for the next meeting

8.1 The meeting agreed that the ability to interface face-to-face with operational representatives from Afghanistan and Pakistan had led directly to many of the beneficial outcomes that had been achieved by the meeting. Conversely, because India was not represented at the meeting it had proved difficult to advance many of the issues that related to India.

8.2 Suitable work programmes were in place to support a number of related implementations that would occur on AIRAC 28 August, and time would be needed to allow these implementations to happen before further review was appropriate.

8.3 Accordingly, the meeting considered that a further ATFM/TF meeting in the first quarter 2009 timeframe was appropriate and that strong encouragement should be made for Afghanistan, India and Pakistan to attend this meeting. The Bangkok Regional Office would attempt to make such arrangements and would keep affected parties informed.

Closing of the Meeting

8.4 In closing the meeting, Mr. Tiede summarized the positive progress that had been achieved by the meeting in many areas. In particular, Afghanistan's implementation, with effect from 28 August 2008, of ATS route UL333 across the southern portion of the Kabul FIR added extra capacity and flexibility to the ATFM operations and would provide quantifiable benefits to airspace users. Operational agreements reached between Afghanistan and Iran would ensure appropriate management of such flights.

8.5 Mr Tiede also commended the significant works of Pakistan as had been reported to this meeting. Over time, the ATFM/TF had made many requests to Pakistan to assist with structural improvements to ATS route configurations and ATC operational procedures. Following a period of study, Pakistan had been able to fulfill virtually all of these requests and arrangements were now in place for the various coordinations and implementations to proceed over the next few months. In aggregate, these improvements would have a marked impact on streamlining the traffic flows entering Kabul FIR.

8.6 The agreement to continue the ATFM/TF work programme, rather than move to the ATFM Scrutiny Group methodology, would enable many of the items in work to be completed and even-handed oversight of the ATFM operations to continue. Mr. Tiede encouraged all parties to continue to study the widespread problem with poor on-time performance, as the ability to implement improvements in this area alone would result in many benefits.

……

DRAFT
ATC REROUTE PROCEDURE TO BE APPLIED IN BANGKOK, YANGON AND KOLKATA FIRS FOR FLIGHT SUBJECT TO ATFM

1 INTRODUCTION

1.1 The purpose of these procedures are to assist flights subject to ATFM to achieve their required allocated wheels-up time (AWUT) as well as the allocated time at the Kabul entry gate.

1.2 These re-route procedures are applicable to two pairs of ATS routes namely, L759 vs L515/M770 as well as L507 vs P646 within Bangkok, Yangon and Kolkata FIRs.

1.3 The re-route procedures will only be applied when it is necessary to do if longitudinal separation cannot be achieved on the flight planned route.

1.4 The procedures detailed below will be effective at 0000UTC on xxxx 2007.

2 DETAILS OF THE RE-ROUTE PROCEDURES

2.1 The application of these re-route procedures applies to ATS route L759 between PUT and BBS, and L515/M770 between PUT and BUBKO.

2.2 Flights which have planned to operate on L759 may be diverted to L515/M770 by Bangkok ACC or vice versa as follows:

Original ATS Route	**Re-route Procedure**
PUT L759	PUT L515 OBMOG M770 BUBKO N895 BBS L759
PUT L515 OBMOG M770	PUT L759 ……*intercepts M770???*

2.3 The application of re-route procedure to ATS route L507 and P646 between BKK and CEA for flights which have planned to operate on L507 may be diverted to P646 by Bangkok ACC or vice versa as follow;

Original ATS Route	**Re-route Procedure**
VTBS L507	VTBS P646 DOPID W111 CEA L507
VTBS P646	VTBS L507 G450 JJS P646

2.4 This reroute procedure is active only between 1500 to 2000 UTC daily.

Note:
The reroute procedure is provided for use by ATC in contingency situations to assist flights subject to ATFM to achieve the required separation. Operators should be prepared to fly the Bypass procedure if instructed by ATC.

TELEPHONE
Int
0009744589555
(wait for tone)
436-4097

AFGHANISTAN
Ministry of Transportation and Civil Aviation

AIP SUPPLEMENT (SUP)

01/08

E-mail: affora3aairspace@auab.centaf.af.mil

DATE: 28 AUG 08

EXTENSION OF RNP10 ROUTE UL333

1. INTRODUCTION

1.1 The purpose of this AIP Supplement (SUP) is to notify the extension of RNP 10 route UL333 with effect from 0001 UTC on 28th August 2008.

2. EXTENSION OF RNP10 ROUTE UL333

2.1 Details of the extended bi-directional RNP10 route UL333, applicable within the Kabul FIR between SOKAM and SERKA, are shown in Appendix 1. The purpose of extending this route is to alleviate the separation problems caused by bunching of flights during the nightly operational hours of ATFM procedures. Operating procedures and restrictions applicable to UL333 within the Kabul FIR are detailed below.

3. RNP 10 NAVIGATION REQUIREMENTS

3.1 RNP 10 approval is mandatory for aircraft to fly on UL333. Pilots must advise ATC of any deterioration or failure of the navigation systems below the navigation requirements for RNP 10.

3.2 Pilots of aircraft meeting RNP 10 navigation requirements must indicate /R in Item 10 of the ICAO Flight Plan.

4. AIRCRAFT NAVIGATION PERFORMACE

4.1 Aircraft navigation performance shall be such that the standard deviation of lateral track errors shall be less than 8.7 km (4.7 NM).

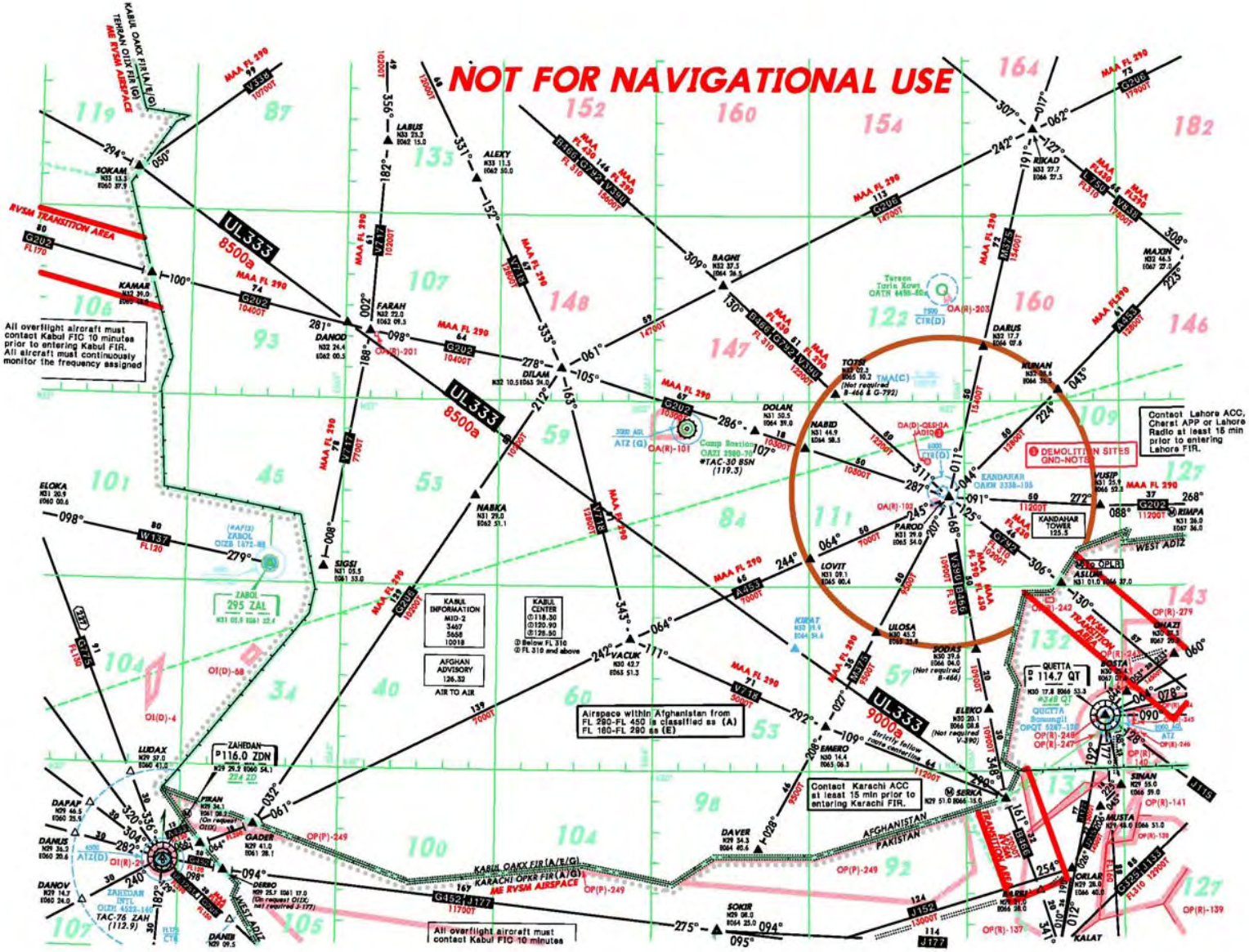
5. OPERATING LIMITATIONS

5.1 The following operating limitation is applicable to UL333 in the Kabul FIR aircraft only accepted at or above FL310.

6. OPERATORS PROCEDURES

6.1 Operator shall ensure in-flight procedures; crew manuals and training programmes are established in accordance with RNP 10 navigation requirements

APPENDIX 1
TO AIP SUPP 01/08 DATED 28 AUG 08



AIR ROUTE	FIX — TO LAT/LONG	FIX LAT/LONG	MINIMUM OBSTACLE CLEARANCE (MOCA)	MINIMUM RADIO RECEPTION ALTITUDE (MRA)
UL333	**SOKAM** N33º13'16" E60º37'54"	**DANOD** N32º24'22" E62º00'32"	8 500	
	DANOD N32º24'22" E62º00'32"	**KIRAT** N30º39'54" E64º54'37"	8 500	
	KIRAT N30º39'54" E64º54'37"	**SERKA** N29º51'00" E66º15'00"	9 000	

```
A1027/08 NOTAMN
A) OAKX
B) WIE
C) 0809250259
E) QXXXX AFGHANISTAN AIP SUPP 01/08 EXTENSION OF RNP10 ROUTE UL333
EFFECTIVE 28 AUG 08 IS AVAILABLE AT THE MOTCA WEB PAGE:
HTTP://WWW.MOTCA.GOV.AF/  IF THE AIP SUPP DOES NOT APPEAR, HIT THE
REFRESH BUTTON ON YOUR WEB BROWSER OR CLEAR YOUR CACHE.
CREATED: 07 Jul 2008 09:37:00
SOURCE: OAKBYNYX
```

ICAO Bay of Bengal ATS Coordination Group – ATFM Task Force

Model NOTAM to include SERKA/UL333/B466 in ATFM Procedures

NOTAM (*name of State/authority***). PROVISIONS OF ATFM AIP SUPPLEMENT (***reference number of existing ATFM AIP Supplement***) ARE EXPANDED TO INCLUDE ADDITIONAL KABUL FIR ENTRY POINT SERKA AND ATS ROUTES UL333 SERKA SOKAM AND B466 SERKA PAROD IN ATFM PROCEDURES.**

WITH EFFECT FROM (*date /time***) ALL WESTBOUND FLIGHTS INTENDING TO ENTER THE KABUL FIR BETWEEN 2000UTC AND 2359UTC DAILY ON ADDITIONAL ATS ROUTE SERKA/UL333 AND ATS ROUTE B466 BETWEEN SERKA AND PAROD FROM F310 TO F390 INCLUSIVE SHALL COMPLY WITH ATFM PROCEDURES INCLUDING MANDATORY REQUIREMENT TO OBTAIN ATFM SLOT ALLOCATION FROM BANGKOK ATFMU.**

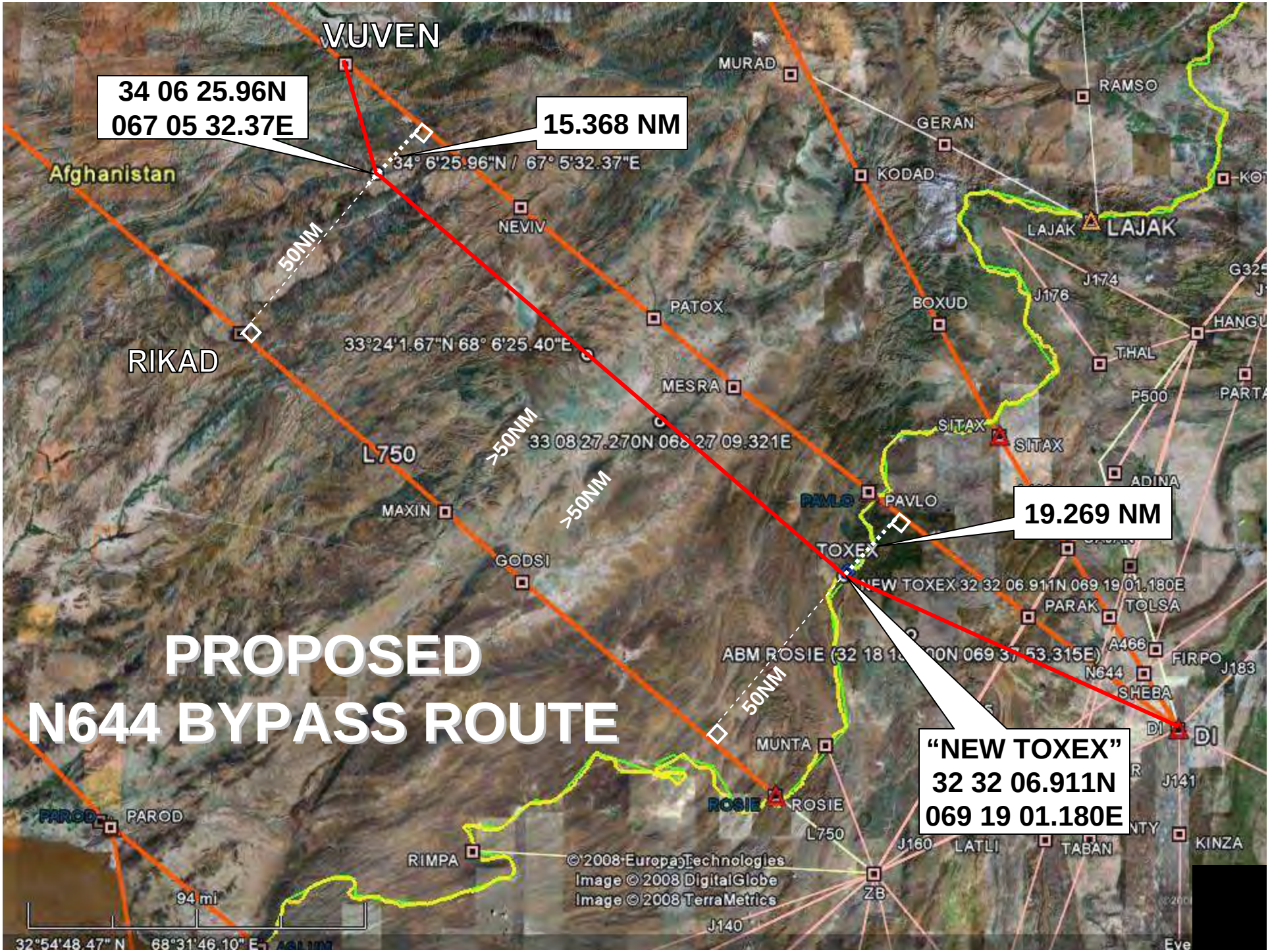

VUVEN
34 06 25.96N
067 05 32.37E
15.368 NM
Afghanistan
34° 6'25.96"N / 67° 5'32.37"E
MURAD
RAMSO
GERAN
KODAD
NEVIV
LAJAK
LAJAK
50NM
J174
J176
BOXUD
PATOX
RIKAD
33°24'1.67"N 68° 6'25.40"E
THAL
MESRA
P500
>50NM
SITAX
SITAX
33 08 27.270N 068 27 09.321E
L750
ADINA
PAVLO
PAVLO
19.269 NM
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Image © 2008 TerraMetrics
ZB
94 mi
J140
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68°31'46.10" E

Bay of Bengal Air Traffic Flow Management Task Force

Task List

(last updated ATFM/TF/12, 17 July 2008)

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
8/7	Pakistan lower the Minimum Enroute Altitude (MEA) on P628 to FL300 as soon as possible to align with MEA for P628 in India	September 2008	India, Pakistan, Afghanistan Regional Office	Ongoing	Pakistan advised ATFM/TF/12 that they are ready to lower the MEA on P628/G792 provided Delhi ACC is able to treat FL300/ FL320 as same level for transfer of control at VIKIT. Also, Kabul ACC should consider making FL280 available via ASLUM.
8/11	Study feasibility of route segments proposed during ATFM/TF/8 to assist N644 and A466 in vicinity of DI Khan	~~July 2007~~ October 2008	Afghanistan, India, Pakistan,	Ongoing	Pakistan advised ATFM/TF/12 that provision of parallel flow within Lahore FIR between GUGAL/ PAVLO and SAMAR/ LAJAK has been considered favourably and concurrence of concerned quarters is expected soon.

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
8/12	Study and rectify inconsistency between bases of airways in the Yangon and Chennai FIRs with a view to harmonization	~~ATFM/TF/11 November 2007~~ ATFM/TF/13 first quarter 2009	India, Myanmar, Thailand to assist	Ongoing	Base of airways in Yangon FIR is charted (Jeppesen) as FL280, base in Chennai FIR charted as FL260
~~**8/13**~~	~~Study proposal for formulation of 'BOBCAT Scrutiny Group' as described in Agenda Item 7 of ATFM/TF/8 report~~	~~ATFM/TF/11 November 2007~~	~~All~~	~~Ongoing~~ Closed	~~ATFM/TF/12 deferred discussion on this matter indefinitely pending potential continuation/expansion of ATFM/TF to regional role.~~
8/15	Review trial related data with a view to incrementally reducing flow buffer time from 5 minutes	ATFM/TF/13 first quarter 2009	ATFM/TF	Ongoing	ATFM/TF/12 reviewed this issue at length, high complexity, continue monitoring and further review at ATFM/TF/13
~~**8/18**~~	~~The Regional Office would work with IATA to produce a suitable summary of airline concerns in relation to in flight re-route, for relay to ANSPs involved in ATFM procedures.~~	~~2007~~	~~Regional Office & IATA~~	~~Ongoing~~ Closed	~~ATFM/TF/12 agreed that the implementation of ATFM procedures had reduced instances of reroute considerably. No longer an issue..~~
8/19	Data provision. Provide 7 consecutive days data collection each month, commencing from the third Sunday of each month, first date 20 May 2007, promptly to the ATFMU	One week data per month continuously	Afghanistan, India, Pakistan, Malaysia, Singapore and Thailand	Ongoing	Report to ~~ATFM/TF/11~~ ATFM/TF/13

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
~~**9/11**~~	~~Beyond Kabul FIR, 3 of the routes through Kabul join in Turkmenistan leading to further capacity restrictions. Regional Office to coordinate with EUR/NAT (Paris) Office of ICAO to seek assistance in ensuring exit capacity from Kabul FIR.~~	~~2007~~	~~Regional Office~~	~~Ongoing~~ ~~Closed~~	~~Report to ATFM/TF/11~~ ~~Attention drawn to this matter during RDGE/7 meeting in Paris, October 2007~~
9/13	Thailand and India agreed to use M770 as an alternate route when a bunching situation occurred on L759. Flights affected by the bunching will be re-routed to M770 and rejoin L759 over the Indian continent via position PALKO and BBS. A coordination procedure will be arranged between India, Myanmar and Thailand as soon as possible	~~June 2007~~ October 2008	Thailand, India, Myanmar, keep IATA informed	Ongoing	ATFM/TF/11 informed that Thailand and Myanmar have agreed to procedure, awaiting agreement from India ATFM/TF/12 advised procedure not yet implemented, raised Action Item 12/4 for urgent action
10/3	Continue investigation into use of PAROD vice ASLUM as BOBCAT sequencing fix. Subject to agreement from affected parties, implement appropriate change to BOBCAT software parameters to accommodate PAROD	ATFM/TF/13 first quarter 2009	Thailand BOBCAT Development Team, IATA, India, Pakistan, Afghanistan	Ongoing	ATFM/TF/11 agreed to use PAROD, implementation date TBD. ATFM/TF/12 set target date 28 August 2008.
~~10/4~~	~~Examine ways to enhance existing RVSM=>CVSM flight level arrangements between Delhi ACC and Lahore ACC to include consideration of Kabul entry flight level slot~~	~~July/August 2007~~	~~India, Pakistan, SWG/2~~	~~Ongoing~~ ~~Closed~~	~~Report to ATFM/TF/11~~ ~~ATFM/TF/11 noted significant improvement in this regard~~
10/5	Implement conditional ATS route with RNP10 lateral separation with N644 for bypass via TOXEX entering Afghanistan	July/August 2008	Pakistan, Afghanistan SWG/2	Ongoing	Pakistan and IATA agree with Guidance proved in Appendix D to ATFM/TF/12 report, Afghanistan to consider Report to -ATFM/TF/13
~~**11/1**~~	~~Adjust BOBCAT software parameters to remove priority for flights via ASLUM~~	~~December 2007~~	~~Thailand BOBCAT Development Team~~	~~Ongoing~~ ~~Completed~~	~~Report to ATFM/TF/12~~

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
~~**11/2**~~	~~Study impact on Karachi ACC operations of flights into Kabul FIR at FL280 via SERKA to join V390.~~	~~January 2008~~	~~Pakistan, Afghanistan~~	~~Ongoing~~ Completed	~~Pakistan did not foresee any difficulties in this regard.~~
~~**11/3**~~	~~Kabul ATS Authority via ACA re-issue NOTAM A0422/04 with text "V390" deleted at point 4.~~	~~December 2007~~	~~Kabul ATS Authority~~	~~Ongoing~~ Completed	~~Report to ATFM/TF/12~~
11/4	Kabul ATS Authority to explore avenues by which H24 AIS capability could be made available. Solutions could include the preparation of a number of NOTAM templates for typical events and making arrangements to fax or email them to a H24 AIS Office for issue on behalf of Afghanistan.	First quarter 2009	Kabul ATS Authority	Ongoing	Report to ATFM/TF/13
~~**11/5**~~	~~Prepare and circulate discussion paper in relation to maintenance group, scrutiny group responsible for continued oversight of the BOBSA ATFM operations~~	~~First quarter 2008~~	~~Thailand, IATA, Regional Office~~	~~Ongoing~~ Closed	~~ATFM/TF/12 deferred discussion on this matter indefinitely pending potential continuation/expansion of ATFM/TF to regional role.~~
~~**11/6**~~	~~Pakistan to review outstanding Action Items attributed to Pakistan in this list and provide update to Regional Office by end January 2008~~	~~January 2008~~	~~Pakistan~~	~~Ongoing~~ Closed	~~ATFM/TF/12 updated by Pakistan on outstanding actions~~
~~**11/7**~~	~~Investigate and correct the persistent ground-ground communications outages between Afghanistan and Pakistan ACCs.~~	~~ATFM/TF/12 July 2008~~	~~Afghanistan, Pakistan~~	~~Ongoing~~ Closed	~~ATFM/TF/12 and Inter Regional Afghanistan Interface (IRAI) meeting updated., Pakistan advised that ground-ground communication has now considerably improved. In addition fixed ISD telephones programmed for Kabul ACC has also been provided to cater for any failure.~~

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
11/8	Identify causes and implement solutions for the poor on time performance for AWUT and Kabul entry, both too early and too late, that was still evident in the data reviewed by ATFM/TF/12. Review standard taxi times for affected airports.	~~ATFM/TF/12 July 2008~~ ATFM/TF/13 first quarter 2009	All	Ongoing	Report to ATFM/TF/13
11/9	Conduct overall review of the priority allocated at FL280 for departures from India and Pakistan	ATFM/TF/13 first quarter 2009	BOBCAT Development Team, ICAO, IATA	Ongoing	ATFM/TF/12 agreed to simulation trials to be conducted July/August 2008
11/11	Noting DGCA Action Item 44/14 in relation to environmental benefits, ATFM/TF/11 requested that IATA work with its member airlines to attempt to broadly quantify the environmental savings being made from the ATFM procedures.	ATFM/TF/13 first quarter 2009	IATA	Ongoing	Report to ATFM/TF/13
12/1	Bangkok ATFMU to include announcement on BOBCAT website highlighting that the primary reason that flights transited the Kabul FIR at level lower than slot allocation was because their own departure time was outside AWUT window and the Kabul entry fix time window was consequently not met..	August 2008	Bangkok ATFMU	Open	
12/2	Regional Office to relay concerns of ATFM/TF/12 to India about poor departure timeliness from Delhi and non submission of data from India	August 2008	Regional Office	Open	

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
12/3	Enhance data collection: A) amend electronic template to remove less significant data points, B) adopt point of contact methodology using ATFM/TF delegates as State POC, C) create email address list accordingly D) transmit email reminder to POCs one week before monthly data collection period	August 2008	Bangkok ATFMU	Open	
12/4	Resolve L759 bunching issue: a) Thailand undertake urgent coordination with India (Kolkata FIR) to implement bypass procedures, b) The Regional Office bring the matter to the attention of India and seek the urgent implementation of the procedures shown in Appendix XX to the report of ATFM/TF/12, in accordance with the agreements previously given by India as recorded in the Report of ATFM/TF/9 (January 2007), c) In the event that the bypass procedures between Bangkok FIR and Kolkata FIR could not be implemented by AIRAC 23 October 2008: o Thailand publish NOTAM advising of ATFM bunching issue in Bangkok FIR and requiring flights during the BOBCAT period to include in Field 18 of Flight Plan RMK/ details of alternate route & level acceptable to be flown if flight was affected by a bunching situation. o	August 2008 August 2008 October 2008	Thailand, India Regional Office, India Thailand	Open Open Open	

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
12/5	Take BOBCAT configuration actions including appropriate BOBCAT Announcements to configure SERKA – SOKAM, SERKA PAROD, change to PAROD vice ASLUM, additional route segments vicinity DI Khan etc	August 2008	Bangkok ATFMU	Open	
12/6	Manage SERKA related bunching in Kuala Lumpur FIR:				
	a) NOTAM SERKA as temporarily unavailable for traffic departing Singapore and Malaysia,	August 2008	Singapore, Malaysia	Open	
	b) Manage traffic on P628 through interface with BOBCAT,	August 2008	Bangkok ATFMU	Open	
	c) Implement connector routes for L510 to mange overflow traffic from N571/N877, and	August 2008	Malaysia, India, Regional Office	Open	
	d) NOTAM segment LAGOG – BIKEN as unavailable during BOBCAT hours	August 2008	India, Regional Office	Open	
12/7	Pakistan to create an additional waypoint in the vicinity of Adina to enable the transition between airways G325 and M881.	August 2008	Pakistan	Open	
12/8	Lower the MEA on P628/G792				
	a) Delhi ACC to use F300/FL320 as one level for transfer of control at VIKIT,	August 2008	Pakistan, India, Regional Office	Open,	
	b) Afghanistan to study possibility of making FL280 available via ASLUM	August 2008	Afghanistan	Open	

Proposed Agenda
ATFM Seminar/Workshop
Fukuoka, Japan 7-9 October 2008

TUESDAY, 7TH OCTOBER 2008		
TIME	**TITLE AND SUMMARY**	**SPEAKER & ORGANIZATION**
0915-1000	Registration of Delegates	
1000-1030	Opening of the Seminar/Workshop, Administration, Introduction of Delegates	Moderators: Mr. Andrew Tiede - ICAO Regional Officer ATM, Asia/Pacific Office Mr. XXXX, JCAB
1030-1100	**Coffee/Tea**	Sponsored by JCAB?
1100-1130	ICAO ATFM Provisions & APANPIRG Key Priorities	Mr. Andrew Tiede - ICAO
ATFM in the Asia Pacific Region Today		
1130-1200	Air Traffic Management Centre Fukuoka	JCAB
1200-1230	Bob of Bengal Collaborative Air Traffic (BOBCAT) System	(to be confirmed), AEROTHAI[1]
1230-1330	**Lunch**	Sponsored by JCAB?
1330-1400	Air Traffic Flow Management in Australia	(name TBC), Airservices Australia[2]
1400-1430	Singapore Changi Strategic Flow Management – Lessons Learnt	(name TBC), CAAS[3]
1430-1500	Air Traffic Flow Management in China	Air Traffic Management Bureau of CAAC
1500-1530	Hurry Up and Wait – The IFATCA Perspective	John Wagstaff, IFATCA
1530-1600	**Coffee/Tea**	Sponsored by JCAB?
1600-1700	Air Traffic Flow Management – The Customers' Perspective	IATA[4]
1700-1730	Questions and Answers Panel session	All Speakers from the day

[1] POC: Toon: piyawut@aerothai.co.th
[2] POC: Matthew Shepherd: Matthew.Shepherd@airservicesaustralia.com – Human managed sequencing/automated sequencing/CTMS
[3] POC: Edmund HENG: Edmund_HENG@caas.gov.sg
[4] POC: Soon Boon Hai will provide names/airlines: SOONBH@iata.org

WEDNESDAY, 8TH OCTOBER 2008		
TIME	**TITLE AND SUMMARY**	**SPEAKER & ORGANIZATION**
0945-1000	Opening Remarks Day 2	Mr. Andrew Tiede - ICAO
ATFM in Other Regions		
1000-1030	National Operations Centre	NAV CANADA
1030-1100	**Coffee/Tea**	Sponsored by JCAB?
1100-1200	Overview of Regional ATFM Initiatives in North America, Caribbean and South America	FAA[5]
1200-1230	*Presentation*	
1230-1330	**Lunch**	Sponsored by JCAB?
Workshop – Session 1 – Planning for ATFM		
1330-1400	The Bay of Bengal long range ATFM implementation – Lessons from the ATFM Task Force. A Regional Office perspective	Mr. Andrew Tiede - ICAO Regional Officer ATM, Asia/Pacific Office
1400-1430	ATFM Lessons Learned in NAM/CAR/SAM	Mr. Ricardo Torres, SENEAM
1430-1500	*Development of Centralised ATFM Services in Australia*	(name TBC), Airservices Australia
1500-1530	*Presentation*	
1530-1600	**Coffee/Tea**	Sponsored by JCAB?
1600-1630	Planning for Near-Term Implementation of ATFM	FAA
1630-1700	Questions and Answers Panel session	All Speakers from the day

[5] CONOPS, Ops Telcons, Data Exchange, ATFM TF, etc.

THURSDAY, 9TH OCTOBER 2008		
TIME	**TITLE AND SUMMARY**	**SPEAKER & ORGANIZATION**
0900-1000	*Travel to Fukuoka ATMC*	*Transport arrangements from Hotel to Fukuoka ATMC by JCAB*
Workshop – Session 2 - Where Do We Go From Here?		
1000-1030	Asia/Pacific ATFM Concept of Operations – Strategy and Recommendations	Moderators: Mr. Andrew Tiede – ICAO Mr. XXXX
1030-1100	Regional Supplementary Procedures (Doc 7030) and Guidance Materials – Recommendation and Update	Moderators: Mr. Andrew Tiede – ICAO Ms. XXXX
1100-1130	**Coffee/Tea**	Sponsored by JCAB?
1130-1215	Proposals for Consideration by APANPIRG	Moderators: Mr. Andrew Tiede – ICAO Ms. XXXX
1215-1245	Summary and Closing of ICAO Asia/Pacific ATFM Seminar/Workshop	
1245-1430	**Lunch**	Sponsored by JCAB
1430-1630	Visit to ATMC and ATC facilities at the Fukuoka Air Traffic Management Center	Hosted by Fukuoka ATMC
1630 onwards	Return to Hotel	*Transport arrangements from Fukuoka ATMC to Hotel by JCAB*

DRAFT

Air Traffic Flow Management (ATFM) Communication Manual for the Asia Pacific Region

Version 1.0

May 2008

FOREWORD

Centralized air traffic flow management (ATFM) facilities are best able to communicate their national system's ability to accept traffic from adjacent international air traffic service (ATS) providers. As coordination and collaboration efforts intensify between the countries, common procedures and communication are essential. Once procedures are defined, a key element in removing language barriers is establishing common terms and phrases. Terminology and phraseology differences in ATFM could be a potential source of confusion during communications between international ATFM facilities.

Common terminology is an essential element in exchanging definitive, clear, and concise communication between international ATFM units. Likewise, the phraseology should follow a technical pattern for the exchange of standardized and harmonized messages. The terminology and phraseology presented are not intended to be a requirement for ATFM communications, but may be used as a guideline for the exchange of ATFM messages.

TABLE OF CONTENTS

1. General

1.1 The primary goal of these guidelines is to develop terminology and phraseology for the exchange of ATFM messages between units providing ATFM services. The terminology and phraseology contained herein are intended to both reflect the current use of plain language and provide a basis for standardization and harmonization.

1.2 Although there are various plain language words and phrases in use today by ATFM service providers, these words and phrases can be organized into a modular and structured method of delivery to ensure communication harmonization and reduce the incidence of misunderstanding between units providing ATFM service.

1.3 It is not the intent of these guidelines to provide detailed information on ATFM concepts, procedures, and initiatives; however, since not all readers may be familiar with ATFM terms used in the examples, a brief description of ATFM initiatives is provided at Appendix 1. The list is not all-inclusive and does not preclude the innovation and application of other procedures that will result in improved service.

1.4 These guidelines include the concept of modular and structured ATFM messages and define an ATFM message's components as who, what, where, when and why. These five components are described as follows:

a. Who: The ATFM service unit being contacted followed by the ATFM service unit that is initiating the contact.

b. What: The ATFM objective to be achieved.

c. Where: The location of the ATFM objective to be achieved.

d. When: The time and/or duration of the ATFM objective to be achieved.

e. Why: The reason for the ATFM objective.

1.5 There is no module regarding "how" the ATFM restrictions should be achieved by the counterpart ATFM service provider. It is the counterpart's responsibility how they fulfill the requested ATFM restrictions within their airspace. However, the center being asked for the ATFM restrictions may collaborate with the originating center on the type and method of ATFM measure application. Generally speaking, ATFM service providers resolve demand-capacity related constraints by initiating national ATFM initiatives first. Therefore, ATFM restrictions requested by an adjacent international ATFM facility should be considered highly necessary. Therefore, once information is exchanged regarding an ATFM restriction and the acceptance is expressed, it is considered MANDATORY. It should be noted that a critical situation could require acceptance of an ATFM restriction without allowing any options for the requested facility.

1.6 Below are the examples of possible ATFM messages:

- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC … REQUIRE 100 MILES IN TRAIL REGARDLESS OF FLIGHT LEVEL ON R220, R580 AND ALL PACOTS TRACKS FOR TRAFFIC LANDING NARITA ESTIMATING FIR BOUNDARY FROM 0100 UTC UNTIL 0500 UTC DUE TO SEVERE WEATHER".
- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER… CAPACITY RESTRICTION: LOS ANGELES HAS STARTED FLOW RESTRICTIONS FOR ALL AIRCRAFT LANDING LOS ANGELES DUE TO EARTHQUAKE. APPROACH HAS REQUESTED GROUND STOPS FOR ARRIVALS UNTIL FURTHER NOTICE".

2. ATFM Message Components

2.1 The use of a modular and structured ATFM message provides for consistent ATFM message design and delivery. Each of the ATFM message's five components can contain plain language elements that when combined provide a complete ATFM message. The harmonization achieved lies in the delivery of an ATFM message that has all of the required components in a structured format while making allowances for different plain language elements. This is of particular benefit for ATFM service providers that use different ATFM terminology or for non-native English speaking ATFM service providers.

2.2 As the modular and structured ATFM message may contain several different elements of plain language, this section will examine each of the five components and detail some of the possible plain language words and phrases that are in use today.

2.3 **WHO**: The **who** component identifies the ATFM service unit being contacted followed by the ATFM service unit that is initiating the contact. ATFM units will be addressed by name until ICAO Annex 10 is amended accordingly. Examples of the who component:

- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER…"
- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC…"

2.4 **WHAT**: The **what** component identifies the ATFM objective to be achieved. The **what** component may also be used to provide ATFM information. Objectives include but are not limited to:

a) REQUIRE (number) MILES (or MINUTES) IN TRAIL AT THE SAME FLIGHT LEVEL;
b) REQUEST (number) MILES (or MINUTES) IN TRAIL REGARDLESS OF FLIGHT LEVEL;
c) REQUEST A RATE OF (number) AIRCRAFT PER HOUR;
d) FLIGHT LEVELS (number) AND (number) NOT AVAILABLE;
e) ONLY FLIGHT LEVELS (number), (number) AND (number) ARE AVAILABLE;
f) (route/airport/airspace) NOT AVAILABLE DUE (reason) ALTERNATIVE[S] IS/ARE (routes/airports).

2.5 **WHERE**: The **where** component represents the location of the ATFM objective to be achieved. It is often preceded by a modifying clause, indicating what aircraft or traffic the restriction will apply to. The modifying clause and the location combination are used to construct there where component.

Examples of location:

- "…AT NIPPI…"
- "…ON A337…"
- "…WESTBOUND ON PACOTS TRACK CHARLIE…"
- "…INBOUND ON G344…"
- "…ON PACOTS TRACK 2 LANDING SAN FRANCISCO AIRPORT…"
- "…ABOVE FLIGHT LEVEL 300…"

Examples of what aircraft or traffic are included:

- "…FOR ALL AIRCRAFT…"
- "…FOR TRAFFIC FASTER THAN 300 KNOTS…"
- "…FOR HEAVY AIRCRAFT…"
- "…FOR TRAFFIC LANDING…"

- "…FOR AIRCRAFT DEPARTING…"
- "…FOR TRAFFIC OVERFLYING…"
- "…FOR AIRCRAFT PASSING…"

2.6 **WHEN**: The **when** component represents the time and/or duration of the ATFM objective to be achieved:

[FROM (time)] UNTIL (time).

Examples of time/duration:

- "…FROM 0300 UTC UNTIL 0600 UTC…"
- "…FROM NOW UNTIL 0600 UTC…"
- "…FROM 2300 UTC UNTIL FURTHER NOTICE…"
- "…UNTIL FURTHER NOTICE…"

2.7 **WHY**: The **why** component represents the reason for the ATFM objective:

a) DUE TO (reason);
b) FOR (reason).

Examples of reasons:

- "…DUE TO RUNWAY CLOSURE"
- "…FOR (SEVERE) WEATHER"
- "…DUE TO COMMUNICATION FAILURE"
- "…DUE TO (significant event/natural disturbance such as FIRE or VOLCANIC ASH)"
- "…FOR STATE AIRCRAFT ACTIVITY"
- "…DUE TO EQUIPMENT OUTAGE"
- "…FOR EMERGENCY"
- "…DUE TO ATFM INITIATIVES IN (location)"

3. ATFM Message Types

3.1 **Information to be shared prior to invoking the ATFM restrictions**: The information-sharing should be facilitated not only during the actual flow control but also (and more importantly) well prior to invoking the ATFM restrictions when the possibility of flow control arises. The following phrases will make clear the distinction between the ATFM messages and the information provided for situation awareness:

a) POSSIBLE TRAFFIC FLOW RESTRICTIONS;
b) CAPACITY RELATED INFORMATION.

Examples of messages sent prior to invoking ATFM restrictions follow:

- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… **POSSIBLE TRAFFIC FLOW RESTRICTIONS**… NARITA AIRPORT HAS CLOSED ONE RUNWAY AND STARTED SNOW REMOVAL".
- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… **CAPACITY RELATED INFORMATION**…NARITA AIRPORT HAS ENTERED THE STORM ZONE OF THE TYPHOON".

3.2 **ATFM Initiative Message**: ATFM initiatives communicate air traffic flow restrictions/objectives from one air traffic service provider to another. They follow the five component structure described earlier:

a. Who: The ATFM service unit being contacted followed by the ATFM service unit that is initiating the contact.

b. What: The ATFM objective to be achieved.

c. Where: The location of the ATFM objective to be achieved.

d. When: The time and/or duration of the ATFM objective to be achieved.

e. Why: The reason for the ATFM objective.

Examples of ATFM initiatives follow:

- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER … REQUIRE 30 MINUTES IN TRAIL AT THE SAME FLIGHT LEVEL FOR ALL AIRCRAFT LANDING CHICAGO FROM 0800 UTC UNTIL FURTHER NOTICE DUE TO STATE AIRCRAFT ACTIVITIES".
- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… FL350 AND BELOW NOT AVAILABLE FOR AIRCRAFT OVERFLYING JAPANESE DOMESTIC AIRSPACE UNTIL 0900 UTC DUE TO EMERGENCY".

3.3 **Reply to ATFM Initiative Message**: The following phrases will be used for replying to ATFM initiative messages:

a) ACCEPT (initiative);
b) AGREED TO (initiative);
c) (initiative) IS ACCEPTABLE [DEPENDS ON THE DEMAND] (other pertinent information, if any);
d) UNABLE (initiative) [DUE (reason)] (alternative proposed).

Examples of replying to ATFM initiatives follow:

- "AGREED TO 30 MINUTES IN TRAIL AT THE SAME FLIGHT LEVEL ON PACOTS TRACKS 2 AND 3 FROM 1000 UTC UNTIL 1500 UTC".
- "UNABLE TO ACCEPT THE RESTRICTION FROM 1430 UTC DUE TO TRAFFIC VOLUME ON A590 UNTIL 1530 UTC".

3.4 **Coordination of aircraft exempted from ATFM initiatives**: The following phrases will be used for the coordination of aircraft which are exempt from ATFM restrictions:

a) REQUEST EXEMPTION FROM ATFM;
b) COORDINATION OF ATFM EXEMPTION.

3.5 The following types of aircraft may be exempted from ATFM restrictions:

- Aircraft in a state of emergency
- Aircraft engaged in search and rescue missions
- Aircraft operating for humanitarian reasons
- Aircraft carrying the head of State or distinguished visitors of State
- Aircraft carrying a patient who needs urgent medical treatment

Examples of messages requesting ATFM exemption follow:

- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER… **REQUEST EXEMPTION FROM ATFM**…UAL123 IS CARRYING A PATIENT WHO NEEDS URGENT MEDICAL TREATMENT".
  "UAL123…EXEMPTION APPROVED".
- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… **COORDINATION OF ATFM EXEMPTION**… JA501A IS OPERATING SEARCH AND RESCUE MISSIONS".

3.6 **Information for the next coordination**: If it is possible and appropriate, the expected time of next coordination will be forwarded with the ATFM messages:

I WILL CALL YOU AT (time) FOR FURTHER COORDINATION.

An example of a message with information for the next coordination follows:

- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER… REQUIRE 30 MINUTES IN TRAIL REGARDLESS OF FLIGHT LEVEL FOR ALL AIRCRAFT ON PACOTS TRACK 8 FROM 1000 UTC UNTIL FURTHER NOTICE DUE TO MILITARY ACTIVITY. I WILL CALL YOU AGAIN AT 1100 UTC FOR FURTHER COORDINATION".

3.7 **Amendment:** The amendment of an ATFM message should be structured as the initial message and include similar elements but with additional modifiers. These modifiers may include:

a) CHANGE
b) AMEND
c) REDUCE
d) INCREASE
e) DECREASE

3.8 Amendment messages should also identify which message is being amended, as several restrictions could be in place at one time. Examples of ATFM amendment messages follow:

- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… WE HAVE **CHANGED** THE RESTRICTION ON TRAFFIC FLYING PACOTS TRACKS CHARLIE, ECHO AND FOXTROT FOR NARITA AIRPORT. WE NOW NEED 20 MINUTES IN TRAIL AT THE SAME FLIGHT LEVEL ON PACOTS TRACKS CHARLIE, ECHO AND FOXTROT FOR TRAFFIC LANDING NARITA FROM NOW UNTIL 0900 UTC".
- "FUKUOKA ATMC, THIS IS FAA COMMAND CENTER…WE HAVE **INCREASED** THE INBOUND RATE FROM 5 AIRCRAFT PER HOUR TO 10 AIRCRAFT PER HOUR FOR TRAFFIC BEYOND OAKLAND FIR UNTIL FURTHER NOTICE".

3.9 **Cancellation**: The cancellation of an ATFM message should be structured the same as the initial message and include similar elements but also contain a canceling word or phrase. It is normally not necessary to state the reason for the cancellation. A canceling word or phrase may include:

a) CANCEL
b) RESUME
c) RESUME NORMAL
d) RELEASE

3.10 Cancellation messages should also identify which message is being cancelled, as several restrictions could be in place at one time. An example of an ATFM cancellation message follows:

- "FAA COMMAND CENTER, THIS IS FUKUOKA ATMC… **CANCEL** THE RESTRICTION ON TRAFFIC BEYOND THE FUKUOKA FIR AT THIS TIME. **RESUME NORMAL** TRAFFIC FLOW".

4. Active Listening

4.1 Because of the variety of ATFM information that may be exchanged, and the lack of a full set of standardized phraseology, **active listening** is encouraged. Active listening is a structured form of listening and responding that focuses the attention on the speaker. The listener must take care to attend to the speaker fully, and then repeats, in the listener's own words, what he or she thinks the speaker has said. The listener does not have to agree with the speaker; he or she must simply state what they think the speaker said. This enables the speaker to find out whether the listener really understood. If the listener did not, the speaker can explain further. Once the speaker and listener are clear as to the message, the listener should respond with agreement, acceptance or disagreement.

4.2 Active listening has several benefits. First, it forces people to listen attentively to others. Second, it avoids misunderstandings, as people have to confirm that they do really understand what another person has said.

5. Abbreviations

5.1 Appendix 2 provides a sample list of abbreviations used that are not defined in the ICAO Doc. 8400 (PANS-ABC). Neighboring ATFM facilities may wish to develop a similar list of abbreviations which are frequently used in ATFM communication, and include them in a letter of agreement. There is no requirement to develop such a list.

DESCRIPTION OF AIR TRAFFIC FLOW MANAGEMENT INITIATIVES

The following list contains the ATFM initiatives presently conducted by U.S. FAA. It is not all-inclusive and does not preclude the innovation and application of other procedures that will result in improved service.

Name	Description
Airborne holding	Planned holding of aircraft may be utilized. This is normally done when the operating environment supports holding and the weather conditions are expected to improve shortly; this ensures aircraft are available to fill the capacity at the airport.
Altitude	Utilized to segregate different flows of traffic, or to distribute the number of aircraft requesting access to a specified geographic region. **a. Capping**: Term to indicate aircraft will be cleared to an altitude lower than their requested altitude until they are clear of a particular airspace. Capping may apply to the initial segment of the flight or for the entire flight. **b. Tunneling**: Term to indicate traffic will be descended prior to the normal descent point at the arrival airport to remain clear of an airspace situation; e.g., holding.
Fix balancing	Assigning an aircraft a fix other than that in the filed flight plan in the arrival or departure phase of flight to equitably distribute demand.
Ground delay programs (GDP)	Aircraft are held on the ground in order prior to departure to manage capacity and demand at a specific location, by assigning arrival slots. The purpose of the program is to limit airborne holding.
Ground stops (GS)	GS is a process that requires aircraft that meet specific criteria to remain on the ground. Since this is one of the most restrictive methods of traffic management, alternative initiatives should be explored and implemented if appropriate. GSs should be used: **a.** In severely reduced capacity situations (below most user arrival minimums, airport/runway closed for snow removal, or aircraft accidents/incidents); **b**. To preclude extended periods of airborne holding; **c**. To preclude sector/center reaching near saturation levels or airport grid lock; **d**. In the event a facility is unable or partially unable to provide ATC services due to unforeseen circumstances; and **e**. When routings are unavailable due to severe weather or catastrophic events.
Miles-in-trail (MIT)	The number of miles required between aircraft that meet a specific criteria. The criteria may be separation, airport, fix, altitude, sector, or route specific. MIT are used to apportion traffic into manageable flows, as well as to provide space for additional traffic (merging or departing) to enter the flow of traffic.
Minutes-in-trail (MINIT)	The number of minutes required between successive aircraft. It is normally used in a non-radar environment, or when transitioning to a non-radar environment, or when additional spacing is required due to aircraft deviating around weather.
Reroutes	Reroutes are ATC routings other than the filed flight plan. They are issued to: **a.** Ensure aircraft operate with the "flow" of traffic. **b.** Remain clear of special use airspace. **c.** Avoid congested airspace. **d.** Avoid areas of known weather where aircraft are deviating or refusing to fly.

Name	Description
Sequencing programs	These programs are designed to achieve a specified interval between aircraft; they may be software generated or determined by ATFM personnel. Different types of programs accommodate different phases of flight. **1. Departure Sequencing Program (DSP)** - Assigns a departure time to achieve a constant flow of traffic over a common point. Normally, this involves departures from multiple airports. **2. En route Sequencing Program (ESP)** - Assigns a departure time that will facilitate integration in the en route stream. **3. Arrival Sequencing Program (ASP)** - Assigns fix crossing times to aircraft destined to the same airport.

Appendix 2

SAMPLE TABLE OF ABBREVIATIONS

The abbreviations listed here are those used by the ATCSCC and ATMC respectively that are not defined in the ICAO Doc. 8400 (PANS-ABC), and are provided only as an example. The shaded abbreviations are considered to be the common terms between the two centers. The asterisk shows verbatim difference in the original collocation but the abbreviation still indicates the common object. The non-common abbreviations are deemed inappropriate for the inter-facility ATFM communication between ATCSCC and ATMC.

	ATCSCC	ATMC
AAR	Airport Acceptance Rate	
ACID	Aircraft Identification	
ADL	Aggregate Demand List	
ADR	Airport Departure Rate	
ADZY	Advisory	
AIM	Aeronautical Information Manual	
ALTRV	Altitude Reservation	Altitude Reservation
ANP	Air Navigation Plan	
AOA	Office of the Administrator	
AOC	Airline Operations Center	
AP	Air Patrol	
APREQ	Approval Request	Approval Request
APVL	Approval	Approval
ARO	Airport Reservation Office	
ARTCC	Air Route Traffic Control Center	Air Route Traffic Control Center
ASM		Airspace Management
AT	Air Traffic	
ATCSCC	Air Traffic Control System Command Center	Air Traffic Control System Command Center
ATMC	Air Traffic Management Center	Air Traffic Management Center
ATMetC		Air Traffic Meteorological Center
ATO	Air Traffic Operations Program	
AUTODIN	Automatic Digital Network	
CARF	Central Altitude Reservation Function	
CCFP	Collaborative Convective Forecast Product	
CCWSU	Command Center Weather Service Unit	
CDM	Collaborative Decision Making	Collaborative Decision Making
CDR	Coded Departure Route(s)	Conditional Route
CDR	Continuous Data Recording	
CDT	Controlled Departure Time	
CFR	Code of Federal Regulations (formerly FAR)	
CIWS	Corridor Integrated Weather System	

	ATCSCC	ATMC
COMSEC	Communications Security System	
CR	Collaborative Routing	
CT	Select Flights Ground Delay Program	
CTA	Controlled Time of Arrival	
CTAS-TMA	Center TRACON Automation System Traffic Management Advisor	
CVRS	Computerized Voice Reservation System	
CWA	Central Weather Advisory	
CWSU	Center Weather Service Unit	
DARC	Direct Access Radar Channel	
DCCWU	ATCSCC Weather Unit	
DOTS	Dynamic Ocean Track System	Dynamic Ocean Track System
DP	Departure Procedure	
DSP	Departure Sequencing Program	
EDCT	Expected Departure Clearance Time	Expected Departure Clearance Time
EFAS	Enroute Flight Advisory Service	
EFTO	Encrypt For Transmission Only	
EOF	Emergency Operations Facility	
EOR	Emergency Operations Room	
EPS	Engineered Performance Standards	
ESCAT	Emergency Security Control of Air Traffic	
ETE	Estimated Time Enroute	Estimated Time Enroute
ETMS	Enhanced Traffic Management System	
EUCARF	European Central Altitude Reservation Facility	
FA	General Ground Delay Program	
FAA	Federal Aviation Administration	Federal Aviation Administration
FADT	Fuel Advisory Delay Time	
FCA	Flow Constrained Area	
FDMS		Flight Data Management System
FDPS		Flight Data Processing Section
FEA	Flow Evaluation Area	
FP	Flight Plan	
FPL	Full Performance Level	
GA	General Aviation	
GAAP	General Aviation Airport Program	
GDP	Ground Delay Program	
GS	Ground Stop	
HARS	High Altitude Route System	
HDTA	High Density Traffic Airport	

	ATCSCC	ATMC
IFCN	Interfacility Communication Network	
IFPFP	Individual Flight Plan From this Point	Individual Flight Plan From this Point
IFSS	International Flight Service Station	
INATS	Interruption of Air Traffic Service	
JCAB	Japan Civil Aviation Bureau	Japan Civil Aviation Bureau
LAA	Local Airport Advisory	
LADP	Local Airport Deicing Plan	
LOA	Letter of Agreement	Letter of Agreement
MAP	Monitor Alert Parameter	
MARSA	Military Assumes Responsibility for Separation of Aircraft	Military Assumes Responsibility for Separation of Aircraft
MEL	Minimum Equipment List	
MINIT	Minutes in Trail	
MIT	Miles in Trail	
MOS	Military Operations Specialist	
MTSAT	Multi-functional Transport Satellite	Multi-functional Transport Satellite
MVFR	Marginal Visual Flight Rules	
NADIN	National Airspace Data Interchange Network	
NAS	National Airspace System	
NAVAID*	Navigational Aid	Navigation Aid
NFDC	National Flight Data Center	
NMCC	National Maintenance Coordination Center	
NOAA	National Oceanic and Atmospheric Administration	
NOM	National Operations Manager	
NOPAC	North Pacific	North Pacific
NOS	National Oceanographic Service	
NRP	National Route Program	
NTMO	National Traffic Management Officer	
NWS	National Weather Service	
OAG	Official Airline Guide	
ODP		Oceanic Air Traffic Control Data Processing System
OPSNET	Operations Network	
OTG		Oceanic Track Generator
OTR		Oceanic Transition Route
PACMARF*	Pacific Military Altitude Reservation Facility	Pacific Military Altitude Reservation Function
PACOTS	Pacific Organized Track System	Pacific Organized Track System
PMTC	Pacific Missile Test Center	
PO	Plan of Operation	

	ATCSCC	ATMC
Pref Route	Preferential Route	
PT	Planning Team	
RA	Route Advisory	
RAA	Remote Airport Advisory	
ROT	Runway Occupancy Time	
SAA	Special Activity Airspace	
SOP	Standard Operating Procedure	
STMP	Special Traffic Management Program	
SUA	Special Use Airspace	
SVRW	Severe Weather	
SWAP	Severe Weather Avoidance Program	
TEC	Tower-Enroute Control	
TELCON	Telephone Conference	
TFM	Traffic Flow Management	
TIS	Traffic Information System	
TMC	Traffic Management Coordinator	Traffic Management Coordinator
TMCIC	Traffic Management Coordinator in Charge	
TMI	Traffic Management Initiative	
TMU	Traffic Management Unit	Traffic Management Unit
TSTM	Thunderstorm	
WSO	Weather Service Office	

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IRAI

Agenda Item 1: Adoption of Agenda

1. The Inter Regional Afghanistan Interface (IRAI) meeting adopted the following agenda:

Agenda Item 1: Adoption of Agenda

Agenda item 2: ATS route matters

Agenda item 3: RVSM implementation including transition areas

Agenda item 4: Air Traffic Flow Management

Agenda item 5: Operational issues including contingency management

Agenda Item 6: Review and update ATS operational LOAs

Agenda Item 7: Future Directions and Arrangements

Agenda Item 8: Any other business

Agenda Item 2: ATS route matters

2.1 The meeting recalled that as an outcome of the Seventh Meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/7, October 2007) it was agreed that the following five routes would be evaluated by the Airspace Control Authority of Afghanistan and, if considered feasible, submitted to the Afghanistan Government as priority for implementation:

a) MID/41: SAMAR (3121N 07434E) – LA (3130N 07424E) – LAJAK (3356N 07030E)

b) MID/42 Option 1: INDEK (3246N 07316E) – PS (3359.7N 07130.3E) – ALAMI (3506N 07025E) – PINAX (3715N 06906E) – G555

c) MID/47: PG (2657.3N 06407.5E) – New WPT – KAMAR (3239N 06044E)

d) MID/52: KAMAR (3239N 06044E) – SERKA (2951N 06615E)

e) MID/53: LAJAK (3356N 07030E) – DOSHI (3536N 06826.5E)

2.2 Uzbekistan updated the meeting in relation to a) and b) above. Agreement had been reached between Uzbekistan, Tajikistan, Kazakhstan and the Russian Federation, as shown in IRAI **Appendix A,** for the following route proposals:

1) SAMAR – INDEK – JABAR – HANGU – LAJAK – DOSHI – further on BT A466 – GR – NAKUK – UP (ZENZELI) – saves 27NM; and

2) SAMAR – INDEK – PS – ALAMI – PINAX – RASID – NAKUK – UP (ZENZELI)- saves 33NM.

2.3 Afghanistan and Pakistan were invited to further study the above route proposals.

2.4 With regard to c) above, Pakistan informed the meeting that they had conducted a study of the MID 47 proposal. The study had identified many constraints in relation to existing communications and surveillance capabilities. Accordingly, Pakistan would not be considering this proposal further in the foreseeable future.

2.5 In respect to paragraph (d) above the MID/52 proposal, in a slightly modified format, has been actioned and Afghanistan has published the AIP Supplement for the implementation of an extension to UL333, to take effect from 28 August 2008. Details of the UL333 extension are included in paragraphs 3.16 to 3.29 of the preceding ATFM/TF/12 report.

2.6 Recognizing that the many steps in the communication chain had the potential to slow the consideration of the route proposals, in order to streamline the coordination Afghanistan was invited to consider providing a letter from MOTCA to the Cairo Regional Office authorizing the Airspace Control Authority to be included as a direct addressee for communications from ICAO.

2.7 The meeting noted that the Asia/Pacific ATFM/TF had recognized that to the west of Kabul FIR, three of the routes through Kabul join in Turkmenistan leading to further airspace capacity restrictions. This matter had been coordinated with the ICAO EUR/NAT (Paris) Office of ICAO during the RDGE/7 meeting, to seek assistance in ensuring adequate exit capacity from Kabul FIR for westbound traffic.

ATS routes at the Afghanistan – Pakistan Interface

2.8 The meeting was briefed on the many ATS route related matters that had been considered by the ATFM/TF/12 meeting. These included many positive developments in terms of route implementations in Afghanistan and Pakistan, and the enhanced interface arrangements between the two States. Full details of the ATS route enhancements agreed to by ATFM/TF/12 in relation to the Afghanistan/Pakistan interface have been included in paragraphs 3.16 to 3.40 of the preceding ATFM/TF/12 report.

Agenda Item 3: RVSM implementation including transition areas

“Interim” RVSM transition procedures India – Pakistan – Afghanistan

3.1 The meeting reviewed information in respect to the implementation of RVSM in South Asia during 2003. In order to enable RVSM implementation to proceed in the Indian and Pakistan FIRs, procedures had been adopted under which Pakistan took responsibility for the flight level transition between CVSM and RVSM into and out of Kabul FIR. This implementation methodology had been adopted on an interim basis only, until RVSM was implemented in the Kabul FIR, which at that time was expected to occur during 2004. Subsequently, delays to RVSM implementation in Kabul FIR had occurred and the meeting was informed that the implementation of RVSM in the Kabul FIR was now unlikely to occur prior to 2010.

3.2 The meeting recognized that, as a consequence, the ‘interim’ procedure had already endured for five years and would remain with Pakistan until RVSM was implemented in Kabul FIR. Although this was a significant burden that had originally been accepted by Pakistan in good faith in the expectation that it was a short term interim arrangement, Pakistan had advised that they would continue to honour the agreement and their associated flight level transition responsibilities indefinitely.

Afghanistan – progress towards RVSM implementation

3.3 Afghanistan provided a comprehensive briefing to the meeting regarding many aspects of the transition of civil aviation responsibilities in the Kabul FIR. Because of the security situation in Afghanistan, in coordination with the Secretary General of ICAO an arrangement was made in 2003 to allow control of the airspace in the Kabul FIR by a military agency, known as the Airspace Control Authority (ACA). This arrangement will remain in place until adequate facilities and resources are available within the Afghanistan Ministry of Transport and Civil Aviation (MOTCA). Since those arrangements were put in place MOTCA has been working, with the assistance of a number of international agencies and the ACA, to prepare for acceptance of the airspace responsibilities.

3.4 To assist in the process of preparing for return of airspace management responsibilities, MOTCA has engaged the ICAO Technical Cooperation Bureau (TCB) to provide a project team in Kabul to manage and implement the project for Transition of Civil Aviation responsibilities. The TCB team includes technical experts in Air Traffic and Airspace Management and the many other disciplines necessary for transition of responsibilities. This includes ATC training expertise. In addition, TCB has commenced deployment of qualified Operational Assistance air traffic controllers, Meteorologists and Rescue/Firefighters to mentor and train Afghan Nationals who have completed training on courses under the Transition Project. A critical part of the transition Project is the development of skills within MOTCA and capacity building at all levels in the organization.

3.5 As part of this work, specific advice is being provided in respect to the implementation of RVSM. Planning for RVSM implementation has commenced, however, implementation of RVSM in the Kabul FIR is dependent on several factors, as follows.

Planning

3.6 MOTCA is actively involved in planning for implementation of RVSM in the Kabul FIR but is mindful of the requirements which must be in place before implementation can be successfully undertaken. The ICAO TCB team is providing assistance to MOTCA in recognizing those requirements and supporting the planning activities being undertaken in conjunction with the ACA and other airspace management agencies and airspace stakeholders. MOTCA planning for RVSM implementation is taking account of the schedules for implementation in adjacent States wherever possible, with the objective of achieving coordinated RVSM implementations.

Coordination

3.7 Implementation planning for RVSM in the Kabul FIR is being actively coordinated with all stakeholders, particularly the agencies currently providing airspace management services, and the ACA. An “Airspace Progress Committee” meets regularly, with RVSM implementation as an agenda item at all meetings. The committee membership includes MOTCA, the ACA, ICAO and other international advisors, the upper airspace management organization and ISAF Air Coordination Element.

Surveillance

3.8 Although recognized as being in excess of ICAO provisions, in light of the complex traffic circumstances in Kabul FIR MOTCA has adopted the provision of adequate electronic surveillance of those air routes to be used by RVSM traffic as one of the major requirements for RVSM implementation. Accordingly, MOTCA is presently discussing a number of options to provide suitable surveillance that will cater for the variety of airspace users and their existing avionics fitment. The recent changes to PANS/ATM have enabled this discussion to be extended to include some newer technologies beyond radar and MOTCA has commenced discussions with a funding

agency to arrange a project to provide appropriate electronic surveillance of the upper airspace in the Kabul FIR.

Communication

3.9 MOTCA has recognized that the current air-ground and ground-ground coordination communications infrastructure in the Kabul FIR and with adjacent States is not sufficiently robust or extensive to support RVSM. MOTCA is in receipt of several benchmarking reports on the existing communications infrastructure which are proving useful in determining the RVSM requirements in collaboration with the Airspace Progress Committee. A high priority in the planning is improvement of the ground-ground coordination communications with adjacent States. MOTCA has had discussions with relevant agencies and is preparing a project to improve coordination with adjacent States and extend and upgrade the existing VSAT network.

Coordinating sub regional RVSM implementation

3.10 The meeting recognized the importance of coordinating sub regional RVSM implementations to ensure efficiencies and the harmonization of arrangements. In this context, as Afghanistan progressed towards RVSM implementation coordinated arrangements between at least Iran, Pakistan, Tajikistan, Turkmenistan, Uzbekistan and the related ICAO Regional Offices were essential. Accordingly, the meeting strongly supported the establishment of a working group with membership comprising at least those described above and objectives to achieve a coordinated RVSM implementation in the 2010/2011 timeframe. Assistance in RVSM safety monitoring requirements was available from the MID RMA Board through the Cairo Regional Office.

Agenda Item 4: Air Traffic Flow Management

4.1 The meeting was informed that the driving issue for the formation of the Asia/Pacific ATFM/TF during 2005 had been the inefficient traffic management arrangements in place across the Bay of Bengal leading into the 'bottleneck' formed by the reduced capacity in the Kabul FIR. Since that time traffic growth in the nightly peak traffic had increased by in the order of 20%, year on year.

4.2 The meeting was briefed in relation to the outcomes of the preceding ATFM/TF/12 meeting, as documented in the preceding sections of this combined meeting report. ATFM metering for the westbound peak nightly traffic flows was implemented July 2007 and was operating smoothly, providing welcome relief for ACCs in India, Pakistan and Afghanistan by regulating traffic flows to greatly assist in minimizing occasions of ATC work overload.

Agenda Item 5: Operational issues including contingency management

Kabul ACC Functions

5.1 The meeting reviewed information in relation to the functions of the Kabul ACC, Afghanistan. Notably, the Kabul ACC serves a zone of heavy military activity involving multi national forces on a twenty-four hour/7-day a week basis whilst also facilitating civilian domestic and overflight traffic to the maximum extent possible.

5.2 The Kabul ACC High Sector became active in May of 2005 and subsequently the complete Kabul ACC structure was commissioned on 11 July, 2005. The Kabul ACC was designed to serve a dual purpose. It has a responsibility to assist with de-confliction of military missions as well as the establishment of civil ATC services for Afghanistan. The airspace design is unique and has

many areas that are restricted by military operations. The military mission necessarily takes priority over civil operations and military restrictions often affect the airspace and its usage, changing on a few minutes notice.

5.3 All operations are handled using procedural control techniques. Nevertheless, the Kabul ACC is handling very large numbers of flights with approximately 132,000 traffic movements during 2006 and traffic for 2007 exceeding 150,000 movements.

Kabul Airspace Closures – Contingency Planning

5.4 Thailand had informed previous meetings of the ATFM/TF about occasions where aircraft operating during the ATFM period had been severely disrupted before entering the Kabul FIR due to the closure of one or more ATS routes with little or no warning. These changes had sometimes caused severe disruptions and penalty to the aircraft affected; on at least one occasion the aircraft was required to land for technical reasons (critical fuel) prior to destination.

5.5 Afghanistan confirmed that these occasions were due to the high priority military mission being addressed in Afghanistan. Conflict events were often unpredictable and had to be managed at short notice. The Kabul ACC always endeavoured to give as much warning as possible, however often had little or no warning themselves. In most of these instances, Kabul ACC was heavily dependant on the very professional efforts of both the Karachi and Lahore ACCs in managing to divert the civil traffic flows at short notice.

5.6 The meeting considered that the key to handling this type situation was the rapidity of the message getting to each airline/pilot concerned so that the most safe and efficient decisions could be made. In this context, as well as the ATC to ATC coordination with adjacent ACCs, the swift transmission of information by NOTAM was the most effective way of alerting civil airspace users and provided valuable information to airline AOCs in re-establishing efficient progress for the flight.

5.7 The meeting considered that having H24 AIS capability available to the Kabul ACC so that NOTAMs could be issued immediately would be an extremely valuable step in mitigating the effects of sudden changes on civilian airspace users. The meeting urged Afghanistan to explore avenues by which such H24 capability could be made reliably available and to issues NOTAMS wherever possible for ATC and airline AOC usage.

Uzbekistan Briefing

5.8 Uzbekistan provided a comprehensive “Power Point” briefing to the meeting about all aspects of ATS in Uzbekistan. Comprising 3 FIRS – Tashkent, Samarkand and Nukus – Uzbekistan encompassed 14 aerodromes of which 6 are international and staffing of about 800 technical specialists in communications, navigation and surveillance as well as about 400 ATCOs. Of interest was that the full radar coverage available in Uzbekistan FIRs could provide surveillance approximately 200 NM into Kabul FIR. In general terms traffic in Uzbekistan over recent years had shown increases of about 20% annually.

Agenda Item 6: Review and update ATS operational LOAs

Kabul ACC updates LOAs

6.1 The meeting was informed that over recent months the Kabul ACC had taken the initiative to draft updates to many of the operational Letters of Agreement (LOAs) with the ACCs surrounding Afghanistan. Accordingly, updated draft LOAs for the following interfaces were now

available and Afghanistan was actively seeking opportunities to coordinate with surrounding States and agencies to finalise and sign the updated LOAs:

a) Tehran ACC, Iran – Kabul; ACC,

b) Karachi ACC, Pakistan – Kabul ACC,

c) Lahore ACC, Pakistan – Kabul ACC,

d) Turkmenabat ACC, Turkmenistan – Kabul ACC,

e) Dushanbe ACC, Tajikistan – Kabul ACC, and

f) Termez ACC, Uzbekistan – Kabul ACC.

LOAs Pakistan – Afghanistan

6.2 In order to address items b) and c) above, a meeting has been scheduled between Afghanistan and Pakistan, to be held on 21 July 2008. The agreements reached between Afghanistan and Pakistan during the ATFM/TF/12 and IRAI meetings would be included in these LOAs.

LOAs Uzbekistan - Afghanistan

6.3 In relation to f) above, side meetings between Afghanistan and Uzbekistan had taken place during the ATFM/TF/12 and IRAI meetings and the outcomes would be further considered by both States for inclusion in the LOA.

6.4 Uzbekistan provided additional information in relation to arrangements with Samarkand ACC. Experts from the Uzaeronavigation Center (Uzbekistan) had prepared a draft agreement between the ATM centers of Samarkand (Uzbekistan) and Kabul (Afghanistan).

6.5 As a result of infrastructure complexities, ground-ground coordination was not always successful between the two ACCs. To mitigate these types of situations the Uzbekistan AIP ENR and Uzbekistan NOTAM D0002/07 require that:

"In case of absence of direct contact among ATC units, a crew of an aircraft before entering airspace of the Republic of Uzbekistan should ask the appropriate ATC unit for a clearance to cross the state border of the Republic of Uzbekistan not later than 10 minutes prior to crossing the state border. "

6.6 However, Uzbekistan was experiencing many examples of flights from Afghanistan contacting the ATC units of Uzbekistan only 2-3 minutes prior to crossing, or even during and after crossing the State border at AMDAN. This was causing significant tension with the Defence Forces of Uzbekistan and needed to be corrected.

6.7 In order to address this problem, Uzbekistan was urgently seeking to

a) Urgently coordinate and sign a new agreement with Afghanistan that included options to overcome the problem, and

b) Work with Afghanistan to achieve reliable two-way ground-ground communications between ATC units of Uzbekistan and Afghanistan.

6.8 As part of this process Uzbekistan proposed to establish procedures that obliged ATC units of both States to routinely transfer communications with aircraft to the next ACC not later than 10 minutes prior to the FIR boundary to enable a suitable clearance to be obtained.

6.9 Afghanistan thanked Uzbekistan for the feedback and their proposals to manage this important matter. They would study the issues in coordination with the Kabul ACC and provide feedback to Uzbekistan.

6.10 In the context of these discussions, representatives from Delta Airlines provided operator feedback about their experiences in operating these routes. The communications difficulties described above were being experienced and were causing significant concern. In order to manage the airline side of the issue, Delta had published the following internal advice to aircrews, noting that in many instances the radio communications were still unsuccesful in any case. However, contact using Satcom Phone had routinely been successful:

> *"IF PLANNED VIA A466 THRU AFGHANISTAN INTO UZBEKISTAN CONTACT W/TERMEZ CTRL 10 MIN PRIOR TO ENTERING. REQD BEGIN CONTACT ATTEMPTS 15-20 MIN PRIOR TO ALLOW FOR DELAYED CONTACT. IF UNABLE ON CHARTED FREQS ATTEMPT CONTACT ON VHF 134.3 118.6 132.7 OR HF 5658 10018 4728 OR 3467. IF RADIO CONTACT UNSUCCESSFUL CALL VIA SATCOM PHONE AT 00 998 711 508 217."*

6.11 In order to provide swift and wide promulgation of the radio frequencies that may be reachable as well as ensuring that the Satcom Phone number was widely disseminated, the meeting encouraged Uzbekistan to urgently issue a NOTAM that included the above information.

LOAs Turkmenistan, Tajikistan - Afghanistan

6.12 As Turkmenistan and Tajikistan were not represented at the meeting, work on these LOAs had not been able to advance. Afghanistan was seeking to finalise and implement these LOAs as soon as possible and sought timely assistance from these States and associated ICAO Regional Offices in this regard

LOA Iran - Afghanistan

6.13 In relation to a) above, up until the present time only limited air traffic movements and overflights have existed between Afghanistan and Iran and no valid operational Letter of Agreement has been in place. As a result of the initiatives to implement the extension of UL333 across the southern part of the Kabul FIR from SERKA on the common Iran/Afghanistan boundary, both States have pursued serious intentions to improve air operations between themselves.

6.14 In this regard, the meeting was pleased to hear that the scheduling of the IRAI meeting had acted as an opportunity for a full draft operational LOA that also incorporated procedures for activating UL333 from 28 August 2008 to be agreed by both Afghanistan and Iran. Iran's intention is to handle bi-directional traffic via boundary point of SOKAM on UL333 and expects that using this airway will be very economic for the airlines, saving up to forty five minutes for flights from Europe to mid-Asia States.

6.15 Accordingly, advantage was taken of the meeting forum to have the LOA signed in Kabul by Mr. Alami, Deputy Minister, Technical Ministry of Transport and Civil Aviation, Afghanistan and sent by email to the Cairo Regional Office for electronic relay to the Civil Aviation Authority of Iran for signature. It was anticipated that the LOA would be signed by Iran in the few

days following the close of the IRAI meeting. The transfer of original paper copies of the signed LOAs would subsequently be coordinated by the Cairo Regional Office over the next few weeks.

Agenda Item 7: Future Directions and Arrangements

Update from Islamic Republic of Iran

7.1 The Islamic Republic of Iran provided an information paper to the meeting, as presented by the Secretariat, about the current situation with CNS/ATM issues between Iran and Afghanistan.

7.2 A major part of eastern Tehran FIR has a common border with Kabul FIR and there are three boundary points for transfer of traffic (CHARN, SOKAM, KAMAR). A VSAT line is used to connect two ACCs for verbal ATC coordination, however there are no AFTN circuits in Kabul ACC for interchanging ATS messages, including flight plans.

7.3 Two way air ground communications with flights entering Tehran FIR from Afghanistan which were previously not adequate had now reached a suitable standard as of some months ago. Radar control service is available for west bound traffic arriving Tehran FIR from Afghanistan and also there are reliable navigational aids in the east part of Tehran FIR to support incoming flights entering from Afghanistan.

7.4 In order to establish and improve reliable air traffic movement between two FIRs, Iran considers that the following matters must be taken into consideration:

a) establish acceptable and reliable means to exchange ATS messages (install AFTN circuits, reliable telephone and fax lines, etc)

b) establish standard dual MCW lines between two ACCs (presently VSAT is available but is not sufficiently stable)

c) enhance present level of ATS service provision, and

d) implement RVSM airspace within Kabul FIR.

7.5 Iran invited the meeting to consider ways to address the items raised above with a view to normalizing the provision of ATS at the interface between Iran and Afghanistan.

Agenda Item 8: Any other business

8.1 The meeting did not identify any other business for discussion.

9. Closing of the meeting

9.1 In his closing remarks, Mr. Khonji, ICAO Regional Director for the Middle East Region, highlighted the many successful outcomes that had been part of the combined ATFM/TF/12 and IRAI meetings. He expressed that the Cairo Office had been honored to have been able to host this inaugural interface meeting and called for similar interface meetings to become a part of the regular schedule, at perhaps 12 or 18 month intervals.

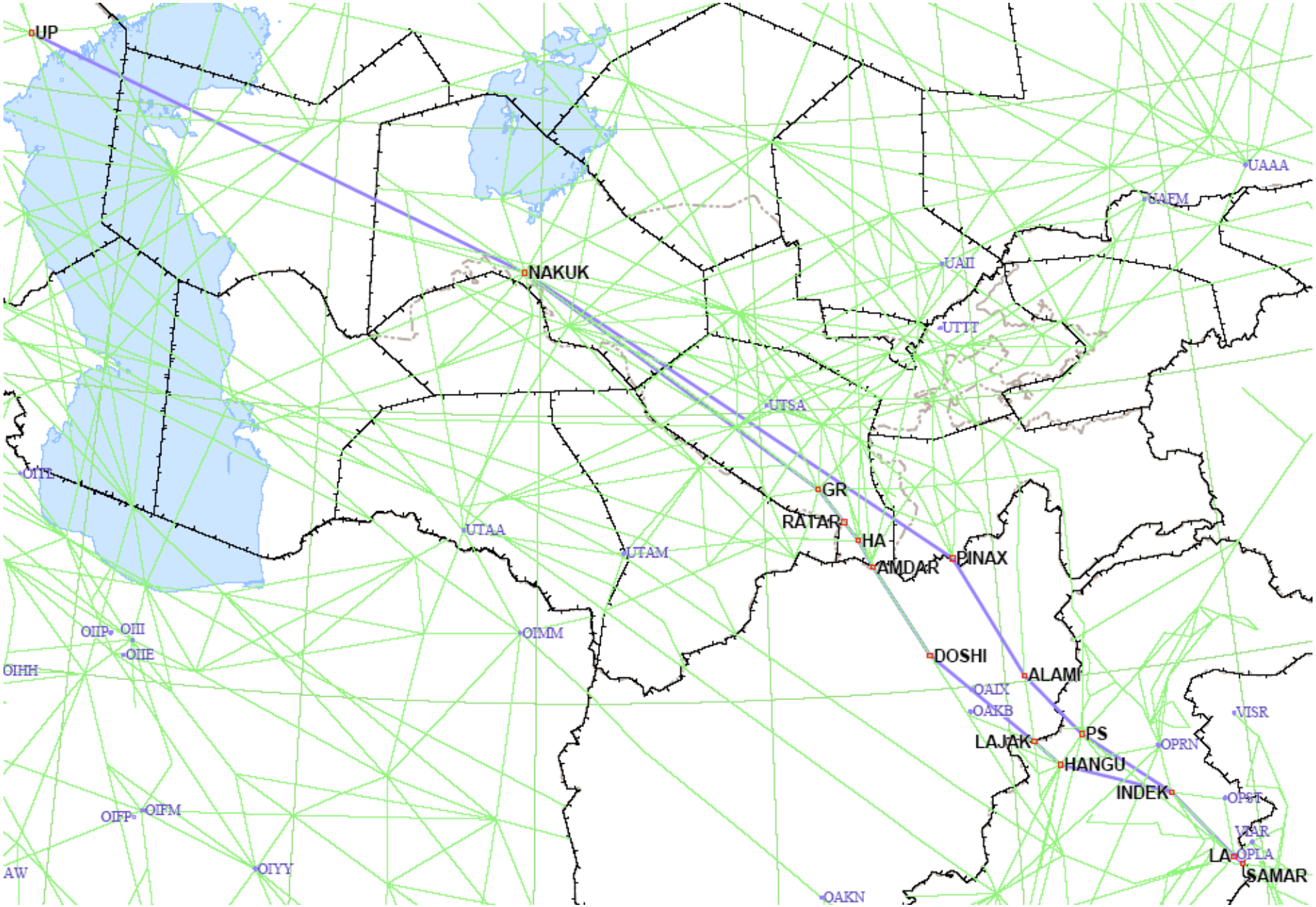
9.2 Mr. Khonji recognized the institutional complexities faced by representatives from Afghanistan in gaining government approval for travel, but nevertheless encouraged Afghanistan to attend as many of the regular ICAO forums held at Cairo Office as possible. Experience had demonstrated that such activities were always mutually beneficial and he expected that Afghanistan would gain worthwhile benefits from attending the ICAO forums regularly.

9.3 Mr. Khonji remarked that the closing of the meetings simply represented the 'ending of the beginning'. He considered that the real work started now and urged all delegates to move quickly in actively pursuing the agreed outcomes of the respective meetings.

9.4 On behalf of ICAO Regional Director for the Asia/Pacific Region, Mr. Andrew Tiede thanked all participants for the positive outcomes that had been achieved during the meeting. From the Asia/Pacific perspective, the interactions with Pakistan and Afghanistan had proven very valuable in managing the ever increasing traffic flows between South East Asia and Europe and this meeting had made notable progress in streamlining these issues. The implementation by Afghanistan of the extension to ATS route UL333 across the southern portion of the Kabul FIR was particularly significant in this context, along with the excellent supporting arrangements being made by Pakistan. Mr. Tiede expected that the opportunities for face to face discussions during both the plenary meeting and the many side meetings that had taken place during the week would continue to bring benefits over the next few months.

9.5 Mr. Tiede thanked Mr. Khonji and the staff at the Cairo Office for their assistance in making the combined meetings a success.

…….. *End* ……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LIST OF WORKING PAPERS (WPs) AND INFORMATION PAPERS (IPs)

ATFM/TF/12

WORKING PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
WP/1	1	Provisional Agenda	Secretariat
WP/2	6	ATFM Task Force Action Plan	Secretariat
WP/3	6	Review of Terms of Reference Air Traffic Flow Management Task Force	Secretariat
WP/4	2	BOBCAT Data Collection and Analysis	Thailand
WP/5	6	Thailand's Bunching Issue	Thailand
WP/6	6	New Routing through the Kabul FIR and the BOBCAT System	Thailand
WP/7	6	Enhancements to the BOBCAT System	Thailand
WP/8	6	Complaints of Flight Level Assignment	Thailand
WP/9	7	Nomination for the 2008 ATCA Awards	Thailand
WP/10	3	Bay of Bengal Air Traffic Flow Management Task Force Action Plan	Pakistan
WP/11	7	Progress Report on a Draft Air Traffic Flow Management (ATFM) Communication Manual for the Asia Pacific Region	United States
WP/12	6	Future Direction of the Air Traffic Flow Management Task Force (ATFM/TF)	United States
WP/13	5	Establishment of ATFM Scrutiny Group	Secretariat
WP/14	7	ATFM Related Outcomes of ATM/AIS/SAR/SG/18	Secretariat
WP/15	3	Air Traffic Flow Management in Kuala Lumpur FIR Update	Malaysia

INFORMATION PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
IP/1	-	List of Working Papers (WPs) and Information Papers (IPs)	Secretariat
IP/2	6	Caribbean/South American ATFM Concept of Operations	Secretariat

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IRAI

WORKING PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
WP/1	1	Provisional Agenda	Secretariat
WP/2	2,3,4,5	Feedback from the Asia/Pacific BBACG and ATFM/TF	Secretariat
WP/3	7	Improvement of co-ordinations regarding CNS/ATM	Islamic Republic of Iran

INFORMATION PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
IP/1	2,6	Information from Uzbekistan	Uzbekistan
IP/2	7	Transition of Civil Aviation Responsibilities in Kabul FIR	Afghanistan

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