INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE

REPORT OF THE COMBINED MEETINGS OF THE FIFTH FANS IMPLEMENTATION TEAM – BAY OF BENGAL (FIT-BOB/5), THE SECOND FANS IMPLEMENTATION TEAM – SOUTH EAST ASIA (FIT-SEA/2), THE FIRST AIR TRAFFIC FLOW MANAGEMENT TASK FORCE (ATFM/TF/1) AND ADS/CPDLC SEMINAR

Bangkok, Thailand, 18 to 22 April 2005

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

Approved by the Meeting
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TABLE OF CONTENTS

PART I - HISTORY OF THE MEETING

PART II - REPORT ON ADS/CPDLC SEMINAR PRESENTATIONS

APPENDICES

PART III - REPORT OF THE FIT-BOB/5 & FIT-SEA/2 MEETINGS

APPENDICES

PART I – HISTORY OF THE MEETING

1. Introduction

1.1 The Combined Meetings of the Fifth FANS Implementation Team – Bay of Bengal (FIT-BOB/5), the Second FANS Implementation Team – South East Asia (FIT-SEA/2), the First Air Traffic Flow Management Task Force (ATFM/TF/1) and ADS/CPDLC Seminar were held at the Kotaite Wing, ICAO Asia and Pacific Regional Office, Bangkok, Thailand between 18 to 22 April 2005.

2. Attendance

2.1 The meeting was attended by 48 participants from 14 States, 2 International Organizations, and 1 data link service provider. A list of participants is at **Attachment 1**.

3. Officers and Secretariat

3.1 Mr. Andrew Tiede, Regional Officer ATM from the ICAO Asia and Pacific Regional Office, acted as the Moderator and Secretary for the meeting. He was assisted by Mr. David J. Moores, Regional Officer ATM.

3.2 Mr. Ron Rigney (Airservices Australia) acted as the Chairman for the Air Traffic Flow Management Task Force components of the combined meeting.

4. Opening of the Meeting

4.1 Mr. Andrew Tiede on behalf of Mr. Lalit B. Shah, Regional Director, ICAO Asia and Pacific Regional Office welcomed the participants to Bangkok. He acknowledged the difficulties faced by administrations in facilitating the attendance by State delegates at this and other ICAO meetings, noting the increasing costs in all areas of the industry. Mr. Tiede also commented that ICAO was not immune from these pressures, and had scheduled the combined meeting and seminar activities this week with this in mind. In order to maximize the effective use of resources, the ADS/CPDLC Seminar would be held on the Monday and Tuesday and the combined FIT-BOB & FIT-SEA and ATFM/TF/1 meeting for the remainder of the week.

4.2 Mr. Tiede advised the meeting that the combining of meeting activities in this manner placed a heavy workload on all participants and urged participants to take the responsibility to ensure that the time this week was used constructively. On the positive side, he noted that this particular meeting combination had brought together representatives from both Bay of Bengal and South China Sea States, to allow the sharing of information across the region and suggested that delegates take opportunities this week to interact with colleagues from other sub-areas of the region.

4.3 Mr. Tiede commented that from the perspective of the Regional Office, the implementation of data link services, such as automatic dependent surveillance (ADS) and controller pilot data link communications (CPDLC), in the non-radar oceanic airspace in the region is in accordance with the requirements in the Asia/Pacific Air Navigation Plan (Doc 9673) and the Asia/Pacific Regional Plan for The New CNS/ATM Systems, both of which were in line with the ICAO Global Air Navigation Plan for CNS/ATM Systems.

4.4 In regard to the meeting of the Flow Management Task Force, Mr. Tiede recalled that the Flow Management difficulties being experienced by the Bay of Bengal States had long been part of the agendas of the FIT-BOB and BBACG, and that APANPIRG had urged States and International Organizations to continue their considerable efforts to improve the ATFM over the Bay of Bengal. In this vein, the ATFM/TF had set a target to have effective flow control mechanisms (including equipment)

functioning on operational trial to manage the night time traffic flows across the Bay of Bengal by AIRAC 29 September 2005.

4.5 Mr. Tiede noted that this would require commitment from ICAO, States and International Organizations to take decisions this week in support of this implementation date and indicated that it would be his wish to finish the week with the hard decisions made on timelines, funding, equipment choice, key players and any other impediment to effective flow management in the Bay of Bengal. Mr. Tiede wished delegates a successful seminar and meetings.

5. Documentation and Working Language

5.1 The working language of the meeting and the language for all documentation was in English. Seventeen (17) Working Papers and three (3) information papers were presented to the meeting. The list of papers is shown at **Attachment 2**.

PART II - REPORT ON ADS/CPDLC SEMINAR PRESENTATIONS

1. In reviewing the operational problems so far identified by the ADS/CPDLC trial in the Bay of Bengal, and in addressing the remarks from the Boeing CRA regarding the complex technical nature of ADS/CPDLC, the 4th meeting of the FIT-BOB (held in conjunction with BBACG/15 in September 2004) considered that an ADS/CPDLC seminar would be an effective way to educate ATS providers and operators in the region about ADS/CPDLC operations. The seminar should provide information from experienced operators and pilots, ATS providers and controllers, network system providers and technical background to the work undertaken by the CRA.

2. In planning the seminar, the Regional Office considered that the members of the FIT-SEA could also benefit from the conduct of seminar and scheduled the seminar accordingly, in conjunction with a combined FIT-BOB and FIT-SEA meeting

3. The seminar was attended by 42 participants from Australia, Bangladesh, Hong Kong China, India, Indonesia, Japan, Lao PDR, Malaysia, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States, IATA, IFALPA and SITA and was moderated by Mr. Andrew Tiede, Regional Officer ATM. The seminar was divided up into four sessions over the two days, as follows:

Monday, 18th April 2005

3.1 Session 1:

a) What is ADS-C, What is CPDLC, What is Data Link
Mr. Craig Roberts, Airservices Australia

b) IFALPA – Pilot Perspectives of ADS/CPDLC, including Cockpit Practices and Procedures
Capt. Toby Gursanscky, IFALPA Representative

c) Data Network System Provision and Architecture
Mr. David Fung, SITA

3.2 Session 2:

a) ADS/CPDLC Operations in the Australian Environment
Mr. Craig Roberts, Airservices Australia

b) Recommended Process for Successful Deployment of ADS/CPDLC Systems
Mr. Hiroshi Matsuda, ATCA Japan

c) Requirements for ATC Systems with ADS/CPDLC – Tokyo ODP System, including lessons learnt during the course of development and operation.
Mr. Takashi Matsumoto, NEC

d) ADS/CPDLC Operating Procedures & Documentation – FANS Operations Manual (FOM), ICAO Provisions in relation to data link services & ICAO Document References for ADS/CPDLC
Mr. Andrew Tiede, ICAO Regional Officer, ATM

Tuesday, 19th April 2005

3.3 Session 3:

a) ADS/CPDLC Operation in the Tokyo FIR
Mr. Hiroshi Inoguchi, JCAB

b) Roles and Functions of the FANS Interoperability/ Implementation Team (FIT), including Problem Reports and System Performance Analysis
Mr. Craig Roberts, Airservices Australia

c) The structure, roles and activities of the FIT CRA of Japan
Mr. Yoshiro Nakatsuji, JCAB CRA

d) Problem Reports and System Performance of Oceanic Datalink Operation, CRA Japan.
Ms. Hiromi Suzuki, CRA Japan

e) Launch and Capabilities of the Japanese Multi Function Transport Satellite (MTSAT)
Mr. Hiroshi Inoguchi, JCAB

3.4 Session 4:

a) Finance Arrangements – Mechanisms to facilitate collaborative funding of the CRA
Dr. Paul Hooper, ICAO Air Transport Regional Officer

b) Status of Bay of Bengal ADS/CPDLC Operational Trial
Mr. M. Sarangapani, Airports Authority of India

c) Use of integrated ADS/CPDLC capabilities in the FAA's ATOP system
Mr. Kevin Chamness, FAA En Route & Oceanic Services, ATO

4. In order to assist participants at the seminar, lists of ADS/CPDLC Acronyms and document references applicable to ADS/CPDLC implementation and operation were prepared. These have been included as **Appendices A and B** respectively to the Report on Seminar Presentations.

5. The seminar participants, in noting the professional and very relevant presentations that had been provided during the seminar, expressed their appreciation to the presenters for their time and energy in preparing and delivering the seminar material.

Acronym List

ACARS	Aircraft Communications Addressing and Reporting System
ACARS-MU	ACARS Management Unit
ADCC	Aviation Data Communication Corporation of China
ACP	Acceptance (AIDC)
ADS	Automatic Dependent Surveillance
ADS-B	ADS Broadcast
ADS-C	ADS Contract
AEEC	Airline Electronic Engineering Committee
AEROTHAI	Aeronautical Radio of Thailand
AES	Aircraft Earth Station
AFN	ATS Facilities Notification
AFTN	Aeronautical Fixed Telecommunication Network
AIDC	ATS Interfacility Data Communication
AIS	Aeronautical Information Service
AOC	Airline Operational Communications
AP-II	PT Angkasa Pura II (Datalink service provider of Indonesia)
APANPIRG	Asia/Pacific Air Navigation Planning and Implementation Regional Group
ARINC	Aeronautical Radio Incorporated
ARTCC	Air Route Traffic Control Center (FAA)
ATMC	Air Traffic Management Center
ATN	Aeronautical Telecommunications Network
ATSU	Air Traffic Service Unit
AVICOM Japan	Name of datalink service provider that covers Japan
AVPAC	Aviation VHF Packet Communication System
BOB	Bay of Bengal
CDA	Current Data Authority
CC	Connection Confirm (CPDLC)
CDM	Collaborative Decision Making
MCDU	Multipurpose Control Display Unit
CPDLC	Controller Pilot Data Link Communication
CPL	Current Flight Plan
CR	Connection Request (CPDLC)

CRA	Central Reporting Agency
CRC	Cyclic Redundancy Check
DARPS	Dynamic Airborne Route Planning System
DR	Disconnect Request
DSP	Datalink Service Provider
EST	Coordinate Estimate (AIDC)
FANS 1/A	Future Air Navigation System 1/A
FDP	Flight Plan Data Processing system
FIR	Flight Information Region
FIT	FANS Interoperability/Implementation Team
FIT-BOB	Bay of Bengal, FIT
FIT CRA	FIT Central Reporting Agency
FIT-SEA	SEACG FIT
FMC	Flight Management System
FN_AK	AFN ACKNOWLEDGEMENT
FN_CAD	AFN CONTACT ADVISORY
FN_COMP	AFN COMPLETE
FN_CON	AFN CONTACT
FN_RESP	AFN RESPONSE
FOM	FANS-1/A Operations Manual
FOM	Figure Of Merit
GES	Ground Earth Station for Satellite Communication
GNSS	Global Navigation Satellite System
HF	High Frequency
HMI	Human Machine Interface
ICD	Interface Control Document
IIOCG	Informal Indian Ocean Coordinating Group
INMARSAT	International Maritime Satellite Organization
IPACG	Informal Pacific ATC Coordinating Group
ISPACG	Informal South Pacific ATS Coordinating Group
LAM	Logical Acknowledgement Message (AIDC)
LRM	Logical Rejection Message (AIDC)

MAC	Coordination Cancellation (AIDC)
MAF	Message Assurance Failure
MAS	Message Assurance (Network acknowledgement)
MNPS	Minimum Navigation Performance Specification
MTSAT	Multi-functional Transport Satellite
NDA	Next Data Authority
Ocean 21	Oceanic ATC System of FAA
OCS	Oceanic Control System (Auckland FIR)
ODP	Oceanic air traffic control Data Processing system (Japan)
PETAL	Preliminary Eurocontrol Test of Air/Ground Data Link
PSR	Periodic Status Report (System performance analyses data)
RAIM	Receiver Autonomous Integrity Monitoring
RGS	Remote Ground Station
RNAV	Area Navigation
RNP	Required Navigation Performance
RTA	Required Time of Arrival (avionics function)
RTCA	Radio Technical Commission for Aeronautics
RVSM	Reduced Vertical Separation Minimum
SATCOM	Satellite Communication
SEAC	Service d'Etat de l'Aviation Civile (French Polinesia)
SEACG	South East Asia ATS Coordination Group
SITA	Société Internationale de Télécommunications Aéronautics
VDL	VHF Digital Link
WAAS	Wide Area Augmentation System
WGS-84	World Geodetic System 1984

ADS/CPDLC IMPLEMENTATION AND OPERATION
RELEVANT REFERENCE MATERIAL

1. Annex 10 – Aeronautical Communications
   Volume 11 – Communication Procedures
   - Chapter 4 : Aeronautical Fixed Services (AFS)
   - Chapter 8: Aeronautical Mobile Services – Data Link Communications

2. Annex 11 – Air Traffic Services
   - Chapter 2: ATS Safety Management
   - Appendix B: Establishment of a target level of safety and lateral separation minima

3. The *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM, Doc 4444)
   - Chapter 2: ATS Safety Management
   - Chapter 5: Separation minima using ADS and CPDLC
   - Chapter 13 and 14: Procedures for use of ADS and CPDLC
   - Appendix 5: CPDLC message Set

4. *Regional Supplementary Procedures(Doc 7030)*
   - MID/ASIA procedures for application of reduced separation minima
   - TLS for en-route

5. *Air Traffic Services Planning Manual (Doc 9426)*
   - Part II, Chapter 4, Appendices A, B and C: Collision risk modelling

6. *Manual of Air Traffic Services Data Link Applications (Doc 9694)*
   - Establishing a data link based service in an airspace in accordance with regional and national plans

7. *Manual on Airspace Planning Methodology for the Determination of Separation Minima* (Doc 9689)
   - Criteria for ADS and CPDLC
   - Appendix 1: A General Collision Risk Model for Distance-based Separation on Intersecting and Coincident Tracks
   - Appendix 5: Assessment of Longitudinal Separation in the Asia/Pacific Regions
   - Appendix 15: Navigation Performance Requirements for the Introduction of 30 NM Lateral Separation in Oceanic and Remote Airspace
   - Appendix 16: A Method of Deriving Performance Standards for ADS Systems

8. ICAO Regional *Guidance Material on CNS/ATM Operations in the Asia/Pacific Region*

9. *FANS 1/A Operations Manual*, Version 1.1 (04 January 2005)

PART III - REPORT OF THE FIT-BOB/5 & FIT-SEA/2 MEETINGS

Agenda Item 1: Adoption of Agenda

1.1 The meeting adopted the following Agenda for the meeting:

Agenda Item 1: Adoption of Agenda

Agenda Item 2: Review FANS-1/A Operations Manual (FOM)

Agenda Item 3: Review operational trial performance

Agenda Item 4: Central Reporting Agency

Agenda Item 5: Data link monitoring requirements

Agenda Item 6: Air traffic flow management plan and implementation

Agenda Item 7: Any other business

Agenda Item 8: Date and venue for the next Meeting

Agenda Item 2: Review FANS-1/A Operations Manual (FOM)

FANS 1/A Operations Manual

2.1 The Secretariat updated the meeting in regard to the status of the FANS 1/A Operations Manual (FOM). In considering the outcomes of the task force established by APANPIRG/14 (August 2003, Conclusion 14/2) to review the regional *Guidance Material on CNS/ATM Operations in the Asia and Pacific Region*, APANPIRG/15 (August 2004) agreed that States should take all relevant ICAO provisions on data link into account when establishing their operating requirements and procedures. Further, the meeting agreed that the FOM provided the necessary procedures for ATS providers and should be used as a basis to operate ADS and CPDLC with aircraft equipped with the FANS-1/A systems.

2.2 Accordingly, APANPIRG/15 adopted the following Conclusion:

Conclusion 15/ 7 – FANS 1/A Operations Manual (FOM)

That, the FANS 1/A Operations Manual (FOM) be used by States and users in the Asia and Pacific Regions as a basis for operating automatic dependent surveillance (ADS) and controller pilot data link communications (CPDLC) in conjunction with Annex 10 – *Aeronautical Telecommunications* Volume II – *Communications Procedures* including those with PANS status, the *Procedures for Air Navigation Services – Air Traffic Management* (PANS/ATM Doc 4444) and the *Guidance Material on CNS/ATM Operations in the Asia and Pacific Region*.

2.3 Paper copies of the FOM are not distributed. There are four “controlled copies” and they can be found at any of the following web sites:

http://www.crasa.cra-japan.org (the JCAB CRASA web page)
http://www.faa.gov/ats/ato/130.htm (the FAA's Oceanic Procedures Branch)
http://www.faa.gov/ats/ato/ipacg.htm (the IPACG web page)
http://www.faa.gov/ats/ato/ispacg.htm (the ISPACG web page)

2.4 In regard to further development of the regional *Guidance Material* and the FOM, and harmonizing with ICAO provisions, APANPIRG/15 recognized that additional work was required to more closely align the material of the documents concerned. In this regard, APANPIRG/15 appreciated that ICAO Headquarters was willing to undertake the lead to progress this work in coordination with the Regional Office and the States responsible for the FOM. APANPIRG/15 reiterated the importance of common data link operating procedures for global applicability and urged States to continue to support ICAO's efforts to achieving this goal.

2.5 In considering the need for harmonized global FANS 1/A operating procedures, ICAO Headquarters had supported proposals raised during the North Atlantic FANS Interoperability Group Eleventh meeting (NAT-FIG/11, October 2004). NAT-FIG/11 agreed that amalgamation of the Pacific FANS Operations Manual (FOM) and the NAT Guidance Material was a desirable goal. The NAT-FIG/11 considered that a jointly drafted FANS document, incorporating the existing FOM and NAT documents, could identify elements of FANS operations that are common across all participating regions, while providing unambiguous guidance for operators in areas that were the subject of confusion. With areas of commonality clearly identified in the document, operationally necessary differences among regional service providers could then be specified in region-specific sections.

2.6 With these principles in mind, NAT-FIG/11 requested that the Asia and Pacific Regional Office in Bangkok be informed of the views expressed, with a view to investigating the possibility of such an amalgamation. The Regional Office supported the proposal and work has commenced under the auspices of the ICAO EUR/NAT Office in order to produce a joint document. Although the magnitude of the task is significant, it is expected that an initial draft document will be circulated for preliminary comment during the 3rd quarter 2005.

Agenda Item 3: Review operational trial performance

India – Update of ADS/CPDLC Operational Trial

3.1 During the ADS/CPDLC Seminar preceding the combined FIT meeting, India had provided an update presentation in regard to the status of the Bay of Bengal ADS/CPDLC operational trial, in relation to operations in the Chennai and Kolkata FIRs.

3.2 India reported that the project had commenced in 1991 as a joint venture between equipment supplier ECIL and the Airports Authority of India (AAI). Site acceptance testing had been completed in 1999, with initial operations in 2002 preceding the commencement of the operational trial in February 2004. India had noted that there were up to a dozen different airlines participating in the trial, with Qatari Airlines most recently joining the trial from March 2005.

3.3 The trial activities served 13 routes in the Bay of Bengal portions of the Chennai and Kolkata FIRs, including P574, N571, N563, P762, L645, P628, N877, L759, M770, L507, L301, N895 and P646. ADS services are available H24 in the Kolkata FIR and from 0200 to 2030 UTC in the Chennai FIR, and India has adopted the FANS 1/A Operations Manual as the operational procedures applicable to the trial.

3.4 Sampling during March 2005 had indicated that the daily number of uplink/downlink messages had varied from 1025 to 2106 per day during the March period. CPDLC messages averaged

about 200 per day, because a NOTAM had been issued indicating no requirement to report on CPDLC or HF once an ADS contract had been established.

3.5 India advised that they would very much appreciate assistance from a CRA in order to analyse and correct the problem reports received so far during the trial. The total number of problem reports logged up until March 2005 was 107. Of these:

- 12 related to ground system problems;
- 8 related to an inability to receive downlink or send uplink even though the link status was normal; and
- 28 related to avionics. A large number of these were associated with a single airline. Coordination was recently undertaken with the airline, resulting in a significant decrease in the number of problems reported.

3.6 Many problem reports were categorised as miscellaneous and include error code received in contact advisory, unsuccessful connection, no message exchange in spite of CPDLC contact etc. The number of problem reports filed has reduced considerably during January – March 2005 as compared to the last quarter of 2004.

3.7 India reported that they had experienced a number of event contracts which had evoked a non-compliance response from aircraft. India is interested in ascertaining whether this particular problem had been experienced in other parts of the region. An enhancement planned for the system will enable the automatic relay of MET data contained in ADS reports directly to the MET department via an automatic message switching system.

3.8 In summary, India reported that the trials were proceeding positively, with confidence increasing amongst pilots and controllers. The ground system, which will receive software update modifications shortly, has already reached a level of stability where failures are now very infrequent. Unfortunately, although the system has capacity to accommodate additional traffic, the number of participating airlines has not increased significantly.

3.9 Although the trial is proceeding well, India reported that they are not yet ready to consider the introduction of reduced separation provisions. India considered that a simultaneous coordinated implementation of reduced separation applications by all participating ATS service providers in the Bay of Bengal was likely to be the best implementation strategy. The Secretariat supported this position.

3.10 India is planning to introduce ADS/CPDLC trial operations in the Mumbai and Delhi FIRs, commencing in late 2005 or early 2006. In support of this initiative, India advised that they would prefer to work strictly with one CRA for both the Bay of Bengal and the Arabian Sea. The Secretariat noted that this was in accordance with proposals in regard to a "Whole of Indian Ocean ATS Coordination Group".

Update of FIT-BOB Work Plan

3.11 The meeting reviewed the Work Plan agreed to by FIT-BOB/4 (September 2004) as shown in **Appendix A.** The meeting was also requested to review the Table of ADS/CPDLC Equipage and ATS Status for the Indian Ocean and Bay of Bengal included as **Appendix B** and update the Regional Office in this regard.

3.12 Sri Lanka advised the meeting that they had installed ADS/CPDLC equipment in early 2001 and commenced trial operations on 15 June 2001 within Colombo FIR. With limited airlines willing

to (and capable of) logon, the trials were conducted on a voluntary basis as stated in AIC A02/02. Since then, the trials were conducted until mid 2003. Though the related AIC continued to be current, due to reduced staffing situations a local instruction had been issued in late 2003, to restrict the services as per the daily staff situation. Currently, the system is not operational due to an equipment malfunction which is expected to be fully restored by mid May 2005 when the operational trial would be reactivated.

3.13 The meeting appreciated the resumption of the trial and suggested that as the Bay of Bengal operational trial had been introduced in February 2005, there would be new arrangements to be put in place, including the operation of the CRA, and a new AIC giving details of the trial should be issued with two AIRAC cycle notification provided. Sri Lanka thanked Airservices Australia for the excellent support and advice given to assist them recommence ADS/CPDLC services, and requested that they would like to continue to seek their assistance. Airservices was pleased to continue to provide assistance where possible**.**

3.14 Sri Lanka also updated the meeting in regard to the assistance that had been provided by India to train their controller staff and assist with technical advice in regard to ADS/CPDLC operations. Sri Lanka thanked India for this assistance and looked forward to continuing this beneficial relationship.

3.15 The meeting shared Sri Lanka's need to gain technical knowledge and expertise, and called upon Airservices Australia who pioneered, along with their partners in the South Pacific Region, the introduction of the first ADS and CPDLC operations, to support the efforts of States in the Asia Region to implement ADS and CPDLC.

3.16 The Secretariat advised that Australia was presently working with African States through the Informal Indian Ocean ATS Coordination Group to implement ADS and CPLDC in the Southern Indian Ocean area. The FIT-BOB/4 meeting had considered the establishment of a Whole of the India Ocean meeting to harmonize ADS/CPDLC implementation across the region. This was endorsed by BBACG/16 (February 2005) who recommended that the Regional Office bring this to the attention of APANPIRG/16 to be held on 22-26 August 2005. This would allow for integration of all the various coordinating groups and implementation plans into a consolidated approach.

3.17 The Secretariat drew attention to the use of free text messages and the problems they posed if not used correctly. Airservices emphasized the importance of correct use of free text messages and referred to Section 5.10 in the FOM which dealt with this matter. In particular free text messages should not be used when issuing ATC route and flight level clearances, as the only message response available to the pilot was "Roger" when the correct response should be "WILCO". Other examples of misuse of free text were explained. Because of the difficulties associated with using free text, pre-formatted free text messages of the most commonly used messages had been included in the FOM and these should be used and use of free text avoided where possible. The Secretariat noted that it may be appropriate to include the standardized free text messages in the PANS-ATM and this would be referred to ICAO Headquarters for consideration.

3.18 Airservices informed the meeting of the importance of collecting data link performance data and presenting it to the CRA in the appropriate format. States should note whether their systems provided raw date and if so, there would be a need to translate this into a more readable format. Collecting and evaluating system performance data was necessary to monitor the health of the systems and to check whether the required performance criteria were being met. This was particularly important for application of separation using ADS where the performance requirements in the collision risk models must be met and ongoing monitoring carried out.

3.19 Also, there was practical value of keeping statistics of the most commonly used CPDLC messages, as this would assist in presenting the system message order to controllers, and for training purposes where comparisons could be made of how controllers and pilots were using the messages.

3.20 IATA requested that India should use the FIR code identifiers for Kolkata (VECF) and Chennai (VOMF) for ADS logon instead of VOMM and VECC respectively, which were airport codes. As the FIR codes were contained on area navigation charts and not the airport codes, this was more useful to pilots. India agreed to make the changes and two AIRAC cycle notification would be provided.

Update of FIT-SEA Work Plan

3.21 The meeting reviewed the FIT-SEA Work Plan provided in **Appendix C** and recognized that the Work Plan contained minimal detail and had not been developed sufficiently for an implementation project. Accordingly, the meeting requested the Secretariat to adopt the FIT-BOB model. IFALPA requested that more attention should be given to timelines and target dates for completing the various tasks. A revised Work Plan format would be prepared for the next meeting. States were requested to provide target dates for introducing ADS and CPDLC services. The meeting also drew attention for the need for States to make use of AIDC and to review their implementation schedules. In this regard, the meeting was also requested to review the Table of ADS/CPDLC Equipage and ATS Status for the South East Asia area included as **Appendix D** and update the Regional Office in this regard.

3.22 The meeting noted that the two principal ATS providers for the non-radar airspace over the South China Sea where ADS was needed were the Philippines and Viet Nam. The Philippines advised that there had been unavoidable delays in obtaining ADS and CDPLC equipment and the implementation date had slipped from 2007, as notified at the last meeting, to 2010.

3.23 The meeting expressed considerable disappointment in this development which would have an adverse impact on improving the air traffic services over the South China Sea. The need for data link services to enhance ATM to improve efficiency, airspace capacity and utilization, and enhance safety was a long standing requirement and a core element in the ICAO Regional CNS/ATM plan. Also, environmental concerns have placed a higher priority and urgency on maximizing fuel savings and the use of ADS and CPDLC would make a significant contribution.

3.24 In noting the delay to implementation in the Philippines, the meeting suggested that a phased approach should be adopted in relation to the implementation of ADS and CPDLC in the South China Sea area as State's operational capability became available. In addition, the Regional office is planning to conduct a Special Implementation Project (SIP) to the Philippines in July 2005 and the meeting requested that the SIP Officer bring to the attention of the Philippine authorities the need to expedite equipage and implementation of ADS and CPDLC in the interests of safety in the South China Sea airspace.

3.25 IATA expressed concern that continued delay in upgrading air traffic services to introduce ADS and CPDLC in the South China Sea area had a major negative impact on flight operations. Operators in the region for some time had equipped their fleets with data link capability at considerable cost and were not deriving the expected benefits. With increasing rapid growth in traffic and airspace capacity enhancements through the implementation of RVSM and reduced lateral separation in the SCS airspace, there was a commensurate requirement to improve the surveillance and communications which had remained unchanged for decades. This area was also subject to seasonal tropical storms causing major disruption to traffic. The need for improved surveillance was long overdue and there were safety concerns that need to be addressed. IATA urged the States concerned to review their implementations plans and do their utmost to accelerate implementation of data link services in accordance with the ICAO's regional CNS/ATM plan.

3.26 The Secretariat endorsed IATA's comments and suggested that there needed to be a renewed effort on the part of States and ICAO to address the timely implementation of the regional CNS/ATM plan and give suitable priority to providing the data link services. The problem seemed to be

an issue of political will on the part of some governments concerned to provide the funding for ATS providers to make the necessary improvements. The problems were well understood operationally, however this may not have been adequately communicated to the higher levels of government. The meeting agreed that the Regional Office should bring this to the attention of States, and in view of the growth in traffic in the region and the safety and environmental concerns being expressed, to request that they give priority to funding the necessary ATM improvements.

Establishment of the CRA for the South-East Asia area

3.27 Japan informed the meeting that in follow-up to the FIT-SEA/1 meeting held in combination with the eleventh meeting of South-East Asia ATS Coordination Group (SEACG/11) from 24 to 28 May 2004, and the offer made by CRA Japan to undertake the role of CRA activity for the South China Sea area, CRA Japan has confirmed that it would be willing to provide the CRA service and requested the meeting to consider this offer. The provision of CRA services would be an extension of its existing activities in the Tokyo FIR as aircraft were operating from the Tokyo FIR to the South-East Asia area. Also this would provide continuous CRA services across this geographical area.

3.28 The meeting recalled that FIT-SEA/1 sought clarification of the respective roles of the CRA of Japan and its relationship with Boeing, with a view to fully understanding whether the South China Sea CRA activities would be undertaken exclusively by the CRA Japan or whether Boeing would have a role and if so, the extent of that role. CRA Japan advised that as part of their activities for the Tokyo FIR, they were working closely with Boeing, as the operating body of the CRA for FAA, on the technical issues concerning problem reports affecting Boeing aircraft.

3.29 CRA Japan advised that initially there would be no charge for setting up and operating the CRA, but consideration would need to be given for funding its ongoing service, and this matter should be taken into account in the CRA funding discussions in due course.

3.30 The meeting noted that it was the intent of CRA Japan to undertake the role of FIT-SEA CRA until the FIT-SEA established a formal CRA. The meeting, recognizing the considerable experience gained by CRA Japan in operating these services for the Tokyo FIR, requested the States concerned and the users to indicate their support for CRA Japan to provide the CRA services for South-East Asia. The Philippines, Singapore, IATA and IFALPA thanked CRA Japan for their offer to set up the CRA and the preparation work that they had done, and supported the proposal. The Secretariat also expressed its appreciation and endorsed CRA Japan's proposal. As Viet Nam and Indonesia were also involved and were not present, the Regional Office would coordinate with them to seek their views and would advise all parties concerned.

3.31 In regard to the formalities to establish the CRA, the Secretariat advised that this was a matter for the States concerned to decide as they were responsible for the provision of the CRA services. In this case, as CRA Japan was an established CRA, the States could all agree through the FIT-SEA to appoint CRA Japan. This was the approach taken by the States of the FIT-BOB to appoint Boeing as the CRA for the Bay of Bengal area. Also, it would be necessary to obtain the cooperation of the aircraft manufacturers and data link service providers and in this regard the Secretariat was requested to confirm their participation at future FIT-SEA meetings.

3.32 CRA Japan advised that the objectives of the FIT-SEA CRA was to assist the FIT-SEA members in planning and implementing ADS/CPDLC systems by sharing the technical and operational information, processing FANS 1/A Problem Reports (PR), disseminating the de-identified problem report information, and submitting reports to the FIT-SEA and relevant bodies. The Secretariat also advised that the offer of FIT-SEA CRA services by the CRA Japan would not require a formal approval of APANPIRG. Proposed terms of reference (TOR) of FIT-SEA CRA are provided in **Appendix E.** The

proposed detailed tasks of FIT-SEA CRA are described in **Appendix F**. The meeting requested the parties concerned to review this information to be finalized at the next FIT-SEA meeting.

3.33 In addition to the above TOR, the FIT-SEA CRA would also share the technical and operational information with the respective ATSUs for the purpose of improving ADS/CPDLC systems.

3.34 The proposed problem reporting procedures, including FANS 1/A PR Form for the FIT-SEA members are provided in **Appendix G**.

3.35 CRA Japan advised that at the next FIT-SEA meeting it would be necessary to confirm the role of the CRA, clarify who were the FIT-SEA members and their roles, and put in place the procedures and process for operating the CRA. The Secretariat suggested that if possible, the preparation by CRA Japan of these documents prior to the RASMAG/3 meeting in June 2005 would permit RASMAG to review and provide feedback in regard to the proposals. In the meantime, the CRA Japan advised that they were willing to start work with Singapore on any problem reports that they had experienced as they were the only State presently operating ADS and CPDLC services in the area. Singapore agreed to provide these reports to the CRA Japan.

Agenda Item 4: Central Reporting Agency

4.1 The Secretariat presented the meeting with a review of the background and work undertaken to date to put viable CRA funding arrangements in place to support an operational trial for implementation and operation of ADS and CPDLC in the Bay of Bengal area. The provision of the CRA services would require funding, and in order to establish a suitable funding mechanism, a Special Coordination Meeting (SCM) was held at the Regional Office, Bangkok on 8-10 December 2003.

4.2 The SCM considered various funding models that could be used by States to cooperate with each other to establish the CRA and provide for the necessary funding. Recommendations were made to the FIT-BOB/3 meeting (February 2004) on how to set up the funding arrangements. In this regard, FIT-BOB adopted the following recommendations made by the SCM:

> That, recognizing that the participating States in the FIT-BOB were responsible for the airspace safety management programmes for the provisions of ATS in the FIRs where ADS/CPDLC would be implemented in the Bay of Bengal area, FIT-BOB would:
>
> a) establish a CRA to evaluate the ground and airborne ADS/CPDLC systems performance during the operational trial;
>
> b) determine the budget for the CRA in consultation with the CRA service provider, the participating States and users, and to establish the funding arrangement to provide funds for the CRA, taking into account the framework provided by the December 2003 SCM;
>
> c) request IATA to collect funds for the CRA from airlines and other stakeholders as advised by FIT-BOB, and establish an arrangement for the provision of CRA services with a service provider subject to available funds for a trial period of one year;
>
> d) seek contributions from other parties to contribute to the cost of operating the CRA and make these funds available to the CRA service provider; and

e) keep the funding arrangements under review during the operational trial period, and to review the efficiency and effectiveness of the funding arrangements prior to the end of the operational trial.

4.3 In considering a suitable service provider for the FIT-BOB CRA, Boeing, who was operating the CRA for the Pacific Region, had confirmed that they would be willing to provide CRA services to the States participating in the FIT-BOB to support the operational trial for the implementation of ADS and CPDLC services. Boeing's offer to provide CRA services for the Bay of Bengal operational trial was accepted by FIT-BOB/3. To set up and operate the CRA, the FIT-BOB States participating in the operational trial requested IATA and Boeing to establish a contractual arrangement for the provision of these services and its funding.

4.4 At the FIT-BOB/4 meeting (September, 2004), IATA informed the meeting that the required airline arrangements to provide funding had been completed with a first year cap of not more than US$500 thousand, and they were in the process of completing the legal documentation with Boeing. Boeing CRA confirmed that satisfactory arrangements had been made and that the finalization of the legal aspects was imminent. Boeing and IATA indicated that for all intents and purposes, the FIT-BOB should consider that the CRA would be able to commence work related to the Bay of Bengal operational trial from October 2004. Participating States were urged to provide appropriate data, contact persons, etc for use by the CRA in accordance with the details contained in the FIT-BOB task list and related CRA documentation, including the FANS 1/A Operations Manual (FOM).

4.5 India commenced an operational trial of ADS and CPDLC in the Chennai and Kolkata FIRs on 19 February, 2004. Thailand was also participating in the trial. Other States involved were expected to join the trial when their data link systems became available. To date, the formal arrangements between IATA and Boeing to establish the CRA have not been completed, and consequently, technical analysis of the problem reports being collected by the States have not been evaluated by the CRA.

4.6 The Secretariat reminded the meeting that there were wider issues associated with the need to effectively fund and operate multinational infrastructure and air navigation services, including services related to airspace safety. In this regard, the meeting was advised that the APANPIRG Regional Airspace Safety Monitoring Advisory Group (RASMAG) had identified the need to establish airspace safety monitoring services to support the application of reduced horizontal separation minima for the South China Sea and EMARSSH routes (60 and 50 NM lateral route spacing respectively), and for any future implementation such as 50 NM longitudinal separation and 30 NM lateral and longitudinal separation.

4.7 The meeting was also advised by Australia that at the ISPACG/19 meeting (Brisbane, February 2005), the United States had informed the meeting that the funding of the ISPACG CRA by the FAA would expire in September 2005, and other funding arrangements would need to be considered.

4.8 The meeting recognized that the provision of safety monitoring services was essential for continued operation of reduced separation minima including RVSM. In this regard, it was also noted that, although the focus of this meeting was on the establishment of the CRA for the Bay of Bengal data link operational trial, similar issues would need to be addressed for funding and operation of safety monitoring services in general. Therefore, the outcome of this meeting would be of considerable interest to other groups involved in considering these issues.

4.9 In light of the above, the Regional Officer, Air Transport made a presentation on how States could best organize to provide necessary safety monitoring services. ICAO's policies and guidance related to the recovery of necessary expenditures were summarized and various options for financing cooperative approaches to the provision of air navigation services were described.

4.10 It was pointed out that the *Convention on International Civil Aviation* (Chicago, 1944) (Doc 7300/8) establishes relevant principles for air navigation charges, especially uniformity in conditions of use and equity in charging. The obligation for providing safety monitoring services for air navigation resides with each State but there are policies, guidelines and mechanisms for recovering appropriate costs as documented in the recently revised publication, *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082/7).

4.11 To elaborate on the guidance contained in Doc 9082/7, the Council of ICAO had agreed that as a general principle, where air navigation services were provided for international use, the providers may require the users to pay their share of the related costs. The meeting was invited to note that the Council recommends that when establishing the cost basis for air navigation services charges, the following principles (among others) should be applied:

a) The cost to be shared is the full cost of providing the air navigation services, including appropriate amounts for cost of capital and depreciation of assets, as well as the costs of maintenance, operation, management and administration.

b) The costs to be taken into account should be those assessed in relation to the facilities and services, including satellite services, provided for and implemented under the ICAO Regional Air Navigation Plan(s), supplemented where necessary pursuant to recommendations made by the relevant ICAO Regional Air Navigation Meeting, as approved by the Council. Any other facilities and services, unless provided at the request of operators, should be excluded, as should the cost of facilities or services provided on contract or by the carriers themselves, as well as any excessive construction, operation, or maintenance expenditures.

c) Air navigation services may produce sufficient revenues to exceed all direct and indirect operating costs and so provide for a reasonable return on assets (before tax and cost of capital) to contribute towards necessary capital improvements.

4.12 The Council had observed that Governments may choose to recover less than full costs from the users in recognition of local, regional, or national benefits. Furthermore, the Council noted that it was up to each State to decide for itself whether, when, and at what level air navigation services were provided.

4.13 The Council also recognizes the desirability of consultation with users of air navigation services before changes in charging systems or levels of charges were introduced. The purpose of consultation was to ensure that the provider gave sufficient information to users relating to the proposed change and gave proper consideration to views of users and the effects the charges would have on them. The aim should be that, wherever possible, changes be made in agreement between users and providers.

4.14 The policies and guidelines indicated above, however, did not preclude States from entering into formal mechanisms to support cooperative approaches in the provision and financing of air navigation services. The four broad mechanisms to consider are:

a) An International Operating Agency - a separate entity assigned the task of providing air navigation services, principally route facilities and services, within a defined area on behalf of two or more sovereign States (e.g. EUROCONTROL);

b) A Joint Charges Collection Agency - an agency that collects route air navigation service charges on behalf of all of the participating States, including those that were over-flown;

c) A Multinational Facility/Service – a mechanism included in an ICAO regional air navigation plan for the purpose of serving international air navigation in airspace extending beyond the airspace services by a single State in accordance with that regional air navigation plan. The participation of States in the provision of a multinational facility/services is based on the assumption that any State having supported and agreed to the implementation of such a facility/service and making use of it, should shoulder its share of the costs involved. Having done this, the participating States would need to formalize in an agreement the terms under which the multinational facility/service was to be provided; or

d) An ICAO Joint Financing Agreement – an agreement involving two or more States sharing in the costs of implementing and operating air navigation facilities and services for international air transport operations.

4.15 In pursuing the provision of funding and the setting up of appropriate mechanisms for this region, the meeting appreciated the guidance provided but recognized that it was beyond the scope of this meeting to establish a funding mechanism that would satisfy the requirements for the provision of safety services for the CRA and other operational requirements. In this regard, the meeting agreed that it would be necessary to convene a meeting of States and users with the appropriate level of expertise to address these matters further. Accordingly, the Regional Office under the guidance of the Air Transport Section was requested to convene a special coordination meeting specifically to finalize the arrangements for funding and setting up of the CRA, and to consider the wider issues of funding necessary for the provision safety services for the international airspaces in the region such as for the application of RVSM and reduced horizontal separation.

4.16 IFALPA expressed the view that the provision of ADS and CPDLC services in the Indian Ocean area were long overdue especially in view of recent traffic growth and continued poor performance of HF communications in some areas, and the effect of adverse major weather conditions that regularly impacted on flight operations. IFALPA urged States to expedite implementation of data link services and to finalize the funding agreement, without which implementation could not proceed.

4.17 In regard to the Bay of Bengal CRA, the Secretariat informed the meeting that the States and users concerned had previously agreed to the process, which had been advanced to the point where an agreement between IATA and Boeing was imminent. Additionally, it had been a key priority of APANPIRG for a considerable time for States to implement data link services especially in the non-radar international airspaces in the region. Also, this was a fundamental element of the regional CNS/ATM Plan and had the support of all parties concerned. There were many complex reasons why ADS and CPDLC could not be implemented earlier in the Asia region, and other implementation priorities had taken precedence such as Y2K, the EMARSSH routes, South China Sea revised route structure and RVSM. These were all major undertakings which had stretched the limited resources of all parties and had led to significant improvements to operations throughout the region. Now that aircraft data link equipage had reached a level to support wider use of ADS and CPDLC, this had now become a top priority and implementation was going ahead as quickly as States and ATS providers could procure and implement the necessary ATM systems.

4.18 IATA was pleased to advise the meeting that they were at the final stage of reaching agreement with Boeing and expected that a contract would be signed by the end of this month. IATA provided details of the contract with Boeing and how the funding mechanism would work. The contract would be effective for 18 months. IATA would be a principal contracting partner with Boeing, and as such

would be responsible for meeting the cost incurred by Boeing for operating the CRA in accordance with the defined requirements. Boeing would be paid in arrears and it should be possible to commence CRA services as soon as the contract was signed. All users of the data link services would be required to pay for the CRA services and a single charge would be levied on airlines by IATA in accordance with agreements with the States concerned. States would not bear any expense in this process and would not be required to participate in the invoicing and collection of charges other than providing the data and publishing their AIP Supplements (SUP).

4.19 However, to bring the CRA into operation, it would be necessary for IATA also to enter into a formal arrangement with the States concerned to ensure provision of the necessary data and to enable IATA to collect charges from the users of the data link services. This would require States to notify users that charges would be levied for the provision of ADS and CPDLC and that IATA was authorized by the States concerned to invoice and collect charges specifically for the operation of the CRA. In regard to the notification to be issued by States on user charges and operation of the CRA, IATA would provide an example of wording that could be used in an AIP SUP and coordinate with the States concerned to complete the arrangements.

4.20 Although the initial contract between IATA and Boeing would be for 18 months, the meeting was advised that it would be possible to extend the arrangement on an annual or triennial basis thereafter, should this interim approach to funding the CRA prove successful for the parties concerned.

4.21 The meeting expressed its considerable appreciation to IATA for their legal expert responsible for setting up the contract with Boeing to fund and establish the Bay of Bengal CRA having rearranged his schedule at short notice to attend this meeting to update on progress.

4.22 The meeting was encouraged by the progress being made and thanked IATA for their considerable effort to establish the CRA on behalf of the States concerned. In regard to the date of the SCM for CRA Funding, it was agreed that this should be held on 2 - 3 June 2005, before the RASMAG meeting on 6-10 June.

Agenda Item 5: Data link monitoring requirements

Draft Guidance Material for End-to-End Safety and Performance Monitoring

5.1 The meeting was presented with a draft copy of the *Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data Link Systems in the Asia/Pacific Region* for review.

5.2 The guidance material was intended to provide a set of working principles for ATS data link system performance monitoring that would be applied by all States implementing these systems, as well as providing detailed guidance on the requirements for establishing and operating a FANS-1/A Interoperability/Implementation Team (FIT) and Central Reporting Agency (CRA). It was intended that this guidance material would help promote a standardized approach for monitoring the performance of ATS data link systems within the Region.

5.3 The Second meeting of the Regional Airspace Safety Monitoring and Advisory Group (RASMAG/2, October 2004) had reviewed the draft *Guidance Material,* noting the development of the material that had occurred since the material was initially presented at RASMAG/1. RASMAG/2 requested that the Regional Office circulate the current draft of the guidance material to the FIT-BOB, FIT-SEA, IPACG and ISPACG forums to allow enhancements to be made based on the experience of these groups. The RASMAG/2 was pleased to note the maturity of the guidance material and agreed that every effort should be made to finalize the material in time for consideration by RASMAG/3 during June

2005, with a view to bringing the material to APANPIRG/16 in August 2005 for endorsement as regional guidance material.

5.4 A copy of the draft *Guidance Material* is included as **Appendix H.** States and International Organizations are requested to submit comments and recommendations to the Regional Office prior to 27 May 2005 in order that they may be incorporated into material to be presented to RASMAG/3 during June 2005.

ICAO OPLINK Panel Draft CPDLC Guidance Material

5.5 The meeting was advised that, as a result of reports of widespread misunderstanding of the use of CPDLC, the Secretary of the ICAO Operational Data Link Panel had requested that the panel develop a document containing guidance material for the use of CPDLC. The Secretary of the Panel, although noting that the material was still under development, recognized that the draft material would be of value to States operating CPDLC systems. Accordingly, the material had been released as a 'draft for comment' in order to allow States to access the material and also to facilitate feedback with a view to finalizing the material.

5.6 Version 1.3 of the draft CPDLC Guidance Material, as presented to OPLINKP Working Group B in Montreal during February 2005, had been included as an electronic 'soft copy' version on the CD-ROM provided to delegates attending the Regional Office ICAO ADS/CPDLC seminar during 18 and 19 April 2005, in Bangkok Thailand.

5.7 States and Organizations are invited to review the draft Guidance Material and provide feedback to the OPLINK Panel. Comments from airlines, pilots, ATS providers and all other interested parties should be directed to OPLINKP via the primary author adam.watkin@airservicesaustralia.com or via the Regional Office for relay to OPLINKP.

Agenda Item 6: Air traffic flow management plan and implementation

6.1 Under the planning arrangements that had been put in place for this meeting, the First Meeting of the Air Traffic Flow Management Task Force (ATFM/TF/1) had been scheduled concurrently with the combined FIT meeting.

6.2 For editorial reasons, the full report of the ATFM/TF/1 meeting has been included as a discrete section located in **PART IV** of this report.

Agenda Item 7: Any other business

ICAO language proficiency requirements

7.1 The meeting was presented with information on the new ICAO language proficiency provisions in Annexes 1, 6, 10 and 11 requiring that as of 5 March 2008, pilots, aeronautical station (radio) operators and air traffic controllers shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements of ICAO documentation. The minimum level that must be achieved by this group is Level 4.

7.2 ICAO published the *Manual on the Implementation of the ICAO Language Proficiency Requirements* (Doc 9835-AN/453) in September 2004 addressing the various training and evaluation issues related to the implementation of ICAO language proficiency provisions to assist States to comply with the provisions.

7.3 In implementing the proficiency provisions, the attention of States is drawn to considering, aspects of:

- mechanisms to identify current proficiency levels amongst operational staff;
- mechanisms for the provision of language enhancement training;
- whether to establish in-house programs for assessment and enhancement training, or utilize external language services providers;
- if using external language services providers, mechanisms to identify appropriate providers;
- numbers of pilots or controllers that can be simultaneously taken off line, and for what period of time, for assessment and/or enhancement training;
- contingency considerations in the event that insufficient staff attain Level 4 proficiency; and
- whether language proficiency tests should be introduced as part of the initial recruiting process.

7.4 Pursuant to Article 42 of the Convention on International Civil Aviation, the introduction of the new language proficiency provisions are becoming applicable progressively. As of 27 November 2003, operational staff shall demonstrate the ability to speak and understand the language used for radio telephony. Until 5 March 2008, the licensing authority of each State is permitted to determine the way in which this ability is demonstrated.

7.5 From 5 March 2008, the demonstration of the ability to speak and understand the language used for radio telephony communications shall be conducted in accordance with the holistic descriptors and rating scale published by ICAO as attachment and appendices to Annex 1.

7.6 The meeting recognized that States could be expected to undertake substantial work in the preparation and application of language testing instruments in order to assess the present ability of pilots, radio operators and air traffic controllers to meet the SARPs. Also they would have to examine issues of aviation language training aimed at enhancing the language skills of operational staff to achieve at least the minimum operational Level 4.

7.7 The Secretariat advised the meeting, that in addition to ICAO's guidance material, an education programme has been launched in the form of a series of seminars to be held in all ICAO regions. The first global seminar was held at ICAO Headquarters, Montreal in September 2004 and the first regional seminar was held at Tokyo in December 2004. The meeting noted that the Regional Office did not have particular language expertise and any further assistance to States would best be sought from ICAO Headquarters, or use made of expertise in the public or private sectors.

30/30 Implementation in the Tasman Sea

7.8 On 20 January 2005, following satisfactory completion of the safety review, 30 NM lateral/30 NM longitudinal separation (based on RNP4 between FANS 1/A approved aircraft) was introduced across the Honiara FIR (Solomon Islands), Nauru FIR (Republic of Nauru), Nandi FIR (Fiji) and the oceanic portions of the Brisbane FIR (Australia) and Auckland FIR (New Zealand).

7.9 Australia provided an information paper to the meeting in respect of the recent 30/30 implementation. Due to time constraints, the paper was not formally presented during the meeting, however the Secretariat drew the attention of the meeting to the paper, as it contained valuable information in regard to the safety management and working group processes that had been undertaken during the implementation of the reduced separation minima.

The Australian Organized Track Structure (AUSOTS)

7.10 Australia provided a presentation to the meeting in regard to the initiatives being taken by Airservices Australia in regard to flex track operations in the Indian Ocean and domestic airspace.

7.11 Under an agreement between Airservices Australia and the FAA, the DOTS+ system will be installed in Melbourne Centre, where it will be used as the operating platform for the generation of daily Flex Tracks for use by airlines operating between South East Asia and Australian Airports.

7.12 Australia informed the meeting that it would work with other States and Organizations in the region to broaden the area for the use of Flex Track operations and to achieve the long-term goal of the successful implementation of User Preferred Trajectories (UPT) on a "Gate-to-Gate" basis.

India VHF

7.13 India informed the meeting that operators should note that a VHF remote control station using VSAT had been installed at Port Blair giving extended VHF coverage of 200 NM to Kolkata ACC on 132.45 MHz. IFALPA advised that the Jeppesen charts of the area had not been updated to show this frequency and India was requested to bring this to their attention as this would facilitate pilots making use of the frequency.

RVSM Issues

7.14 IFALPA raised the problem of RVSM not being applied in the Manila FIR in a consistent manner and pilots experienced some confusion. It was explained by the Secretariat that the Manila FIR had become a transition area between two flight level orientation schemes (FLOS) being used in the West Pacific/South China Sea airspace (modified single alternate) and adjacent airspaces of the Pacific to the east and Indonesia FIRs to the south operating the single alternate FLOS. The Philippines was using a flight level allocation system to cater for the transition problems, which resulted in 2000 ft separation being applied in some areas. This problem was being addressed by the RVSM/TF and a proposal has been developed to change the South China Sea flight level allocation arrangement to minimize the transition problems. However, due to the late submission of traffic sample data by some States for the RMA to carry

out the required safety assessment of the proposed changes, the RVSM/TF meeting dealing with this matter was postponed from its scheduled date in April to September 2005.

Agenda Item 8: Date and venue for the next meetings

Special Coordination Meeting – Bay of Bengal CRA Funding

8.1 Arising from the discussions in regard to the funding of the CRA, the meeting requested the Regional Office under the guidance of the Air Transport Section to convene a special coordination meeting (SCM) specifically to finalize the arrangements for funding and setting up of the BOB-CRA. The Regional Office will make arrangements for the conduct of a 2-day SCM during the 2nd and 3rd of June 2005. The meeting is expected to finalize arrangements between IATA and India for the provision of funding. Other States of the Bay of Bengal, including Sri Lanka, which will shortly be joining the ADS/CPDLC trial will also be invited to attend this meeting. The Regional Office would make arrangements accordingly.

Combined Meeting of FIT-BOB and FIT-SEA

8.2 The meeting considered the potential benefits of holding a combined meeting of the FIT-BOB and FIT-SEA, agreeing that each such occasion should be considered in relation to the circumstances prevailing at the time rather than simply adopting the concept as a routine procedure.

8.3 In light of the imminent commencement of CRA services for the FIT-BOB and the proposed expansion, during late 2005/early 2006, of the Bay of Bengal ADS/CPDLC trial to include Delhi, Mumbai and Colombo FIRs, the meeting agreed that FIT-SEA members would benefit from participation at the next FIT-BOB meeting. Accordingly a combined FIT meeting would be scheduled by the Regional Office during November/December 2005, and final arrangements communicated to States at a later stage.

Air Traffic Flow Management Task Force Second Meeting

8.4 The meeting noted the Secretariat proposal that the ATFM/TF/2 meeting be scheduled over 4 days from 28 June until 1 July 2005. These dates were identified as clashing with the ICAO USOAP audits of Malaysia and Thailand that would be occurring at that time, and was also immediately prior to the scheduled RVSM/TF/26 meeting in Tokyo, which a number of delegates and international organisations would also be attending. The FAA representative advised that they were also likely to be unavailable due to prior business commitments.

8.5 After discussion, it was recognised that the next available meeting date for the Secretariat would not occur until late September or early October. Accordingly, the meeting agreed to the June/July dates described above.

8.6 The meeting recognised the importance of India in regard to overall flow management in the Bay of Bengal, noting India's geographical proximity to Pakistan and Kabul on the one side and Bay of Bengal States on the other. The meeting accepted a very generous offer made by the Airports Authority of India to hold the ATFM/TF/2 meeting in Delhi. The Regional Office would make arrangements with AAI and advise States in due course.

FIT- BOB WORK PLAN

(last updated April 2005)

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
1.	ATS providers to adopt the FOM and to review and update their ATSU operating procedures to align with the FOM.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Important all ATSU adopt common operating procedures. APANPIRG/15 (August 2004) agreed that the FANS1/A Operations Manual (FOM) be used as the basis for ADS and CPDLC operations in conjunction with Annex 10, PANS/ATM and regional guidance material.
2.	ATS providers to coordinate with adjacent ACCs to review and update letters of agreement for introduction of ADS/CPDLC services on a trial basis.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Ensure common ATC procedures applied.
3.	Issue NOTAM on the commencement of the operational trial in line with the model NOTAM provided by FIT-BOB/3.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Some States have already issued NOTAM on their operational trial. India to revise NOTAM Sri Lanka to issue new AIC for recommencement of trial

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
4.	Coordinate with BOB States ~~not present at FIT-BOB/4~~ on implementation of the operational trial..	Ongoing activity as additional States join the operational trial.	ICAO, Malaysia. Sri Lanka, Myanmar, Bangladesh	Ongoing	Determine status on trial participation ~~Reviewed by FIT BOB~~ Sri Lanka planning to recommence trial in June/July 2005
5.	Coordinate with Indian Ocean States on harmonizing implementation of operational trial.	As soon as practicable	ICAO APAC BOB and Indian Ocean States	Ongoing	Operational trial underway in BOB and to harmonize implementation.
6.	Coordinate with Middle East and East African Regional Offices on implementation of operational trial in the Arabian Sea and Indian Ocean.	As soon as practicable	ICAO APAC	Ongoing	To harmonize inter-regional implementation of ADS/CPDLC and to ensure common operating procedures established. APANPIRG/16 to be advised of expansion of implementation plan to whole of the Indian Ocean and formation of coordination group
7.	Collecting of ADS/CPDLC problem reports and submit to CRA.	Immediate	States, operators	Ongoing	To be submitted as soon as practicable to facilitate analyzing the reports. BOB CRA (Boeing) planned operation from May/June 2005.

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
8.	Establish provision of monthly monitoring date ADS/CPDLC system performance data to be submitted to the CRA.	Monthly	States	Ongoing	Essential for evaluating overall system performance within the trial airspace. BOB CRA (Boeing) planned operation from May/June 2005.
9.	Compile data on aircraft ADS/CPDLC equipped in the trial airspace.	6 monthly	States, IATA	Ongoing	To keep record of aircraft participating in the trial and determine overall benefits derived by population of aircraft operating in the trial airspace.
10.	Training of controllers and technical staff on ADS/CPDLC operational procedures based on the FOM.	Ongoing activity as additional States join the operational trial.	States	Ongoing	
11.	Nominate contact person (ATS and technical) and keep details updated.	As soon as practicable	States, operators	Ongoing	Important that CRA has contact with engineering personnel to analyze problem reports and performance data. BOB CRA (Boeing) planned operation from May/June 2005.
12.	Establish data confidentiality agreements with States and operators participating in the trial airspace.	Immediate	CRA, States and operators	As required	Necessary to establish agreement with data providers for release of data and to de-identify reports.

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
13.	Include on aeronautical charts logon address of ATSUs providing ADS/CPDLC services using the FIR code.	As soon as practicable	ICAO	Ongoing	Annex 4 amendment to be considered
14.	Update ICAO Guidance material on CNS/ATM Operations in APAC Region.	As soon as practicable	ICAO	Ongoing	Part III harmonized with FOM. ICAO Headquarters continuing the review/harmonisation of Guidance Material.
15.	Coordinate with FOM editorial group on request for change to the FOM.	As required	BOB FOM editor	Ongoing	BOB FOM editor to be nominated FOM includes Request for Change (RFC) processes. Send all FOM RFCs to the Regional Office.
16.	Establish CRA.	As soon as practicable	States/IATA/ Boeing	Ongoing	SCM regarding CRA funding held December 2003. Boeing & IATA coordinating funding arrangements for CRA and process expected to be completed April 2005. BOB CRA (Boeing) planned operation from May/June 2005
17.	Provide authorization for IATA to invoice and collect user charges to fund the CRA, and States to enter into agreement with IATA to provide required data.	As soon as practicable	BOB States/ IATA	Ongoing	In coordination with IATA States to issue AIP SUP notifying users of charging for CRA services for operators using ADS/CPDLC in BOB data link service area

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Indian Ocean, Bay of Bengal - ADS/CPDLC equipage and ATS Status

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf-acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
AUSTRALIA Airservices Australia	Melbourne Brisbane	YMMM YBBB	Thales	~~SITA~~	~~YES~~	~~YES~~	~~YES~~	~~YES~~	Operational	~~YES~~	NO	Geoff Whitely, Operations Manager Melbourne Centre, Tel 61 3 9235 7378, Fax 61 3 9235 2471, E-mail: geoff.whitely@airservicesaustralia.com	Integrated System, ADS - B in 2005/06
INDIA Airport Authority of India	Chennai	~~VOMM~~ VOMF		SITA	YES	YES	NO	YES	Ops Trial	A1783/03, NOTAM A0700/03 and A1177/03	YES	Sh. B.M.N. Rao GM (CNS) ACS, Chennai Tel: 044-22560444; E-mail: gmcnschen_aai@vsnl.net Sh. N.U.B. Rao GM (ATC) Chennai Tel: 044-22561740; E-mail: gmasr_aai@vsnl.net	ADS-C Integrated with DPS, work in progress to integrate with RDPS LOGON Code to be changed to the FIR code
	Kolkata	~~VECC~~ VECF	ECIL	SITA	YES	YES	NO	YES	Ops Trial	A1278/00 NOTAM A0700/03 and A1177/03	YES	Sh. P.K. Bandopadhaya Addl. G.M. (CNS) ACS, Kolkata Tel: 33-25118722 E-mail: gmce_aai@vsnl.net Sh. Raj Kumar Addl. G.M. (ATC) Kolkata Tel: 033-25119428; Mob: 9830354337 E-mail: gmae_aai@vsnl.net agm_snp_kol@indiatimes.com	ADS-C Integrated with DPS, work in progress to integrate with RDPS Logon Code to be changed to the FIR code
	Mumbai							India will wait until ADS/CPDLC issues are fully resolved for the Chennai and Kolkata FIRS before proceeeding with ADS/CPDLC in the Mumbai FIR.			NO		

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf-acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
INDONESIA Directorate General of Air Communications	Jakarta	WIIZ	ARINC	ARINC	YES	YES	NO (Sep 04)	YES	Ops Trial	AIP Sup Nr:03/01 17May01	YES	Mr. Nanang S. Taruf Deputy Director System & Procedure Air Navigation Directorate of Aviation Safety E-mail: cns-atm@telkom.net Wi Yono Tel: 6221 5506178 E-mail: dss97@centrin.net.id	
MALAYSIA Department of Civil Aviation	Kuala Lumpur	WMFC		ARINC			NO	YES	Malaysia is installing new off the shelf equipment and will commission as stand alone in mid/late 2005. Will integrate after commissioning.		NO	Mr.Harizan Mohammad Yatim Director ATS Tel: 603-78465233 Fax: 603-78472997 E-mail: accwmfc@tm.net.my harizan@atsdca.gov.my	2005 New Equip Stand alone
	Kota Kinabalu	WBKK		ARINC			NO	YES			NO		2005 New Equip Stand alone
MALDIVES	Male		NO	NO	NO	NO	NO	NO	NO	NO	NO		
MYANMAR Department of Civil Aviation	Yangon	VYYF	Thales	SITA	YES	YES	NO	NO	Ops Trial	AIC A1/99 (10.1.99)	NO	U Yoa Shu Director ATS Myanmar Tel: 95 1 663838 E-mail dca.myanmar@mptmail.net.mn	Stand alone. Moving to new facilities, consider trial after mid 205.
SINGAPORE Civil Aviation Authority of Singapore	Singapore	WSJC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	yeo_cheng_nam@caas.gov.sg	Ops Trial completed 1999, integrated system

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf-acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
SRI LANKA Airport & Aviation Services (AASL) Ltd	Colombo	VCCC	Thales	SITA	YES	YES	NO	YES	Ops Trial	AIC-A020F-2001	NO	Mr. Ajith Nandana Wickremarachchi Senior Air Traffic Controller Airport & Aviation Services (Sri Lanka) Limited Bandaranaike International Airport, Colombo, Katunayake Sri Lanka Tel: 94 777344338 Fax: 94 11 2635105 E-mail: wickram1@yahoo.com	Stand alone
THAILAND AEROTHAI	Bangkok	VTBB	ARINC	ARINC	YES	YES	YES	YES	Ops Trial	3 monthly NOTAM	YES	Bangkok ACC Director	
ARINC												Mr. Sarawut Assawachaichit Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com	
CENTRAL REPORTING AGENCY (CRA)												Mr. Bradley Cornell Boeing Tel: 1 425 2946520 E-mail: bradley.d.cornell@boeing.com	
IATA												Soon Boon Hai Assistant Director Safety Operations & Infrastructure Tel: 65 62397267 Fax: 65 65366267 E-mail: soonbhd@iata.org	

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf-acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
IFALPA												Capt. Toby Gursanscky Regional Vice President South Pacific Tel: 61 2 99487532 E-mail: gursanscky@bigpond.com	
SITA												Mr. David Fung SITA Regional Manager, Asia AIRCOM CNS Services Room 1201, 12/F Centre Point 181-185 Glovcester Road Wanchai Hong Kong, China Tel: 852-9400 7979 E-mail: david.fung@sita.aero	
ICAO												Mr. Andrew Tiede Regional Officer ATM Tel: 66 2 5378189, ext. 152 Fax: 66 2 537 8199 E-mail: atiede@bangkok.icao.int icao_apac@bangkok.icao.int	

FIT- SEA WORK PLAN

(last updated April 2005)

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
1.	ATS providers to adopt the FOM and to review and update their ATSU operating procedures to align with the FOM.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Important all ATSU adopt common operating procedures. APANPIRG/15 (August 2004) agreed that the FANS1/A Operations Manual (FOM) be used as the basis for ADS and CPDLC operations in conjunction with Annex 10, PANS/ATM and regional guidance material.
2.	ATS providers to coordinate with adjacent ACCs to review and update letters of agreement for introduction of ADS/CPDLC services on a trial basis.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Ensure common ATC procedures applied.
3.	Issue NOTAM on the commencement of the operational trial in line with the model NOTAM provided by FIT-BOB/3.	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Singapore has issued NOTAM on availability of ADS/CPDLC services in the Singapore FIR
4.	Coordinate with SEA States on implementation of the operational trial..	Ongoing activity as additional States join the operational trial.	All States	Ongoing	Determine status on trial participation

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
5.	As States join the operational trial collect ADS/CPDLC problem reports and submit to CRA.	Immediate	States, operators	Ongoing	To be submitted as soon as practicable to facilitate analyzing the reports. CRA Japan expected to undertake CRA services from May/June 2005. Singapore to provide data to CRA Japan.
6.	Establish provision of monthly monitoring date ADS/CPDLC system performance data to be submitted to the CRA.	Monthly	States	Ongoing	Essential for evaluating overall system performance within the trial airspace. CRA Japan expected to undertake CRA services from May/June 2005.
7.	Compile data on aircraft ADS/CPDLC equipped in the trial airspace.	6 monthly	States, IATA	Ongoing	To keep record of aircraft participating in the trial and determine overall benefits derived by population of aircraft operating in the trial airspace.
8.	Training of controllers and technical staff on ADS/CPDLC operational procedures based on the FOM.	Ongoing activity as additional States join the operational trial.	States	Ongoing	
9.	Nominate contact person (ATS and technical) and keep details updated.	As soon as practicable	States, operators	Ongoing	Important that CRA has contact with engineering personnel to analyze problem reports and performance data.

	ACTION ITEM	TIME FRAME	RESPONSIBLE PARTY	Status	REMARKS
					CRA Japan expected to undertake CRA services from May/June 2005.
10.	Establish data confidentiality agreements with States and operators participating in the trial airspace.	Prior to commencement of operational trial	CRA, States and operators	As required	To establish agreement with States , operators and data providers for release of data and to de-identify reports.
11.	Include on aeronautical charts logon address of ATSUs providing ADS/CPDLC services using the FIR code.	As soon as practicable	States/ ICAO	Ongoing	Annex 4 amendment to be considered
12.	Update ICAO Guidance material on CNS/ATM Operations in APAC Region.	As soon as practicable	ICAO	Ongoing	Part III harmonized with FOM. ICAO Headquarters continuing the review/harmonisation of Guidance Material.
13.	Coordinate with FOM editorial group on request for change to the FOM.	As required	SEA FOM editor	Ongoing	SEA FOM editor to be nominated. FOM includes Request for Change (RFC) processes. Send all FOM RFCs to the Regional Office.
14.	Establish CRA.	As soon as practicable	ICAO APAC/States/ CRA Japan	Ongoing	Regional Office to confirm with States not present at FIT-SEA/2 on acceptance of CRA Japan as the SEA CRA.
15.	Provide details of processes necessary to set up and operate the SEA CRA	FIT-SEA/3	SEA States/ CRA Japan/ participating industry partners	Ongoing	CRA Japan to provide information at SEA/3

South China Sea/South-East Asia - ADS/CPDLC equipage and ATS Status

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf-acturer	DSP (e.g. SITA, ARINC)	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	ADS/CPDLC TRIAL	CONTACTS	REMARKS
CHINA	Sanya AOR												State to provide information for FIT-SEA/3
HONG KONG, CHINA CAD - Civil Aviation Department	Hong Kong												State to provide information for FIT-SEA/3
INDONESIA Directorate General of Air Communications	Jakarta	WIIZ	ARINC	ARINC	YES	YES	NO (Sep 04)	YES	Ops Trial	AIP Sup Nr:03/01 17May01	YES	Mr. Nanang S. Taruf Deputy Director System & Procedure Air Navigation Directorate of Aviation Safety E-mail: cns-atm@telkom.net Wi Yono	
JAPAN JCAB - Civil Aviation Bureau of Japan	Naha Tokyo												Tokyo FIR Oceanic participating in the IPACG FIT State to provide information for FIT-SEA/3
MALAYSIA Department of Civil Aviation	Kuala Lumpur	WMFC		ARINC			NO	YES	Malaysia is installing new off the shelf equipment and will commission as stand alone in mid/late 2005. Will integrate after commissioning.		NO	Mr.Harizan Mohammad Yatim Director ATS Tel: 603-78465233 Fax: 603-78472997 E-mail: accwmfc@tm.net.my harizan@atsdca.gov.my	2005 New Equip Stand alone
	Kota Kinabalu	WBKK		ARINC			NO	YES			NO		2005 New Equip Stand alone
PHILIPPINES	Manila												State to provide information for FIT-SEA/3

STATE/ ORGANIZATION	**FIR**	**LOGON CODE**	**Ground Station Manuf-acturer**	**DSP** (e.g. SITA, ARINC)	**ADS**	**CPDLC**	**AIDC**	**FDP**	**Test, Ops Trial or Operational**	**Procedures Published**	**ADS/CPDLC TRIAL**	**CONTACTS**	**REMARKS**
SINGAPORE Civil Aviation Authority of Singapore	Singapore	WSJC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	yeo_cheng_nam@caas.gov.sg	
THAILAND AEROTHAI	Bangkok	VTBB	ARINC	ARINC	YES	YES	YES	YES	Ops Trial	3 monthly NOTAM	YES, Bay of Bengal	Bangkok ACC Director	
VIETNAM	Hanoi Ho Chi Minh												State to provide information for FIT-SEA/3
ARINC												Mr. Sarawut Assawachaichit Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com	
CENTRAL REPORTING AGENCY (CRA)												Proposed CRA Japan	CRA status to be confirmed by Regional Office with States not present at FIT-SEA/2
IATA												Soon Boon Hai Assistant Director Safety Operations & Infrastructure Tel: 65 62397267 Fax: 65 65366267 E-mail: soonbhd@iata.org	
IFALPA												Capt. Suresh Menon Regional Vice President ASIA/East Tel: 61 2 99487532 Fax:(65) 6584 8869 E-mail: menon@pacific.net.sg	

STATE/ ORGANIZATION	**FIR**	**LOGON CODE**	**Ground Station Manuf-acturer**	**DSP** (e.g. SITA, ARINC)	**ADS**	**CPDLC**	**AIDC**	**FDP**	**Test, Ops Trial or Operational**	**Procedures Published**	**ADS/CPDLC TRIAL**	**CONTACTS**	**REMARKS**
SITA												Mr. David Fung SITA Regional Manager, Asia AIRCOM CNS Services Room 1201, 12/F Centre Point 181-185 Glovcester Road Wanchai Hong Kong, China Tel: 852-9400 7979 E-mail: david.fung@sita.aero	
ICAO												Mr. Andrew Tiede Regional Officer ATM Tel: 66 2 5378189, ext. 152 Fax: 66 2 537 8199 E-mail: atiede@bangkok.icao.int icao_apac@bangkok.icao.int	

PROPOSED
TERMS OF REFERENCE (TOR)
FANS IMPLEMENTATIION TEAM, SOUTH-EAST ASIA
CENTRAL REPORTING AGENCY
(FIT-SEA CRA)

The objective of the FIT-SEA CRA is to assist the FIT-SEA members to plan and implement ADS and CPDLC systems in the South China Sea area in accordance with the TOR of FIT-SEA.

To meet the above objective the FIT-SEA CRA shall:

a) share the technical and operational information with the FIT-SEA members on the planning and implementation of ADS and CPDLC systems;

b) process the problem reports (PR) received from the FIT-SEA members in the manner prescribed in the FANS 1/A Operations Manual (FOM);

c) disseminate the de-identified information on individual PR to the FIT-SEA members by means of access to the CRA Japan website; and

d) prepare periodic reports for the FIT-SEA and RASMAG.

The services of the FIT-SEA CRA operated by the CRA Japan are on a voluntary and temporary basis until a formal CRA is established by the FIT-SEA.

……..

LIST OF PROPOSED TASKS OF FIT-SEA CRA

The tasks of the FIT-SEA CRA concerns information sharing with the FIT-SEA members on technical and operational information to support the planning and implementation of ADS/CPDLC systems, the process of problem reports (PRs), and preparation of periodic reports to the FIT-SEA.

Tasks	Remarks
1. Information Sharing through FIT-SEA/RASMAG a. Suggestion on planning and implementation of ground systems. b. Advice on development of ADS/CPDLC operational procedures.	
2. Collection and processing of Problem Reports (PRs) a. Collection of PRs from ATSU and aircraft operators b. Processing the PRs with: * data analysis; * reconstruction of the event; * identification of causes/factors in cooperation with appropriate parties; and * monitoring of rectification progress.	Via e-mail, postal mail and fax Engineers analyse the logs of ground systems Consultation/cooperation with appropriate parties
3 Dissemination of information a. Report on the summary of PRs to the FIT-SEA. b. Website * List of PRs; * System performance analysis data of the Tokyo FIR; and * Documents.	Report to the FIT-SEA and RASMAG All information including PRs is de-identified FANS 1/A Operations Manual (FOM) & other documents Periodic reports and meeting summaries.

PROBLEM REPORTING PROCEDURES OF THE FIT-SEA CRA

1. Contact Point

Manager: Mr. Yoshiro NAKATSUJI

Address: K-1 Building, 3rd floor

1-6-6, Haneda Airport. Ota-ku, Tokyo 144-0041, Japan

Telephone: +81-3-3747-1231

Fax: +81-3-3747-1231

E-mail: crasa@cra-japan.org OR naka@atcaj.or.jp

2. Address to send FANS 1/A Problem Reports (PRs)

FANS 1/A PRs should be sent to "CRA Japan" via any means of e-mail, postal mail or facsimile.

E-mail address: crasa@cra-japan.org OR naka@atcaj.or.jp

Postal mail address:

CRASA, K-1, 1-6-6, Haneda Airport, Ota-ku, Tokyo 144-0041, Japan

Facsimile: +81-3-3747-1231

3. FANS 1/A PR Form

The FIT-SEA members are requested to send PRs to the CRA Japan with the items prescribed in the paragraph 3.10, FANS 1/A Operations Manual (FOM).

It is recommended to use the FANS 1/A PR Form attached to this paper. When other form is used, all items required by the FOM should be included.

4. Website address

http://www.crasa.cra-japan.org

FANS 1/A PROBLEM REPORT				Number
Date UTC		Time UTC		
Registration		Flight Number		
Sector				
Originator		Aircraft Type		
Organization				
Active Center		Next Center		
Position				
Description				

DRAFT GUIDANCE MATERIAL FOR END-TO-END SAFETY AND PERFORMANCE MONITORING OF AIR TRAFFIC SERVICE (ATS) DATALINK SYSTEMS IN THE ASIA/PACIFIC REGION

1 Background

1.1 The Asia Pacific Airspace Safety Monitoring (APASM) Task Force established by the Asia Pacific Air Navigation Planning Implementation Regional Group (APANPIRG) noted that requirements for monitoring aircraft height-keeping performance and the safety of reduced vertical separation minimum (RVSM) operations had been more comprehensively developed than for other Air Traffic Management (ATM) services, such as reduced horizontal separation based on required navigation performance (RNP), and monitoring of Air Traffic Services (ATS) datalink systems. For RVSM, a handbook with detailed guidance on the requirements for establishing and operating Regional Monitoring Agencies (RMA) was at an advanced stage of development by the ICAO Separation and Airspace Safety Panel (SASP). (The RMA Handbook has since been completed and is expected to be adopted by ICAO in 2005). There was no comparable document under development by ICAO for ATS datalink applications and so the APASM Task Force developed draft guidance material for the Asia/Pacific Region covering safety and performance monitoring for ATS datalink applications.

1.2 The experience gained by the Informal Pacific ATC Coordinating Group (IPACG) and the Informal South Pacific ATS Coordinating Group (ISPACG) FANS Interoperability Teams (FITs) and the supporting Central Reporting Agency (CRA) to monitor automatic dependent surveillance (ADS) and controller pilot datalink communication (CPDLC) performance for both aircraft and ground systems was used as a resource on which to develop monitoring guidance material.

1.3 The APASM Task Force was succeeded by the Regional Airspace Safety Monitoring Advisory Group (RASMAG) of APANPIRG, which decided to adopt this APASM material and further develop it to become the standard guidance material for end-to-end safety and performance monitoring of ATS datalink systems in the Asia Pacific region.

1.4 Within the remainder of the Asia Pacific Region, the Bay of Bengal and South East Asia Coordinating Groups are mirroring what has been done by IPACG and ISPACG and have created implementation teams and CRAs to accomplish this activity. These implementation teams also perform the interoperability activities which will continue after the implementation is complete. This guidance material focuses on interoperability issues, both prior to and following implementation.

2 Requirements for Safety and Performance Monitoring

2.1 Annex 11, at 2.26.5, states:

> "Any significant safety-related change to the ATC system, including the implementation of a reduced separation minimum or a new procedure, shall only be effected after a safety assessment has demonstrated that an acceptable level of safety will be met and users have been consulted. When appropriate, the responsible authority shall ensure that adequate provision is made for post-implementation monitoring to verify that the defined level of safety continues to be met."

2.2 ATS datalink applications, such as ADS, CPDLC and ATS interfacility data communication (AIDC), are increasingly being used in support of separation and particularly of reduced separation minima. Accordingly, it is necessary to provide the monitoring required by Annex 11 to those

datalink services. Datalink services comprise both a technical and an operational element. These guidelines, which apply only to the technical element, propose a structure and methodology for monitoring the technical end-to-end safety performance of air-ground and ground-air datalink services. The operational aspects of datalink monitoring are carried out by the appropriate Safety Monitoring Agency (SMA).

2.3 Ground-ground datalink systems supporting applications such as AIDC are essentially simpler and more direct than air-ground systems, and monitoring can be achieved directly between the concerned ATS providers. However, it should be noted that States have a responsibility to ensure that monitoring of ground-ground datalink systems is carried out in support of the implementation of reduced separation minima. Monitoring of ground-ground datalink performance is outlined in Appendix A.

2.4 The requirement for on-going monitoring after implementation is based on several factors, including both degradation of performance with time and changes to equipment which may occur, either through modification or under renewal programmes. The use of ADS-B to support separation and the introduction of the Aeronautical Telecommunication Network (ATN) will be significant changes to the system that will require monitoring programmes.

3 Purpose of Guidance Material

3.1 The purpose of this guidance material is to:

a) Provide a set of working principles common to all States implementing ATS datalink systems.

b) Provide detailed guidance on the requirements for establishing and operating an interoperability team.

c) Provide detailed guidance on the requirements for establishing and operating a Central Reporting Agency.

d) Promote a standardized approach for implementation and monitoring within the Region.

e) Promote interchange of information among different Regions to support common operational monitoring procedures.

4 Establishment and Operation of an Interoperability Team and CRA

4.1 Recognizing the safety oversight responsibilities necessary to support the implementation and continued safe use of ATS datalink systems, the following standards apply to any organization intending to fill the role of an interoperability team:

a) The organization must receive authority to act as an interoperability team as the result of a decision by a State, a group of States or a regional planning group, or by regional agreement.

b) States should appoint a CRA that has the required tools and personnel with the technical skills and experience to carry out the CRA functions.

c) States should ensure that the CRA is adequately funded to carry out its required functions.

5 Interoperability Teams

5.1 The technologies adopted to provide ATS datalink functionality exist in several different domains (e.g. aircraft, satellite, ground network, air traffic service units and human factors) and these elements must be successfully integrated across all domains. Airborne and ground equipment from many different vendors, as well as the sub-systems of several different communication networks, must inter-operate successfully to provide the required end-to-end system performance. In addition, standardised procedures must be coordinated among many different airlines and States to provide the desired operational performance. Technical and operational elements must then coalesce to allow the various applications to demonstrate mature and stable performance. Only then can essential benefits be realized.

5.2 A team approach to interoperability is essential to the success of any ATS datalink implementation, an important lesson learned by the ISPACG, whose members were the first to implement CNS/ATM applications using FANS 1/A systems. Stakeholders had worked closely together during the initial development and subsequent certification of FANS-1/A, but even though a problem-reporting system was in place when FANS-1/A operations commenced, many problems went unresolved and it was not possible in the short term to adopt the new operational procedures that would provide the expected benefits of higher traffic capacity and more economic routes. Therefore, an interoperability team was formed to address both technical and operational issues and help to ensure that benefits would result. However, the ISPACG also realized that a traditional industry team approach would not be effective. Daily attention and sometimes significant research would be required if the many issues were to be adequately resolved. To address these concerns, the interoperability team created a dedicated sub-team, the CRA, to perform the daily monitoring, coordination, testing, and problem research tasks outlined by the team. This approach is similar to that taken for RVSM implementations where supporting groups provide aircraft height keeping monitoring services.

5.3 Although the monitoring process described above was developed for FANS-1/A based CPDLC and ADS applications, it applies equally to ATN-based ATS applications. This was validated during the Preliminary EUROCONTROL Test of Air/ground data Link (PETAL) implementation of ATN-based ATS datalink services in Maastricht Area Control Centre.

5.4 Role of the Interoperability Team

5.4.1 The role of the interoperability team is to address technical and operational problems affecting the transit of datalink aircraft through international airspace. To do this, the interoperability team must oversee the end-to-end monitoring process to ensure the datalink system meets, and continues to meet, its performance, safety, and interoperability requirements and that operations and procedures are working as specified.

5.4.2 The specific tasks of an interoperability team are:

a) Initiate and oversee problem reporting and problem resolution processes.

b) Initiate and oversee end-to-end system performance monitoring processes.

c) Oversee the implementation of new procedures.

d) Report to the appropriate State regulatory authorities and to the appropriate ATS coordinating group.

5.4.3 Terms of reference for an interoperability team are shown at Appendix B.

5.5 Interoperability Team Members

5.5.1 The principal members of an interoperability team are the major stakeholders of the sub-systems that must interoperate to achieve the desired system performance and end-to-end operation. In the case of ATS datalink systems, the major stakeholders are aircraft operators, ATS providers, and communication service providers.. Other stakeholders such as international organizations, and airframe and avionics manufacturers also play an important role and should be invited by the major stakeholders to contribute their expertise.

6 Central Reporting Agencies

6.1 Work must be done on a daily basis for an interoperability team to achieve its important goals of problem resolution, system performance assurance, and planning and testing of operations that will enable benefits. A dedicated sub-team, the CRA, is required to do the daily monitoring, coordination, testing and problem research tasks for the interoperability team. Appendix C shows a table of CRA tasks and the associated resource requirements.

6.2 A CRA should be established in order to determine the safety performance of the datalink systems before the implementation of reduced separation minima in a particular area, and it should remain active throughout the early stages of implementation. However, as the performance of the systems stabilises to a satisfactory level, it should be possible to reduce the number of CRAs in the region by combining responsibility for different areas.

6.3 The functions of a CRA are:

a) To develop and administer problem report processes.

b) To maintain a database of problem reports.

c) To process monthly end-to-end system performance reports from air traffic service providers.

d) To coordinate and test the implementation of new procedures resulting from ATS datalink systems for a given region.

e) To administer and monitor an informal end-to-end configuration process.

f) To manage data confidentiality agreements as required.

g) To identify trends.

h) To provide regular reports to the interoperability team.

6.4 CRA Resource Requirements

6.4.1 To be effective, the CRA must have dedicated staff and adequate tools. Staffing requirements will depend on the complexity of the region being monitored. There are several factors that affect regional complexity from an ATS monitoring standpoint such as dimensions of the airspace, variety in operating procedures, number of airlines, number of airborne equipment variants, number of air traffic service providers, number of ground equipment variants and number of communication service providers.

6.4.2 The CRA must be able to simulate an ATS ground station operational capability to the extent of exercising all combinations and ranges of CPDLC uplinks and ADS reports. The CRA must also have access to airborne equipment: a test bench is adequate, though engineering simulators that can be connected to either the ARINC or SITA communication network can offer additional capability for problem solving. In support of the datalink audit analysis task, the CRA must have software that can decode communication service provider audit data and produce usable reports. Without these tools it is virtually impossible for a CRA to resolve problems or monitor system performance.

6.4.3 Coordination is an important part of the CRA's job. In the pursuit of problem resolution, action item resolution, monitoring and testing, many issues arise that require coordination among the various stakeholders. The CRA has a primary responsibility to provide this coordination function as delegated by the interoperability team. Coordination between CRAs is also important, particularly to expand the information database on problems and trends; there may be a need for CRA coordination within the region and with CRAs in other regions. An incident may appear to be an isolated case, but the collation of similar reports by a CRA or the CRA coordinating group might indicate an area that needs more detailed examination

7 Working Principles for Central Reporting Agencies

7.1 The working principles in this guidance material result from the combined experience of the North Atlantic FANS Implementation Group, ISPACG FANS Interoperability Team, IPACG FANS Interoperability Team, and the ATN implementation in Maastricht ACC.

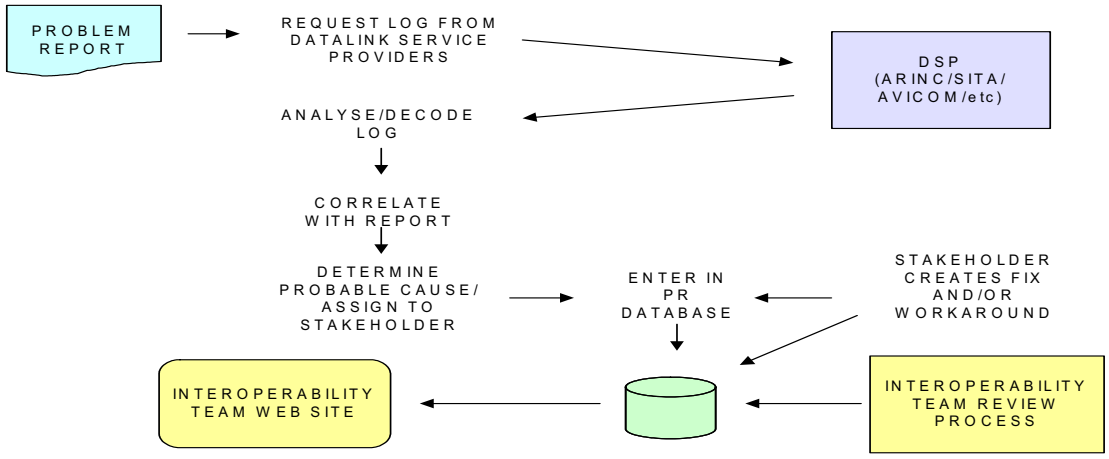
7.2 Confidentiality Agreements

7.2.1 Confidentiality of information is an established principle for problem reporting, and so reports must be de-identified before being made accessible to other agencies. However, it is necessary for the CRA to retain the identity of the original reports so that problem resolution and follow-up action can be taken.

7.2.2 The CRA must initiate and maintain confidentiality agreements with each entity providing problem reports.

7.3 Problem Identification and Resolution

7.3.1 The problem identification and resolution process, as it applies to an individual problem, consists of a data collection phase, followed by problem analysis and coordination with affected parties to secure a resolution, and recommendation of interim procedures to mitigate the problem in some instances. This is shown in the diagram below.



(Editors Note: change wording of FIT web site and FIT review process above)

7.3.2 The problem identification task begins with receipt of a report from a stakeholder, usually an operator, ATS provider or communication service provider. If the person reporting the problem has used the problem reporting form provided in the appropriate regional manual, then data collection can begin. If not, additional data may have to be requested from the person reporting the problem.

7.3.3 The data collection phase consists of obtaining message logs from the appropriate parties (which will depend on which service providers were being used and operator service contracts). Today, this usually means obtaining logs for the appropriate period of time from the communication service providers involved. (In the future, with ATN development, additional providers will become involved and airborne recordings as per EUROCAE ED-112 should become available.) Usually, a log for a few hours before and after the event that was reported will suffice, but once the analysis has begun, it is sometimes necessary to request additional data, (perhaps for several days prior to the event if the problem appears to be an on-going one).

7.3.4 Additionally, some airplane-specific recordings may be available that may assist in the data analysis task. These are not always requested initially as doing so would be an unacceptable imposition on the operators, but may occur when the nature of the problem has been clarified enough to indicate the line of investigation that needs to be pursued. These additional records include:

- Aircraft maintenance system logs.
- Built-In Test Equipment data dumps for some airplane systems.
- SATCOM activity logs.

7.3.5 Logs and printouts from the flight crew and recordings/logs from the ATS provider(s) involved in the problem may also be necessary. It is important that the organization collecting data for the analysis task requests all this data in a timely manner, as much of it is subject to limited retention.

7.3.6 Once the data has been collected, the analysis can begin. For this, it is necessary to be able to decode all the messages involved, and a tool that can decode every ATS datalink message type used in the region is essential. These messages include:

- AFN (ARINC 622), ADS and CPDLC (RTCA DO-258/EUROCAE ED-100) in a region operating FANS-1/A.
- Context Management, ADS and CPDLC applications ICAO Doc 9705 and RTCA DO-280/ED-110) in a region using ATN.
- FIS or ARINC 623 messages used in the region.

7.3.7 The analysis of the decoded messages requires a thorough understanding of the complete message traffic, including:

- Media management messages.
- Relationship of ground-ground and air-ground traffic.
- Message envelope schemes used by the particular datalink technology (ACARS, ATN, etc).

7.3.8 The analyst must also have a good understanding of how the aircraft systems operate and interact to provide the ATS datalink functions, as many of the reported problems are airplane system problems.

7.3.9 This information will enable the analyst to determine a probable cause by working back from the area where the problem was noticed to where it began. In some cases, this may entail manual decoding of parts of messages based on the appropriate standard to identify particular encoding errors. It may also require lab testing using the airborne equipment (and sometimes the ground networks) to reliably assign the problem to a particular cause.

7.3.10 Once the problem has been identified, then the task of coordination with affected parties begins. The stakeholder who is assigned responsibility for fixing the problem must be contacted and a corrective action plan agreed.

7.3.11 This information (the problem description, the results of the analysis and the plan for corrective action) is then entered into a database covering datalink problems, both in a complete form to allow continued analysis and monitoring of the corrective action and in a de-identified form for the information of other stakeholders. These de-identified summaries are reported at the appropriate regional management forum.

7.4 Mitigating Procedures

7.4.1 The CRA's responsibility does not end with determining the cause of the problem and identifying a fix. As part of that activity, and because a considerable period may elapse while software updates are applied to all aircraft in a fleet, procedural methods to mitigate the problem may have to be developed while the solution is being coordinated. The CRA should identify the need for such procedures and develop recommendations for implementation by the service providers and operators involved.

7.5 Routine Datalink Performance Reporting

7.5.1 An important part of datalink safety performance is the measurement of the end-to-end performance. This should, of course, be carried out prior to implementation of new separation minima, but should continue on a regular basis to give assurance that the safety requirements continue to be met. Datalink performance assessment is based on round-trip time, availability, integrity, reliability and continuity, and ATS providers should provide the CRA with regular measurements of these parameters.

7.5.2 The CRA will use the information supplied by ATS providers to produce a performance assessment against the established datalink requirements for the region. These requirements are set according to the separation minima being applied, and so may differ within different areas according to usage.

7.5.3 The CRA performance assessment should be made available to the RMA and SMA for their calculation of system performance against the minimum values defined in the FANS 1/A Operations Manual. The system performance criteria are at Appendix D.

7.5.4 ADS round-trip times are normally measured as the time between sending a contract request and receiving the associated Acknowledgement (ACK) or Message Assurance (MAS) message. CPDLC round-trip times are normally determined from the ATSU end-system time stamps for transmission of the uplink message and reception of the associated MAS.

7.5.5 ADS and CPDLC downlink one-way times are defined by the difference between the aircraft time stamp and the ASTU end-system reception time stamp.

7.5.6 ADS and CPDLC success rates are only available for uplink messages. The success rate is expressed as the percentage of messages that receive a successful ACK or MAS within a specified time.

7.5.7 AIDC round trip times may be obtained from the difference between message transmission and reception of the Logical Acknowledgement Message (LAM). The success rate is expressed as the percentage of messages that are successfully delivered to the destination ATSU.

7.6 Configuration Monitoring

7.6.1 A variety of technical systems are involved in the datalink process and changes, particularly to software and software parameters, are not infrequent; any change may have an impact on the overall performance of the datalink. It is therefore important that the CRA is kept informed of each change of configuration of each system. With this information it is often possible to identify changes that lead to improvements or deteriorations in the datalink performance or that may be associated with particular problems.

7.6.2 All ATS providers, communication service providers, aircraft operators and avionics suppliers should therefore report all system configuration changes to the CRA. The CRA will then maintain a database of configuration changes for each system or sub-system. It is not necessary for the CRA to know the details of changes, but where a change is expected to affect performance, information on the likely effect should be provided.

7.7 New Procedures and Improved Performance Requirements

7.7.1 The CRA may recommend new end-to-end datalink system performance requirements, either to accommodate new operational procedures or to take account of recognised problems.

7.7.2 The CRA may recommend the testing and implementation of new procedures.

APPENDIX A

METHODOLOGY FOR MONITORING AIDC

1 Introduction

1.1 AIDC plays an important role in ATC coordination, and may become a significant element of ATC in the support of reduced separation minima. The performance of AIDC operations should therefore be monitored as part of the required monitoring process prior to the implementation of reduced separation minima.

1.2 AIDC operates essentially over fixed networks and generally has only two or three involved parties: the ATS providers and network providers. It is therefore generally unnecessary to develop a FIT-type approach to safety monitoring; instead such monitoring and problem identification and resolution can be carried out directly by the concerned parties.

1.3 Because, in general, fixed networks are used for AIDC, continuous performance monitoring after implementation of reduced separation minima is not generally necessary, though annual performance and availability checks are recommended. Monitoring should also take place after any changes to the network or the end-user equipment. This will be particularly important during the implementation of the ATN.

2 AIDC Technical Performance

2.1 Two major criteria for monitoring AIDC technical performance are the achievement of acceptable delivery times and the reliability of message delivery. Delivery times can best be measured in terms of the end-to-end round trip time. Reliability is measured as the AIDC message delivery success rate.

3 End-to-end Round-Trip Time

3.1 The end-to-end round trip message time may be measured as the time difference between the transmission of an AIDC message and the reception of the corresponding Logical Acknowledgement Message (LAM) or Logical Rejection Message (LRM). If the originating AIDC system receives neither a LAM nor an LRM from the receiving system within a specified time limit (a variable system parameter, typically 5 minutes), it will declare a time-out, and the time parameter must be used as the round-trip time.

3.2 Any AIDC message requiring a LAM response may be used; CPL messages are perhaps the most used and therefore the most convenient.

3.3 A large number of measurements of round-trip times should be averaged for performance reporting.

4 Message Delivery Success Rate

4.1 The Message Delivery Success Rate may be expressed as the percentage of messages successfully delivered to the destination ATSU.

4.2 Unsuccessful delivery is indicated by either the reception of an LRM or a time-out due to non-reception of a LAM within a specified time.

4.3 Case-1: LRM Received

4.3.1 When an AIDC system detects an error in a received message, it responds with a Logical Reject Message (LRM) to the originating system. Receipt of the LRM indicates that the original message was not successfully delivered.

4.4 Case-2: Time out

4.4.1 The time-out indicates non-delivery of the message (and initiates various actions within the AIDC system).

$$\text{Message Delivery Success Rate} = 1 - \frac{(LRM + TO)}{TOT}$$

Where:
LRM = number of received LRMs
TO = number of Time Outs
TOT = total number of messages

4.5 A large number of measurements of delivery success rates should be averaged for performance reporting.

5 Reporting

5.1 ATS providers should report the results of AIDC performance monitoring to RASMAG.

APPENDIX B

TERMS OF REFERENCE FOR AN INTEROPERABILITY TEAM

Reporting and problem resolution processes

- To establish a problem reporting system.
- To review de-identified problem reports and determine appropriate resolution.
- To identify trends.
- To develop interim operational procedures to mitigate the effects of problems until such time as they are resolved.
- To monitor the progress of problem resolution.
- To prepare summaries of problems encountered and their operational implications.

System performance and monitoring processes

- To determine and validate system performance requirements.
- To establish a performance monitoring system.
- To assess system performance based on information from the CRA.
- To authorise and coordinate system testing.
- To identify accountability for each element of the end-to-end system.
- To develop, document and implement a quality assurance plan that will provide a path to a more stable system.
- To identify configurations of the end-to-end system that provide acceptable datalink performance, and to ensure that such configurations are maintained by all stakeholders.

New procedures

- To coordinate testing in support of implementation of enhanced operational procedures

Reporting

- To report safety-related issues to the appropriate State or regulatory authorities for action
- To provide reports to each meeting of the implementation team or ATS coordinating group, as appropriate.
- To provide reports to RASMAG.

APPENDIX C

CRA TASKS AND RESOURCE REQUIREMENTS

NOTE: CHANGE ORDER TO MATCH PARA 6.3

CRA Task	Resource Requirement
Manage data confidentiality agreements as required	Legal services Technical expertise
Develop and administer problem report process: • de-identify all reports • enter de-identified reports into a database • keep the identified reports for processing • request audit data from communication service providers • assign responsibility for problem resolution where possible • analyse the data Identify trends	Problem reporting data base ATS audit decode capability Airborne test bench as a minimum, simulator highly recommended ATS simulation capability (CPDLC and ADS)
Coordinate and test the implementation of new procedures	Airborne test bench as a minimum, simulator capability highly recommended ATS simulation capability (CPDLC and ADS) ATS audit decode and report capability Technical expertise Operational expertise
Administer and monitor an informal end-to-end configuration process.	Technical expertise
Report to the interoperability team	Technical expertise

APPENDIX D

FANS 1/A OPERATION MANUAL
SYSTEM PERFORMANCE CRITERIA

The table below defines the minimum values to be met and verified. This does not prevent ATS service providers from negotiating more constraining contractual requirements with their communication service providers if it is thought necessary.

Criteria	Definition	Values
Performance	End to end round trip time for uplinks. (sending and reception of MAS)	Round trip time of 2 minutes, 95% of messages. Round trip time of 6 minutes, 99% of messages.
	End to end one way time for downlinks. (comparison of message time stamp and receipt time)	One way time of 1 minute, 95% of messages. One way time of 3 minutes, 99% of messages
	Uplink messages only: Undelivered messages will be determined by: • Message assurance failure is received. After trying both VHF and SATCOM. Depending on reason code received, the message might, in fact, have reached the aircraft. • No message assurance or flight crew response is received by ATSU after 900 seconds	Less than 1% of all attempted messages undelivered
Availability	The ability of the network data link service to perform a required function under given conditions at a given time: The maximum allowed time of continuous unavailability or downtime should be declared MTTR (Mean Time To Repair) ∗	99.9% TBD
Reliability	The ability of a data link application/system to perform a required function under given conditions for a given time interval: it can be expressed in MTBF (Mean Time Between failure) ∗	TBD
Integrity	The probability of an undetected failure, event or occurrence within a given time interval.	10^{-6}/hour

∗ Availability = MTBF x 100/(MTBF+MTTR)

Note: RTCA SC189/EUROCAE WG 53 defines the performance requirements for specific operational environments.

— END —

PART IV - REPORT OF THE ATFM/TF/1 MEETING

1. Opening of the ATFM/TF/1 Meeting

1.1 The task force Chairman, Mr. Ron Rigney (Airservices Australia), welcomed the participants to the first meeting of the ATFM/TF and declared the meeting open. He reflected on the outcomes of the Special Coordination Meeting – Bay of Bengal (SCM-BOB) which was held in conjunction with the BBACG/16 meeting during 31 January – 4 February 2005, noting that the SCM-BOB meeting had agreed to the establishment of a dedicated Air Traffic Flow Management Task Force to plan and develop an ATFM service for the Bay of Bengal and South Asia.

1.2 In his opening remarks, Mr. Rigney reminded the meeting that the provision of an ATFM was a function of Air Traffic Management and that the challenge for the ATFM/TF would be to develop an ATFM system which would:

a) Minimise delays;
b) Improve capacity and access to optimized Flight Levels;
c) Accommodate growth;
d) Enhance safety; and
e) Minimize the impact on the environment through the reduction of exhaust gas emissions.

1.3 Mr. Rigney referred to the various sources of ATFM planning and guidance material which existed within the various ICAO annexes and documents and encouraged the Task Force members to seek guidance from these documents in the development of an ATFM system fro the Bay of Bengal and South Asia.

2. Establishment of the ATFM/TF

2.1 Recent meetings of APANPIRG, the BBACG and the RVSM/TF had all recognized a need to improve the overall management of traffic flows across the Bay of Bengal area. APANPIRG/15 (August 2004) had noted the considerable efforts being made by States to collaborate together with IATA to improve the ATFM over the Bay of Bengal area and encouraged all parties to continue their efforts and to take into account the benefits to be derived from ATM automated systems.

2.2 During RVSM/TF/24 (November 2004) further extensive discussion took place regarding aspects of ATFM in the Bay of Bengal. RVSM/TF/24 recommended that a special coordination meeting should be convened to study the matter in greater detail, and consideration be given to conducting an operational trial to enable the States concerned to assess the effectiveness of any automated ATFM system selected and the corresponding ATFM plan.

2.3 In order to progress this work, the Special Coordination Meeting – Bay of Bengal (SCM-BOB) called for by RVSM/24 was held in conjunction with the BBACG/16 meeting during 31 January – 4 February 2004. The SCM-BOB agreed that a dedicated Air Traffic Flow Management Task Force (ATFM/TF) should be established under BBACG to plan and develop an ATFM service for the Bay of Bengal and South Asia.

2.4 The SCM-BOB, recognizing that the ATFM/TF would report via the BBACG to the ATM/AIS/SAR Sub Group of APANPIRG, drafted suitable preliminary terms of reference (TOR) for the ATFM Task Force for the Bay of Bengal and South Asia region. The ATFM/TF/1 meeting reviewed and updated the TOR; the updated TOR have been reproduced as **Appendix A.**

3. **Task Force Core Team**

3.1 The Regional Office had encouraged a 'core team' approach to the task force activities, as this had been very successful in other areas of the Regional Office programme. The meeting reviewed and confirmed the composition of the core team of the task force, as follows:

- ICAO Task Force Chairman – Mr. Ron Rigney, Secretariat – Mr. Andrew Tiede;
- India Mr. V. Somasundaram (AAI), supported by Mr. M. Sarangapani (AAI);
- Malaysia Mr. Lim Kim Seang (DCA Malaysia);
- Singapore Mr. Kuah Kong Beng (CAAS);
- Thailand Mr. Tinnagorn Choowong (AEROTHAI), supported by Mr. John Richardson; and
- IATA Mr. Soon Boon Hai.

3.2 The meeting also recognized the specialist contributions that other States and Organizations could make to the core team activities and recommended that the Secretariat in consultation with the task force Chairman include additional core team members and resources as and when required.

3.3 In this regard, the meeting regretted the late notice absence of Pakistan from this meeting, noting the critical role that Pakistan played in feeding traffic into the Kabul FIR. The meeting urged the Secretariat to ensure that Pakistan was again invited to the next task force meeting, with a view to including Pakistan in the core team at that time. The meeting also agreed to the request from Sri Lanka that they join the task force core team at the commencement of the Phase 2 activities, noting that Sri Lanka intended to fully participate in the Phase 1 meeting programme in order to keep abreast of task force developments.

4. **ATFM Phased Implementation**

4.1 In order to meet the objectives described in the TOR, the SCM-BOB adopted a phased implementation programme as per the following:

Phase One: Flights planning to transit the Kabul FIR

Phase Two: Other international flights crossing the Bay of Bengal and/or South and South East Asia areas

Phase Three: Future planning for increased traffic within the Bay of Bengal and South and South East Asia areas

ATFM/TF Phase One

4.2 The SCM-BOB agreed that the first priority of the task force should be towards resolving the immediate problems encountered by westbound traffic operating across the Bay of Bengal to Europe during the night time period. In order to progress toward a solution, the following steps were identified to assist in the implementation of ATFM in this context by the third quarter of 2005:

a) complete an analysis of the traffic data including Departure/Arrival data;

b) identify bottleneck areas;

c) develop an ATFM tool to optimize the usage of all ATS routes and levels available through the Kabul FIR;

d) Undertake a series of trials and demonstrations of the ATFM tool; and

e) Develop the ATFM/TF Task List.

4.3 The SCM-BOB agreed that the ATFM/TF should hold its first meeting as soon as practicable. In this regard, it was agreed that if States were able to include the ATFM/TF member in their delegation to the combined FIT-BOB/SEA seminar and meeting scheduled for 18-22 April 2005, it would be possible to arrange an initial meeting of the ATFM/TF during this period. In the interim, the SCM-BOB requested the ATFM/TF members to continue discussions over next the few weeks "off-line" with key organizations/industry stakeholders to consider/evaluate options for an ATFM tool and to update FIT-BOB/SEA at their combined April meeting.

5. Informal Singapore 'Mini' Meeting

5.1 In accordance with the request from the SCM-BOB that discussions continue "off-line" in preparation for the ATFM/TF/1 meeting, an informal 'mini' working group meeting of several South East Asia task force members and industry stakeholders was held at the Singapore Aviation Academy on 14 & 15 March 2005. The meeting was attended by the task force Chairman (Mr. Ron Rigney, Airservices Australia) and representatives from Singapore, Thailand, and IATA officers and airline representatives. After reviewing the report of the Special Coordination Meeting for Bay of Bengal (SCM-BOB, 31 January to 4 February 2005) the meeting commenced work on a draft framework for the proposed ATFM/TF activities to be considered by the full ATFM/TF/1 meeting in April.

5.2 During the informal working group meeting, Thailand reaffirmed its decision to develop and operate an automated ATFM system to address the westbound traffic flow problems and confirmed that work had already commenced on developing an ATFM computer model, with a target date to complete testing, acceptance and completion by the third quarter of 2005.

5.3 The informal working group was also presented with an updated presentation on the DOTS+ system as an alternative ATFM system tool for the Bay of Bengal. In the light of the revised DOTS+ presentation, the informal working group agreed to recommend to the ICAO Secretariat that the FAA be invited to present their amended DOTS+ proposal, including a detailed financial proposal, to the ATFM/TF/1 meeting.

5.4 The informal working group also agreed to recommend that ATFM/TF/1 be urged to fully consider the options available for the delivery of an ATFM system tool for use in the Bay of Bengal and South Asia and that a decision be taken as to which system tool is to be adopted by the ATFM TF. This would provide the nominated organization with sufficient time to develop the ATFM system and associated management arrangements for implementation by AIRAC date 29 September 2005 as well as finalization of funding arrangements for the provision of the ATFM service.

6. Traffic Sample

6.1 In order to gain an accurate appreciation of the traffic volume and disposition during the night time period, it had been identified by the mini working group meeting in Singapore that it would be necessary for the Task Force to undertake a traffic sampling over a short period of time. Accordingly, the Regional Office issued a request to affected States for assistance in providing suitable traffic data for the period Sunday 3rd April until Saturday 9th April 2005 inclusive. Sampling parameters included the departure point, ETD, ATD, destination, airways flown, flight levels and estimates at the Kabul FIR entry points.

6.2 The data that was recorded comprised aircraft expected to transit the Kabul FIR during the period 1900-2330 UTC, and included westbound departures from Singapore between approximately 1430-1730 UTC, departures from Kuala Lumpur between approximately 1500-1800 UTC and departures

from Bangkok between approximately 1530-1830 UTC. Traffic departing from airports further east that would transit the Singapore, Kuala Lumpur and Bangkok FIRs during the times described above, and traffic joining from the Indian and Pakistan FIRs that would transit the Kabul FIR during the period 1900-2330 UTC, were also recorded in the sample.

6.3 Detailed traffic sample data was provided by Singapore, Thailand, India and Pakistan. This material has been included as **Appendices B through E.** In addition, the Manager of the Kabul FIC/ACC had advised the Regional Office that a detailed traffic sample had been taken by the FIC in accordance with the sampling requirements and that this data would be made available to the Regional Office over the next few weeks.

Note: *The traffic sample data from the Kabul FIC/ACC was received by the Regional Office in the week following the meeting and has been included as* ***Appendix F*** *to this report.*

7. Kabul Update

7.1 The Secretariat updated the meeting in regard to developments in Kabul. It was anticipated that the Kabul ACC would commence operations within the next few months, at which point the services presently provided by the FIC would be upgraded to an ACC. In addition, initial planning for the implementation of RVSM had commenced under the guidance of the Middle East Office of ICAO and it was understood that implementation was proposed for the latter part of 2006, in conjunction with the States of the Russian Federation to the west of Kabul. The Regional Office had been in contact with the Kabul FIC/ACC Manager in respect of the activities of the ATFM/TF, and the Manager had expressed an interest in being involved in the next meeting of the task force. The meeting agreed that the information from Kabul was important and requested that the Regional Office make arrangements to allow a representative from Kabul to attend the next task force meeting.

8. US FAA Dynamic Ocean Track System Plus (DOTS+)

8.1 During RVSM/TF/24 (November 2004), in response to an invitation from the Regional Office, an FAA representative briefed the meeting regarding the DOTS+ automated flow management system. DOTS+ and its Online Track Advisory service has been in operational use in the United States for more than 10 years and could be readily modified to manage the westbound departures across the Bay of Bengal. The system was developed by the FAA, but could be owned and operated by a State ATS provider(s) or by IATA and its member airlines, and the software provided by the FAA under a licensing arrangement.

8.2 Subsequent to the 'mini' working group meeting in Singapore on the 14th & 15th March, the Chairman of the ATFM/TF requested that the Regional Office urge the attendance of the FAA at the ATFM/TF/1 meeting in order that the FAA could provide comprehensive briefings in regard to DOTS+ applications suitable for the Bay of Bengal.

8.3 Accordingly, the Regional Office invited the FAA to provide appropriate representation to the ATFM/TF/1 meeting in order to deliver a comprehensive technical, business and financial presentation in relation to a DOTS+ application for the Bay of Bengal. In order to facilitate decision making by the States involved, the FAA was requested to address all aspects involved in potentially commissioning an operational trial of DOTS+ in the Bay of Bengal, effective AIRAC 29 September 2005, including any likely impediment to implementation.

8.4 Subsequently, during the ATFM/TF/1 meeting, the FAA provided a comprehensive briefing in relation to DOTS+ in accordance with the guidelines described above. The DOTS + could be readily adapted to provide flow management in the Bay of Bengal area, with an implementation time frame in the order of three months.

8.5 The FAA presentation also reported the following:

a) *"DOTS+ Online Track Advisory is available as a complete end to end service on a cost re-imbursement basis. In this arrangement, the service function is performed by FAA supplied Track Advisory Specialists.*

b) *Alternatively, DOTS Online Track Advisory is available on a cost-reimbursement basis as a complete hardware and software system, wherein the service function is performed by a regional operator, such as IATA or a Bay of Bengal Air Traffic Service Provider. This regional operator would be trained on the DOTS+ Online Track Advisory system to perform traffic flow metering.*

8.6 Under either arrangement, the FAA incurred cost of setting up the Online Track Advisory service would be covered by the customer on a "cost-reimbursement basis." The FAA representative reiterated the willingness of the FAA to work with the States of the Bay of Bengal in regard to improving the flow of traffic in the area, and advised that the FAA was ready to answer any questions and enter into further discussions at any time. The FAA representative cautioned that if a decision to adopt DOTS+ was delayed until the second task force meeting scheduled in June, then it was likely that the FAA would have difficulty meeting the proposed implementation date of 29 September 2005.

8.7 In regard to funding the DOTS+ implementation, Singapore informed the meeting that if the DOTS+ was selected by the States concerned, Singapore would be prepared to work with FAA to host the DOTS+ system in Singapore and, in addition, would consider funding of up to half the start up cost. However, for the ongoing operation of the system other cost-recovery funding arrangements would be required.

8.8 In addition to the above, India indicated that subject to suitable high-level approval, they could also consider providing a portion of the funding for the implementation of DOTS+, if DOTS+ was selected by the States of the region. The meeting expressed its appreciation to Singapore and India for their generous offers to support the implementation of DOTS+.

8.9 The meeting, in noting the long travel period from the USA, thanked the FAA representative for taking the time to attend this meeting and for the comprehensive presentation that had been prepared and delivered. A copy of the FAA DOTS+ briefing is included as **Appendix G.**

9. **Thailand's ATFM developments**

9.1 Thailand presented the meeting with details of an AEROTHAI proposal to develop and implement an Air Traffic Flow Management (ATFM) system in the Bay of Bengal and South Asia for aircraft transiting the Kabul FIR. The details of the presentation are shown as **Appendix H.**

9.2 The meeting recalled Thailand's previous advice to the SCM-BOB that in recognition of a flow management need, Thailand would be prepared to take an active lead role in developing an appropriate ATFM system in coordination with States and the airlines with a target date for implementation of AIRAC date 29 September 2005.

9.3 In response to the request made by the SCM-BOB to Thailand to provide more details on the Concept of Operations of the ATFM system at ATFM/TF/1, Thailand provided the meeting with a Draft Concept of Operations document, which covered a number of important subjects which related to possible solutions for ATS users and providers, not only through the Kabul FIR but also to reduce bottlenecks as aircraft transited over the Bay of Bengal and the domestic airspace of India and Pakistan. A copy of the Concept of Operations is shown at **Appendix I**.

9.4 Thailand also informed the meeting that it had actively participated in the informal Working Group meeting that was convened in Singapore on 14-15 March 2005 and that AEROTHAI had continued to be very active in the development of a computerized ATFM system. The meeting was also reminded of the request arising out of the SCM-BOB meeting discussions, that

> "*ATFM/TF members to continue discussions over the next few weeks "off-line" with key organizations/industry stakeholders to consider/evaluate options for an ATFM tool and to update FIT-BOB/SEA at their combined April meeting".*

9.5 In this regard, Thailand informed the meeting that it had recently held encouraging and cooperative discussions on these matters, together with other ATFM topics, with representatives from the Airports Authority of India and the Indian Department of Civil Aviation during a visit to Delhi by senior AEROTHAI personnel.

9.6 In summarizing the progress to date, Thailand reminded the meeting that the Draft Concept of Operations was broad by nature and would remain so until further discussions had taken place with the Users and States concerned. Thailand advised the meeting that it was committed to the air traffic flow management process due to Thailand's geographical location and expressed the view that the overall management of the ATFM system should be vested in a State or States within the area of the ATFM operation.

9.7 Thailand advised the meeting that they would be prepared to give a detailed presentation in regard to their ATFM proposals, based on Thailand's assumptions in regard to the probable operational procedures that would be used, at the next task force meeting scheduled in June 2005.

9.8 Thailand assured the meeting of its ability to put in place a reliable and robust ATFM system and expressed the view that it was confident that, with the cooperation from States and the airline industry, the ATFM system developed by AEROTHAI would be capable of overcoming all obstacles and would enable a smooth flow of traffic in an expeditious manner across the area.

9.9 However, due to the need for a number of important and necessary tasks, which require the consultation and agreement of all States and Organizations involved in the project before implementation of ATFM could be achieved, Thailand accepted that the proposed date of 29 September 2005 was likely to be reviewed.

10. Use of Non-Standard (Opposite Direction) Levels

10.1 During the combined Sixth RVSM Seminar and Twenty Fifth Meeting of the ICAO RVSM Implementation Task Force (RVSM/TF/25, Incheon, 21-25 March 2005), Japan provided a report of the level allocation practices, including usage of non standard (opposite direction) levels, adopted in the northern Pacific in order to increase the efficiency of this airspace. The RVSM/TF/25 meeting considered that these practices should be brought to the attention of Bay of Bengal States as they may be of relevance in alleviating some of the airspace capacity problems experienced in the Bay of Bengal during the night time peak period traffic flows from Asia to Europe.

10.2 Japan presented a detailed briefing on the flight level orientation scheme (FLOS) used in the Tokyo FIR. The FLOS was based on the single alternate (SA), but by agreement through LOAs and coordination arrangements with the adjacent Anchorage and Oakland ACCs, all flight levels could be assigned. For example, on the major route systems of the NOPAC (Japan/Anchorage) and the PACOTS (Japan/Hawaii), a variety of level assignment configurations were being used including use of non-standard (opposite direction) levels to take advantage of favourable wind conditions, timings of the direction of traffic flows and user requirements.

10.3 IFALPA commented that conditions in the northern Pacific were more favorable to this type of arrangement because the availability of reliable communications was high and Japan was strictly curfew limited, resulting in bunching of traffic into predominantly one way flows as a result of the curfew limitations. In addition, there were minimal crossing tracks. IFALPA advised that they could not agree to a similar arrangement involving the use of multiple non-standard (opposite direction) levels in the Bay of Bengal because of the existing difficulties with communications and the different traffic flows that characterized this area.

10.4 The Secretariat suggested that the matter was of a different perspective in the Bay of Bengal and, rather than a wide scale usage of non-standard (opposite direction) levels, what was being sought was essentially a single non-standard (opposite direction) level during a night time period of almost exclusively westbound departures in order to make a second flight level available to traffic departing Singapore.

10.5 Singapore supported the Secretariat proposal in regard to the assignment of a non-standard (opposite direction) flight level in the circumstances described above. The meeting thanked RVSM/TF/25 for bringing the situation in the North and Central Pacific to their attention, agreed that this matter should be further investigated by the ATFM/TF and added the issue to the Task List.

11. Protocols for an ATFM System for the Bay of Bengal

11.1 The informal Singapore working group had drafted a number of Protocols of ATFM in preparation for the ATFM/TF/1 meeting. These were reviewed and updated during the ATFM/TF/1 meeting and are attached as **Appendix J** to this report.

12. Task List

12.1 The meeting considered that the Task List was the primary tool for progressing the work of the task force and, in this regard, agreed that an ATFM Operations Handbook should be developed as a task list item. The Operations Handbook should include the operating procedures and associated guidance material for the ATFM Unit, ACCs and Airline operators.

12.2 The meeting reviewed and updated the Task List in light of the inputs and discussions that occurred during the ATFM/TF/1 meeting. The revised Task List is shown as **Appendix K.**

13. Establishment of an Operational Trial

13.1 In regard to the implementation process of a Bay of Bengal ATFM system, the ATFM/TF/1 meeting agreed that an operational trial would be required and this matter would be considered further by the ATFM/TF/2 meeting.

14. Selection of ATFM Tool

14.1 The meeting recalled that the mini working group meeting in Singapore had recommended that the ATFM/TF/1 be urged to fully consider the options available for the delivery of an ATFM system tool for use in the Bay of Bengal and South Asia, and that a decision be taken during ATFM/TF/1 as to which system tool would be adopted by the ATFM TF.

14.2 In this regard, as a result of the broad nature of the material that had been made available by AEROTHAI, the meeting had experienced difficulty in establishing a full understanding of the ATFM system tool and associated concepts that were being proposed by AEROTHAI. Accordingly, the Chairman expressed the view that there was insufficient detail presently before the ATFM Task Force to

enable it to make a suitably informed decision on the merits of the AEROTHAI proposal, and as such the meeting was also unable to undertake a meaningful comparison between the AEROTHAI and FAA proposals.

14.3 Further, the Chairman recognized the concerns expressed by the meeting in regard to the proposed implementation timeframe, noting that in order to meet the implementation target date of 29 September, the corresponding AIRAC date for the publishing of required AIP amendments and associated documentation would be 7 July 2005.

14.4 Accordingly, the Chairman recommended to the meeting that the selection of an ATFM system tool be deferred until ATFM/TF/2, at which time the two systems would be evaluated by way of "Proof of Concept" demonstrations to the ATFM/TF/2 meeting.

14.5 In making this recommendation, the Chairman noted the work and commitment that had been undertaken by AEROTHAI and the FAA to date and urged their continued participation in the development of ATFM system tools for possible deployment in the Bay of Bengal and South Asia region.

14.6 In further discussions regarding the selection of an ATFM system tool, the meeting agreed that the development of an ATFM operational requirement would be of assistance in the selection process.

14.7 The Chairman, in inviting presentations for the ATFM/TF/2 meeting, urged that all working papers and materials be made available well in advance of the meeting, to enable a well considered decision to be reached. In recognizing that there may be additional parties wishing to make similar proposals to the ATFM/TF/2 meeting, the Chairman invited the participation of these parties under similar administrative requirements to those described above.

15 ATFM/TF Chairman's closing remarks

15.1 The Chairman expressed his appreciation to the participants for their significant contributions to the ATFM/TF/1 meeting. On behalf of the ATFM/TF, the Chairman also expressed his appreciation to the ICAO Regional Office for all their support and assistance provided to the meeting. The Chairman wished the Participants a safe journey home.

Terms of Reference for the Air Traffic Flow Management Task Force for the Bay of Bengal and South Asia region (ATFM/TF)

The Air Traffic Flow Management Task Force (ATFM/TF) will report via the BBACG to the ATM/AIS/SAR Sub Group of APANPIRG.

Objectives:

The objectives of the ATFM/TF are to:

1. To enhance and facilitate the orderly and efficient flow of air traffic across the Bay of Bengal and South Asia;

2. To minimize ground and enroute delays;

3. To maximize capacity and optimize the flow of air traffic within the area;

4. To plan for and manage future ATS workload in the light of forecast increased traffic flow within the area; and

5. To assess the economic and environmental impact of the implementation of the ATFM system.

Implementation Programme

To meet these objectives the ATFM/TF shall adopt a phased implementation programme as per the following:

Phase One: Flights planning to transit the Kabul FIR

Phase Two: Other international flights crossing the Bay of Bengal and/or South and South East Asia areas

Phase Three: Future planning for increased traffic within the Bay of Bengal and South and South East Asia areas

(Note: For the purposes of the ATFM/TF, South Asia includes, India, Nepal, Pakistan and Sri Lanka).

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 3-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	LSZH	QFA6007	A333	1445	1522	F380		N571	IDASO	-	-		-
2	EHAM	KLM838	B744	1455	1511	F300		P628	VILAT	G792	F320		2103
3	EGLL	QFA9	B744	1455	1525	F320		L759	ROSIE	L750	F320		2112
4	EDDF	QFA5	B744	1500	1539	F320		L759	ROSIE	L750	F320		2125
5	EDDF	DLH777	B744	1505	1529	F300		P628	VILAT	G792	F320		2126
6	LFPG	AFR257	B773	1520	1551	F300		L759	TAVUN	L750	F350		2144
7	EGLL	SIA322	B744	1520	1620	F300		P628	VPL	V390	F350		2216
8	EGLL	BAW16	B744	1525	1542	F300		P573	ANSAX	-	-		-
9	LFPG	SIA334	B744	1540	1608	F300		P628	VPL	L750	F320		2158
10	LSZH	SIA346	B744	1545	1634	F300		N877	GUNIP	-	-		-
11	EHAM	SIA324	B772	1545	1614	F320		N571	VIRAM	-	-		-
12	EDDF	SIA026	B744	1550	1628	F300		P574	ANSAX	-	-		-
13	EGCC	SIA328	B772	1550	1606	F320		L759	ROSIE	L750	F320		2202
14	EGLL	BAW18	B744	1555	1617	F300		P574	ANSAX	-	-		-
15	LGAV	SIA348	B772	1700	1714	F320		M300	PEKDO	-	-		-

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 4-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EHAM	KLM838	B744	1455	1513	F280		P628	VPL	G792	F320	-	2104
2	EGLL	QFA9	B744	1455	1517	F320		M300	LEMAX	-	-	-	-
3	EDDF	QFA5	B744	1500	1523	F320		L759	ROSIE	L750	F350	-	2112
4	EDDF	DLH777	B744	1505	1527	F280		P628	ASOPO	L750	F310	-	2108
5	LFPG	AFR257	B773	1520	1546	F300		P628	VPL	G792	F310	-	2142
6	EGLL	SIA322	B744	1520	1603	F280		P628	ASOPO	V390	F360	-	2157
7	EGLL	BAW16	B744	1525	1555	F300		M300	ATETA	-	-	-	-
8	LFPG	SIA334	B744	1540	1617	F280		P628	ASOPO	V390	F300	-	2211
9	EHAM	SIA324	B772	1545	1609	F320		N571	GURAS	-	-	-	-
10	LSZH	SIA346	B744	1545	1626	F300		L759	ZB	L750	F350	-	2210
11	EDDF	SIA026	B744	1550	1629	F280		P628	ASOPO	V390	F360	-	2223
12	EGLL	BAW18	B744	1555	1616	F300		M300	ATETA	-	-	-	-
13	EKCH	SIA352	B772	1700	1724	F320		N571	GURAS	-	-	-	-
14	LIRF	SIA340	B772	1700	1708	F320		N571	AGELA	-	-	-	-

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 5-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EGLL	QFA9	B744	1455	1518	F320		L759	ROSIE	L750	F350	-	2105
2	EDDF	QFA5	B744	1500	1537	F320		N571	VUSET	-	-	-	-
3	EHAM	KLM838	B744	1501	1508	F300		L759	MIPAK	L750	F320	-	2053
4	EDDF	DLH777	B744	1505	1522	F280		P628	VATLA	L750	F320	-	2105
5	LFPG	AFR257	B773	1520	1535	F300		L759	TAVUN	L750	F320	-	2123
6	EGLL	SQ322	B744	1520	1545	F300		L759	MIPAK	L750	F320	-	2131
7	EGLL	BAW16	B744	1525	1548	F300		M300	ATETA	-	-	-	-
8	LOWW	AUA8	B763	1535	1646	F300		L759	VPL	L750	F310	-	2259
9	EHAM	SQ324	B772	1545	1629	F300		L759	TAVUN	L750	F320	-	2226
10	LSZH	SQ346	B744	1545	1604	F280		P628	PPB	V390	F350	-	2202
11	LFPG	SQ334	B744	1546	1601	F300		M300	RULKA	-	-	-	-
12	EDDF	SQ206	B744	1550	1613	F300		L759	MIPAK	L750	F320	-	2159
13	EGCC	SQ328	B772	1550	1611	F320		M300	CLC	-	-	-	-
14	EGLL	BA18	B744	1555	1616	F300		M300	ATETA	-	-	-	-
15	LGAV	SQ348	B772	1700	1715	F340		M300	ESPAP	-	-	-	-

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 6-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EHAM	KLM836	B744	1455	1511	F280		L759	MABUR	L750	F320	-	2100
2	EGLL	QFA9	B744	1455	1521	F320		L759	ROSIE	L750	F350	-	2114
3	EDDF	QFA5	B744	1500	1541	F320		L759	ROSIE	L750	F350	-	2134
4	EDDF	DLH777	B744	1505	1532	F300		P628	VPL	L750	F350	-	2120
5	LFPG	AFR257	B773	1520	1551	F300		L759	TAVUN	L750	F310	-	2107
6	EGLL	SQ322	B744	1520	1603	F280		L759	MABUR	L750	F320	-	2155
7	EGLL	BAW16	B744	1525	1618	F300		L759	MABUR	A466	F280	-	2229
8	LFPG	SQ334	B744	1540	1558	F280		P628	VATLA	L750	F320	-	2153
9	EHAM	SQ324	B772	1545	1641	F300		L759	PUT	L750	F320	-	2246
10	LSZH	SQ346	B744	1545	1630	F280		L759	MABUR	L750	F320	-	2222
11	EDDF	SQ26	B744	1550	1611	F280		P628	VATLA	L750	F320	-	2206
12	EGLL	BAW18	B744	1555	1654	F300		L759	DI	A466	F280	-	2308
13	EGLL	QFA15	B744	1640	1714	F320		L759	ROSIE	L750	F350	-	2307
14	EKCH	SQ352	B772	1700	1726	F320		L759	BBS	L750	F340	-	2333

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 7-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EHAM	KLM838	B744	1455	1527	F300		L759	MIPAK	L750	F350		2112
2	EGLL	QFA9	B744	1455	1536	F320		L759	ROSIE	L750	F320		2127
3	EDDF	QFA5	B744	1500	1751	F320		L759	ROSIE	L750	F320		2342
4	EDDF	DLH777	B744	1505	1529	F300		P628	VPL	L750	F340		2115
5	LFPG	AFR257	B773	1520	1549	F300		L759	TAVUN	L750	F310		2141
6	EGLL	SIA322	B744	1520	1542	F280		P628	PPB	L750	F320		2136
7	EGLL	BAW16	B744	1525	1604	F300		L759	MIPAK	A466	F320		2207
8	LOWW	AUA8	B763	1535	1708	F300		L759	GURTI	N644	F350		2331
9	LFPG	SIA334	B744	1540	1620	F300		L759	MIPAK	L750	F320		2212
10	LSZH	SIA346	B744	1545	1648	F300		L759	MIPAK	L750	F340		2240
11	EHAM	SIA324	B772	1545	1628	F300		L759	TEPUS	L750	F340		2231
12	EGCC	SIA328	B772	1550	1657	F300		L759	AGOSA	L750	F340		2301
13	EDDF	SIA026	B744	1550	1654	F280		P628	PPB	L750	F340		2247
14	EGLL	BAW18	B744	1555	1727	F300		L759	MIPAK	N644	F320		2330
15	LGAV	SIA348	B772	1700	1720	F300		M300	OKABU	-	-		-
16	LIRF	SIA340	B772	1700	1737	F300		L759	TEPUS	L750	F340		2341

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 8-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EHAM	KLM836	B744	1455	1501	F300		L759	MIPAK	A466	F300		2053
2	EGLL	QFA9	B744	1455	1512	F280		L759	TAVUN	L750	F350		2108
3	EDDF	QFA5	B744	1500	1531	F320		L759	TAVUN	L750	F350		2126
4	EDDF	DLH777	B744	1505	1527	F280		P628	VATLA	L750	F310		2112
5	LFPG	AFR257	B773	1520	1545	F300		L759	MABUR	L750	F300		2138
6	EGLL	SIA322	B744	1520	1542	F300		P628	VPL	L750	F310		2137
7	EGLL	BAW16	B744	1525	1557	F300		L759	MIPAK	A466	F350		2159
8	LFPG	SIA334	B744	1540	1608	F300		L759	MIPAK	L750	F310		2201
9	EHAM	SIA324	B772	1545	1633	F300		L759	SUKAT	L750	F310		2237
10	LSZH	SIA346	B744	1545	1625	F300		M300	ESPAP	-	-	-	-
11	EDDF	SIA026	B744	1550	1636	F300		P628	VPL	L750	F310		2231
12	EGCC	SIA328	B772	1550	1614	F320		M300	IGAMA	-	-	-	-
13	EGLL	BAW18	B744	1555	1623	F300		L759	MIPAK	A466	F350		2225
14	EGLL	QFA15	B744	1640	1701	F320		L759	-	L750	F350		2256
15	EKCH	SI8A352	B772	1700	1717	F320		L759	LEMEX	L750	F310		2322

TRAFFIC DATA for ATFM IMPLEMENTATION
SINGAPORE DEPARTURES

Date : 9-Apr-05

S/No.	Dest.	Flight No.	Acrft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further Climb PX	Route Thru Kabul	Kabul Level Plan/Assigned		ETA Entry Pt Kabul FIR
1	EHAM	KLM838	B744	1455	1505	F300		L759	MIPAK	A466	F320		2053
2	EDDF	DLH777	B744	1505	1525	F300		N571	IDASO	-	-		-
3	EGLL	SIA322	B744	1520	1546	F300		L759	MIPAK	L750	F350		2134
4	LFPG	AFR257	B773	1520	1601	F300		L759	TAVUN	L750	F350		2151
5	EGLL	BAW16	B744	1525	1614	F300		L759	MIPAK	A466	F350		2213
6	LOWW	AUA8	B763	1535	1559	F280		L574	ANSAX	-	-		-
7	LFPG	SIA334	B744	1540	1620	F280		P628	PPB	L750	F350		2211
8	EHAM	SIA324	B772	1545	1628	F300		L759	PUT	L750	F350		2228
9	LSZH	SIA346	B744	1545	1608	F300		M300	ESPAP	-	-		-
10	EDDF	SIA026	B744	1550	1632	F300		P628	VPL	L750	F350		2224
11	EGCC	SIA328	B772	1550	1611	F320		M300	CLC	-	-		-
12	EGLL	BAW18	B744	1555	1711	F300		L759	MIPAK	A466	F320		2308
13	EGLL	QFA9	B744	1605	1700	F320		L759	ROSIE	L750	F350		2246
14	EDDF	QFA5	B744	1605	1647	F320		L759	ROSIE	L750	F350		2233
15	LIRF	SIA340	B772	1700	1715	F320		M300	ATETA	-	-		-

TRAFFIC DATA for ATFM IMPLEMENTATION
THAILAND Traffic Movements - 3 April to 9 April, 2005
Transit KABUL FIR 1900 - 2330 UTC

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
03.04.05	VTBD	LFPG	AFR169	A343	1605	1605	300	300	L507		N644	350		0501
	VTBD	LOWW	AUA26	B763	1630	1656	300	300	L507		N644	310		0500
	VTBD	EGLL	BAW10	B744	1610	1626	280	280	L507		N644	350		0442
	VTBD	EDDM	DLH773	A346	1610	1631	300	300	L507		N644	310		0452
	VTBD	EDDF	DLH779	B744	1655	1709	280	300	P646		N644	310		0440
	VTBD	LOWW	EVA61	A332	1615	1639	280	320	P646		N644	310		0454
	VTBD	EFHK	FIN098	MD11	1720	1733	280	280	L507		A466	310		0433
	VTBD	EHAM	KLM878	B744	1605	1629	280	320	L507		N644	310		0432
	VTBD	EGLL	QFA1	B744	1725	1741	300	300	P646		L750	350		0440
	VTBD	EKCH	SAS972	A343	1720	1801	300	300	L507		A466	310		0452
	VTBD	LSZH	SWR183	A343	1635	1650	320	320	P646		N644	350		0504
	VTBD	EGLL	THA910	B744	1810	1841	300	300	L507		N644	350		0440
	VTBD	EDDF	THA920	B744	1645	1730	300	320	L507		N644	350		0441
	VTBD	LFPG	THA930	B744	1705	1744	280	300	L507		N644	350		0438
	VTBD	LIRF	THA942	B744	1705	1735	300	340	L507		N644	350		0441
	VTBD	LGAV	THA946	MD11	1735	1805	320	300	R468 L301					
	VTBD	EKCH	THA950	B743	1820	1855	300	300	L507		A466	350		0448
	VTBD	LSZH	THA970	MD11	1730	1753	280	300	L507		N644	350		0453
	VTBD	LTBA	THY71	A343	1745	1749	280	320	L507					
	VTBD	OMDB	UAE385	B773	1825	1844	300	280	R468 L301					
	WSSS	LFPG	AFR257	B773	1551	1520	300	280	R325 L759		L750	350		0553
	VHHH	OMAA	CLX733	B744	1410	1405	320	340	R468 L301					
	VHHH	VABB	CPA057	B742	1410	1428	320	340	R468 L301					
	VHHH	FAJS	CPA749	A343	1545	1605	320	300	R468 P762					
	WMKK	EHAM	MAS16	B744	1555		280	280	B579 L759		L750	310		0531
	WMKK	VECC	MAS182	A333	1500		380	280	B579 L515					
	WMKK	EGLL	MAS2	B744	1540		280	320	B579 L759		L750	310		0532
	WMKK	LFPG	MAS20	B744	1530		320	320	B579 L759		L750	350		0535
	WMKK	LOWW	MAS22	B772	1545		320	340	B579 L759		L750	350		0545
	WMKK	EDDF	MAS6	B772	1550		320	320	B579 L759		L750	350		0542

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WSSS	EDDF	QFA5	B744	1500	1539	320	320	R325 L759		L750	350		0546
	WSSS	EGLL	QFA9	B744	1455	1525	320	320	R325 L759		L750	350		0547
	WSSS	EGCC	SIA328	B772	1550	1606	320	320	B579 L759		L750	350		0556
	RPLL	OMDB	UAE335	B773	1555	1614	300	300	R468 L301					
	VTBD	LLBG	ELY084	B772	1605	1612	300	300	R468 L301					
	VHHH	OMAA	AZA9061	B744	1410		320	300	R468 L301					
	VHHH	FAJS	SAA287	A346	1550	1620	300	300	R468 P762					
04.04.05	VTBD	LFPG	AFR171	A343	1605	1626	300	300	L507		N644	350		0454
	VTBD	LOWW	AUA26	B763	1630	1646	300	300	L507		N644	310		0500
	VTBD	EGLL	BAW10	B744	1610	1641	280	280	L507		N644	310		0442
	VTBD	EDDF	DLH779	B744	1655	1714	280	280	L507		N644	350		0435
	VTBD	EDDM	DLH783	A346	1610	1634	320	320	P646		L750	310		0451
	VTBD	EFHK	FIN098	MD11	1720	1746	300	280	L507		A466	310		0438
	VTBD	EHAM	KLM878	B744	1605	1622	280	280	L507		N644	350		0430
	VTBD	HKJK	KQA231	B763	1650	1639	300	260	R468 L301					
	VTBD	EGLL	QFA1	B744	1855	1927	300	300	P646		L750	310		0436
	VTBD	EDDF	RBA33	B763	1630	1709	320	300	L507		N644	350		0502
	VTBD	OJAI	RJA183	A342	1615	1636	280	300	R468 L301					
	VTBD	EKCH	SAS972	A343	1720	1744	320	320	L507		A466	350		0454
	VTBD	LSZH	SWR183	A343	1635	1654	320	320	P646		N644	350		0501
	VTBD	VECC	THA313	A333	1640	1702	360	380	L507					
	VTBD	EGLL	THA910	B744	1810	1834	300	300	L507		N644	350		0437
	VTBD	EDDF	THA920	B744	1645	1711	300	320	L507		N644	350		0438
	VTBD	LFPG	THA930	B744	1705	1732	300	320	L507		N644	350		0437
	VTBD	LIMC	THA940	MD11	1715	1741	300	300	L507		N644	350		0448
	VTBD	ESSA	THA960	B744	1810	1836	300	300	L507		A466	350		0437
	VTBD	LSZH	THA970	B744	1730	1846	300	300	L507		N644	350		0437
	VTBD	LTBA	THY61	A343	1745	1756	300	320	L507					
	VTBD	OMDB	UAE385	B773	1835	1908	300	300	R468 L301					
	VTBD	OMSJ	VAP618	B743	1650	1716	340	300	R468 L301					
	RCTP	VIDP	CAL181	A343	1345	1401	380	360	G473 L507					
	VHHH	OMDB	CPA745	A333	1605		380	380	R468 L301					

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VHHH	FAJS	CPA749	A343	1545	1613	320	300	R468 P762					
	RPLL	OBBI	GFA257	A343	1550		360	360	R468 L301					
	WMKK	EHAM	KLM810	B744	1510		280	320	B579 L759		N644	310		0524
	WMKK	EGLL	MAS2	B744	1540		280	280	B579 L759		L750	310		0528
	WMKK	LFPG	MAS20	B744	1530		280	280	B579 L759		L750	310		0528
	WMKK	EDDF	MAS6	B772	1550		340	340	B579 L759		L750	390		0552
	WSSS	EGLL	QFA15	B744	1640		280	280	R325 L759		L750	350		0547
	WSSS	EDDF	QFA5	B744	1500	1523	320	320	R325 L759		L750	350		0549
	WSSS	LSZH	SIA346	B744	1545	1626	300	320	B579 L759		L750	350		0544
	WSSS	VECC	SIA416	B772	1300	1313	380	380	B463 L507					
	VTBD	LLBG	ELY082	B772	1800	1809	300	280	R468 L301					
	VVTS	LFPG	HVN533	B772	1605	1633	340	340	P646		N644	350		0535
	VHHH	FAJS	SAA287	A346	1550		300	320	R468 P762					
	RPLL	OMDB	UAE333	A332	1013	1213	360	360	R468					
05.04.05	VTBD	LFPG	AFR169	A343	1605	1617	300	300	L507		N644	350		0500
	VTBD	VCBI	ALK423	A332	1415	1418	400	300	R468 P762					
	VTBD	LOWW	AUA26	B763	1630	1644	280	280	L507		N644	310		0445
	VTBD	EGLL	BAW10	B744	1610	1627	300	300	L507		N644	350		0445
	VTBD	EHAM	CAL065	B744	1935	1948	300	300	P646		L750	310		0401
	VTBD	VCBI	CPA703	B773	1430	1445	360	300	R468 P762					
	VTBD	EDDM	DLH773	A346	1610	1636	320	320	P646		L750	310		0452
	VTBD	EDDF	DLH779	B744	1655	1711	280	280	L507		N644	310		0434
	VTBD	HAAB	ETH0627	B763	1330	1426	280	300	R468 L301					
	VTBD	EFHK	FIN092	MD11	1720	1728	300	300	L507		A466	310		0439
	VTBD	EHAM	KLM878	B744	1605	1620	280	280	L507		N644	350		0431
	VTBD	OMSJ	MPH098	B742	1255	1749	300	300	R468 L301					
	VTBD	OPRN	PIA893	A310	1745	1806	340	340	L507					
	VTBD	EGLL	QFA1	B744	1725	1732	300	300	P646		L750	310		0437
	VTBD	OJAI	RJA183	A342	1615	1641	320	300	R468 L301					
	VTBD	VECC	THA313	A306	1640	1707	320	320	L507					
	VTBD	EGLL	THA910	B744	1810	1822	320	320	L507		N644	350		0445
	VTBD	EDDF	THA920	B744	1645	1734	320	320	L507		N644	350		0439

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	LFPG	THA930	B744	1705	1745	300	320	L507		N644	310		0436
	VTBD	LIRF	THA944	B743	1720	1746	320	300	L507		N644	350		0446
	VTBD	EKCH	THA950	B743	1820	1847	320	320	L507		A466	350		0440
	VTBD	LSZH	THA970	MD11	1730	1759	300	280	L507		N644	350		0452
	VTBD	LTBA	THY61	A343	1745	1808	300	300	L507					
	VTBD	OMDB	UAE385	B773	1825	1852	320	280	R468 L301					
	WSSS	LFPG	AFR257	B773	1520	1535	300	280	R325 L759		L750	310		0548
	WSSS	LOWW	AUA8	B763	1535		320	280	B579 L759		L750	310		0613
	VHHH	VOMM	BAW3458	B744	1635		320	320	R468 P762					
	VHHH	FAJS	CPA749	A343	1545	1608	320	320	R468 P762					
	RCTP	VABB	EVA679	MD11	1650		320	320	R468 L301					
	WSSS	EHAM	KLM838	B744	1455	1508	280	280	R325 L759		L750	350		0544
	WMKK	EHAM	MAS16	B744	1555		280	320	B579 L759		L750	310		0529
	WMKK	VECC	MAS182	A333	1500		380	380	B579 L515					
	WMKK	EGLL	MAS2	B744	1540		280	280	B579 L759		L750	310		0529
	WMKK	EDDF	MAS6	B772	1550		340	340	B579 L759		L750	390		0549
	WSSS	EGLL	QFA9	B744	1455	1518	320	320	R325 L759		L750	350		0547
	WSSS	EDDF	SIA026	B744	1550	1613	300	320	B579 L759		L750	310		0546
	WSSS	EGLL	SIA322	B744	1520	1545	300	320	B579 L759		L750	310		0546
	WSSS	EHAM	SIA324	B772	1545	1629	300	320	B579 L759		L750	350		0557
	RPLL	OMDB	UAE335	B773	1555		320	320	R468 L301					
	VTBD	LLBG	ELY082	B762	1710	1730	300	300	R468 L301					
	VTBD	OMDB	MKA904	B772	1815	1818	320	300	R468 L301					
	VVTS	LRBS	HBIHQ	GLEX	1400	1401	400	400	L507		N644	430		0621
	VHHH	FAJS	SAA287	A346	1550	1616	320	360	R468 P762					
06.04.05	VTBD	LFPG	AFR171	A343	1605	1615	320	320	L507		N644	350		0501
	VTBD	LOWW	AUA26	B763	1630	1642	300	300	L507		N644	310		0500
	VTBD	EGLL	BAW10	B744	1610	1630	280	300	L507		N644	350		0444
	VTBD	EHAM	CAL065	B744	1935	1956	300	300	P646		L750	310		0439
	VTBD	EDDF	DLH779	B744	1655	1715	300	300	L507		N644	310		0436
	VTBD	EDDM	DLH783	A346	1610	1646	320	320	P646		L750	350		0455
	VTBD	LOWW	EVA61	A332	1640	1640	300	300	P646		N644	310		0453

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	EFHK	FIN098	MD11	1720	1739	300	280	L507		A466	310		0440
	VTBD	EHAM	KLM878	B744	1605	1618	280	280	L507		N644	350		0432
	VTBD	OMDB	MAS6120	B742	1310	1503	320	300	R468 L301					
	VTBD	HECA	MSR961	B772	1745	1805	320	300	R468 L301					
	VTBD	EGLL	QFA1	B744	1725	1800	300	300	L507		N644	310		0441
	VTBD	EKCH	SAS972	A343	1720	1747	320	320	L507		A466	310		0458
	VTBD	LSZH	SWR183	A343	1635	1657	320	300	P646		N644	350		0504
	VTBD	VCBI	THA307	A306	1445	1509	320	300	R468 P762					
	VTBD	VECC	THA313	A333	1640	1706	360	340	L507					
	VTBD	EGLL	THA910	B744	1810	1824	300	300	L507		N644	310		0440
	VTBD	EDDF	THA920	B744	1645	1722	300	320	L507		N644	350		0442
	VTBD	LFPG	THA930	B744	1705	1745	300	300	L507		N644	310		0440
	VTBD	LIRF	THA942	B744	1705	1734	320	320	L507		N644	350		0442
	VTBD	LGAV	THA946	MD11	1735	1754	320	280	L507		N644	350		0454
	VTBD	EKCH	THA950	B744	1820	1833	320	320	P646		A466	350		0441
	VTBD	ESSA	THA960	B744	1810	1828	320	300	P646		A466	350		0441
	VTBD	LSZH	THA970	B744	1730	1803	300	320	L507		N644	350		0444
	VTBD	LTBA	THY61	A343	1745	1815	300	320	L507					
	VTBD	OMDB	UAE385	B773	1850	1841	300	300	R468 L301					
	VTBD	OMSJ	VAP618	B743	1650	1718	320	300	R468 L301					
	WSSS	LFPG	AFR257	B773	1520	1551	300	280	R325 L759		L750	310		0556
	WMKK	LOWW	AUA2	B772	1635		320	320	B579 L759		L750	310		0541
	WSSS	EGLL	BAW16	B744	1525	1618	300	280	R325 L759		N644	350		0611
	WSSS	EGLL	BAW18	B744	1555	1654	300	300	R325 L759		N644	350		0614
	RCTP	VIDP	CAL181	A343	1345	1359	360	360	G473 L507					
	RCTP	OMAA	CAL257	B744	1830	1834	280	340						
	RCTP	OMAA	CAL343	B744	1825	1828	300	320	R468 L301					
	VHHH	FAJS	CPA749	A343	1545	1611	320	300	R468 P762					
	WSSS	EHAM	KLM836	B744	1455	1511	280	320	R325 L759		L750	310		0549
	WMKK	EHAM	MAS16	B744	1555		280	320	B579 L759		L750	310		0536
	WMKK	EGLL	MAS2	B744	1540		280	280	B579 L759		L750	310		0536
	WMKK	LOWW	MAS22	B772	1545		340	340	B579 L759		L750	390		0557
	WMKK	EDDF	MAS6	B772	1550		340	340	B579 L759		L750	390		0555

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WSSS	EGLL	QFA15	B744	1640	1714	320	320	R325 L759		L750	350		0553
	WSSS	EDDF	QFA5	B744	1500	1541	320	300	R325 L759		L750	350		0553
	WSSS	EGLL	QFA9	B744	1455	1521	320	320	R325 L759		L750	350		0553
	WSSS	EGLL	SIA322	B744	1520	1603	280	320	B579 L759		L750	310		0552
	WSSS	EHAM	SIA324	B772	1545	1641	300	320	B579 L759		L750	350		0605
	WSSS	LSZH	SIA346	B744	1545	1630	280	280	B579 L759		L750	310		0552
	WSSS	EKCH	SIA352	B772	1700	1726	320	320	B579 L759		L750	350		0607
	RPLL	OMDB	UAE335	B773	1555	1615	320	320	R468 L301					
	VTBD	LLBG	ELY084	B772	1605	1610	300	340	R468 L301					
	VVTS	LFPG	HVN533	B772	1605	1619	340	320	P646		N644	350		0540
	VHHH	FAJS	SAA287	A346	1550	1605	300	320	R468 P762					
07.04.05	VTBD	LFPG	AFR169	A343	1605	1616	320	320	L507		N644	350		0501
	VTBD	VCBI	ALK423	A332	1415	1428	400	300	R468 P762					
	VTBD	LOWW	AUA26	B763	1630	1654	280	300	L507		L750	310		0502
	VTBD	EGLL	BAW10	B744	1610	1627	300	300	L507		N644	350		0447
	VTBD	EHAM	CAL065	B744	1935	2010	300	300	P646		L750	310		0439
	VTBD	VCBI	CPA703	B773	1600	1602	360	300	R468 P762					
	VTBD	EDDF	DLH779	B744	1655	1707	300	320	L507		N644	310		0437
	VTBD	EDDM	DLH783	A346	1610	1632	340	340	P646		L750	350		0459
	VTBD	EFHK	FIN092	MD11	1720	1730	300	300	L507		A466	310		0447
	VTBD	EHAM	KLM878	B744	1605	1621	280	280	L507		N644	350		0435
	VTBD	HKJK	KQA231	B763	1650	1657	300	300	R468 P762					
	VTBD	EGLL	QFA1	B744	1725	1836	300	300	L507		N644	310		0444
	VTBD	EDDF	RBA33	B763	1850	1916	320	320	L507		N644	310		0503
	VTBD	EKCH	SAS972	A343	1720	1745	300	300	L507		A466	350		0452
	VTBD	OERK	SVA983	MD11	1650	1624	300	300	R468 L301					
	VTBD	LSZH	SWR183	A343	1635	1659	320	320	P646		N644	350		0501
	VTBD	EGLL	THA910	B744	1810	1833	320	300	P646		A466	350		0439
	VTBD	EDDF	THA920	B744	1645	1722	320	320	L507		N644	350		0443
	VTBD	LFPG	THA930	B744	1705	1758	320	320	L507		N644	350		0443
	VTBD	LIMC	THA940	MD11	1715	1747	300	320	L507		N644	350		0455
	VTBD	LIRF	THA944	B743	1720	1801	320	300	L507		N644	350		0445

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	EKCH	THA950	B743	1820	1850	320	300	L507		A466	350		0444
	VTBD	ESSA	THA960	B744	1810	1844	320	320	P646		A466	350		0441
	VTBD	LSZH	THA970	MD11	1730	1809	320	320	L507		N644	350		0443
	VTBD	LTBA	THY71	A343	1745	1757	260	280	L507					
	VTBD	OMDB	UAE385	B773	1825	1846	300	300	R468 L301					
	WSSS	LFPG	AFR257	B773	1520	1549	300	280	R325 L759		L750	310		0552
	WSSS	LOWW	AUA8	B763	1535	1708	300	320	B579 L759		N644	350		0623
	WSSS	EGLL	BAW16	B744	1525	1604	300	280	R325 L759		N644	350		0603
	WSSS	EGLL	BAW18	B744	1555	1727	300	280	R325 L759		N644	350		0603
	RCTP	OMAA	CLX797	B744	1500	1505	320	300	R468 L301					
	VHHH	FAJS	CPA749	A343	1545	1551	340	300	R468 P762					
	RCTP	VABB	EVA679	MD11	1650	1803	320	340	R468 L301					
	RPLL	OBBI	GFA257	A343	1635	1743	360	360	R468 L301					
	WMKK	EHAM	KLM810	B744	1510		300	280	B579 L759		L750	350		0531
	WSSS	EHAM	KLM838	B744	1455	1527	300	280	R325 L759		L750	350		0545
	WMKK	LSZH	MAS10	B772	1545		340	320	B579 L759		L750	350		0546
	WMKK	EHAM	MAS16	B744	1555		280	320	B579 L759		L750	350		0533
	WMKK	EGLL	MAS2	B744	1540		280	320	B579 L759		L750	350		0533
	WMKK	LFPG	MAS20	B744	1530		280	320	B579 L759		L750	310		0532
	WMKK	EDDF	MAS6	B772	1550		320	320	B579 L759		L750	350		0545
	WSSS	EDDF	QFA5	B744	1500	1751	320	280	R325 L759		L750	350		0551
	WSSS	EGLL	QFA9	B744	1455		320	280	R325 L759		L750	350		0551
	WSSS	EHAM	SIA324	B772	1545	1628	320	280	B579 L759		L750	350		0603
	WSSS	EGCC	SIA328	B772	1550	1657	320	340	B579 L759		L750	350		0604
	WSSS	LFPG	SIA334	B744	1540	1620	300	280	B579 L759		L750	310		0552
	WSSS	LIRF	SIA340	B772	1700	1737	300	320	B579 L759		L750	350		0604
	WSSS	LSZH	SIA346	B744	1545	1648	300	320	B579 L759		L750	350		0552
	RPLL	OMDB	UAE335	B773	1555	1608	320	300	R468 L301					
	VTBD	LLBG	ELY082	B762	1710	1820	300	280	R468 L301					
	VHHH	FAJS	SAA287	A346	1550	1614	300	360	R468 P762					
08.04.05	VTBD	LFPG	AFR171	A343	1605	1626	320	320	L507		N644	350		0459
	VTBD	LOWW	AUA26	B763	1630	1649	300	280	L507		N644	310		0500

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	EGLL	BAW10	B744	1610	1646	300	300	L507		N644	350		0445
	VTBD	EHAM	CAL065	B744	1935	2000	300	300	P646		L750	310		0441
	VTBD	EDDM	DLH773	A346	1610	1641	320	320	P646		N644	350		0454
	VTBD	EDDF	DLH779	B744	1655	1716	280	320	P646		N644	310		0433
	VTBD	LOWW	EVA61	A332	1615	1643	300	300	P646		N644	350		0457
	VTBD	EFHK	FIN098	MD11	1720	1741	300	300	L507		A466	310		0446
	VTBD	EHAM	KLM878	B744	1605	1618	280	280	L507		A466	310		0430
	VTBD	OPRN	PIA893	A310	1745	1811	340	340	L507					
	VTBD	EGLL	QFA1	B744	1725	1749	300	280	L507		N644	310		0442
	VTBD	EDDF	RBA35	B763	1550	1636	320	320	L507		N644	350		0459
	VTBD	OJAI	RJA183	A342	1615	1638	320	260	R468 L301					
	VTBD	EKCH	SAS972	A343	1720	1806	300	320	L507		A466	350		0452
	VTBD	LSZH	SWR183	A343	1635	1658	320	300	P646		N644	350		0501
	VTBD	VCBI	THA307	A306	1445	1507	340	300	R468 P762					
	VTBD	VECC	THA313	A306	1640	1705	320	300	L507					
	VTBD	EGLL	THA910	B744	1810	1823	320	320	L507		A466	310		0441
	VTBD	EDDF	THA920	B744	1645	1710	320	320	L507		N644	350		0442
	VTBD	LFPG	THA930	B744	1705	1755	300	320	L507		A466	310		0437
	VTBD	LIRF	THA942	B744	1705	1744	320	320	L507		N644	350		0443
	VTBD	LGAV	THA946	MD11	1735	1808	300	300	L507		N644	350		0451
	VTBD	EKCH	THA950	B744	1820	1836	320	340	L507		A466	350		0442
	VTBD	LSZH	THA970	MD11	1730	1758	300	300	L507		N644	350		0456
	VTBD	LTBA	THY61	A343	1745	1802	300	280	L507					
	VTBD	OMDB	UAE385	B773	1825	1906	300	300	R468 L301					
	VTBD	OMDB	UAE419	B773	1930	1954	300	300	R468 L301					
	VTBD	OMSJ	VAP618	B743	1650	1732	320	300	R468 L301					
	WSSS	LFPG	AFR257	B773	1520	1545	300	280	R325 L759		L750	350		0553
	WMKK	LOWW	AUA2	B772	1635		320	340	B579 L759		N644	350		0542
	WSSS	EGLL	BAW16	B744	1525	1557	300	280	R325 L759		N644	350		0602
	WSSS	EGLL	BAW18	B744	1555	1623	300	320	R325 L759		N644	350		0602
	VHHH	VOMM	BAW3426	B742	1615	1646	320	300	R468 P762					
	RCTP	VIDP	CAL181	A343	1345	1358	360	380	G473 L507					
	VHHH	OMSJ	CLX733	B744	1430	1434	320	300	R468 L301					

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WMKK	UBBB	CLX795	B744	1745		320	320	B579 L759		N644	350		0543
	VHHH	OMDB	CPA745	A333	1605	1632	360	360	R468 L301					
	VHHH	FAJS	CPA749	A343	1545	1619	320	300	R468 P762					
	WSSS	EHAM	KLM836	B744	1455	1501	300	320	R325 L759		A466	310		0552
	WMKK	EHAM	MAS16	B744	1555		280	320	B579 L759		L750	310		0534
	WMKK	VECC	MAS182	A333	1500		380	380	B579 L515					
	WMKK	EGLL	MAS2	B744	1540		280	280	B579 L759		L750	310		0534
	WMKK	LOWW	MAS20	B744	1530		280	320	B579 L759		L750	310		0535
	WMKK	LOWW	MAS22	B772	1545		320	340	B579 L759		L750	350		0546
	WMKK	EDDF	MAS6	B772	1550		340	340	B579 L759		L750	390		0549
	WSSS	EGLL	QFA15	B744	1640	1701	320	320	R325 L759		L750	350		0555
	WSSS	EDDF	QFA5	B744	1500	1531	320	320	R325 L759		L750	350		0555
	WSSS	EGLL	QFA9	B744	1455	1512	280	320	R325 L759		L750	350		0556
	WSSS	EHAM	SIA324	B772	1545	1633	320	320	B579 L759		L750	310		0604
	WSSS	LSZH	SIA334	B744	1540	1608	300	320	B579 L759		N644	350		0553
	WSSS	EKCH	SIA352	B772	1700	1717	320	320	B579 L759		L750	310		0605
	RPLL	OMDB	UAE335	B773	1555		320	320	R468 L301					
	VTBD	LIMC	BPA3017	B763	1500	1544	320	340	P646		N644	350		0510
	VVTS	LFPG	HVN533	B772	1605	1644	340	340	P646		L750	350		0538
	VHHH	FAJS	SAA287	A346	1550	1607	300	360	R468 P762					
09.04.05	VTBD	LFPG	AFR169	A343	1605	1621	300	300	L507		A466	350		0452
	VTBD	VCBI	ALK423	A332	1415	1418	360	300	R468 P762					
	VTBD	LOWW	AUA26	B763	1630	1647	300	300	L507		L750	310		0457
	VTBD	EGLL	BAW10	B744	1610	1630	320	280	L507		N644	350		0439
	VTBD	EHAM	CAL065	B744	1935	2003	300	300	P646		L750	310		0436
	VTBD	VCBI	CPA703	B773	1430	1446	360	260	R468 P762					
	VTBD	EDDF	DLH779	B744	1655	1725	280	280	P646		A466	310		0425
	VTBD	EDDM	DLH783	A346	1610	1636	320	320	P646		N644	350		0449
	VTBD	EFHK	FIN092	MD11	1720	1759	300	300	L507		A466	310		0439
	VTBD	EHAM	KLM878	B744	1605	1709	280	300	L507		A466	310		0428
	VTBD	HKJK	KQA231	B763	1600	1638	300	300	R468 P762					
	VTBD	EGLL	QFA1	B744	2010	2058	300	300	L507		N644	310		0435

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	EDDF	RBA33	B763	1550	1625	320	320	L507		N644	310		0455
	VTBD	EKCH	SAS972	A343	1720	1755	300	320	L507		A466	310		0445
	VTBD	LSZH	SWR183	A343	1635	1653	320	300	P646		N644	350		0453
	VTBD	VECC	THA313	A333	1640	1742	360	360	L507					
	VTBD	EGLL	THA910	B744	1810	1831	320	320	L507		A466	350		0436
	VTBD	EDDF	THA920	B744	1645	1740	320	300	L507		N644	350		0435
	VTBD	LFPG	THA930	B744	1705	1811	300	320	L507		N644	310		0433
	VTBD	LIRF	THA944	B743	1720	1806	300	280	L507		N644	350		0437
	VTBD	EKCH	THA950	B743	1820	1852	320	320	L507		A466	350		0436
	VTBD	ESSA	THA960	B744	1810	1835	320	300	L507		A466	350		0435
	VTBD	LSZH	THA970	MD11	1730	1801	320	260	L507		N644	350		0435
	VTBD	LTBA	THY61	A343	1745	1751	280	280	L507					
	VTBD	LTBA	THY71	A343	1745	1751	280	280	L507					
	VTBD	OMDB	UAE385	B773	1825	1901	320	320	R468					
	WSSS	LFPG	AFR257	B773	1520	1601	300	280	R325 L759		L750	310		0550
	VHHH	OMAA	AFR6779	B742	1425		320	300	R468 L301					
	WSSS	EGLL	BAW16	B744	1525	1614	300	280	R325 L759		N644	350		0559
	WSSS	EGLL	BAW18	B744	1555	1711	300	320	R325 L759		N644	350		0557
	RCTP	OMAA	CAL241	B744	1840	1820	300	320	R468 L301					
	RCTP	OMAA	CAL363	B744	1730	1728	320	340	R468 L301					
	RCTP	OMAA	CLX735	B744	1555	1556	320	300	R468 L301					
	VHHH	OMDB	CPA001	B742	1725	1812	320	320	R468 L301					
	VHHH	FAJS	CPA749	A343	1545	1619	320	300	R468 P762					
	RCTP	OMDB	EVA685	MD11	1820	1841	320	320	R468 L301					
	RCTP	OMDB	EVA689	MD11	1745	1740	320	320	R468 L301					
	WMKK	EHAM	KLM810	B744	1510		300	320	B579 L759		A466	350		0533
	WSSS	EHAM	KLM838	B744	1455	1505	300	280	R325 L759		A466	310		0548
	WMKK	LSZH	MAS10	B772	1545		340	320	B579 L759		L750	390		0545
	WMKK	EHAM	MAS16	B744	1555		280	320	B579 L759		L750	350		0531
	WMKK	EGLL	MAS2	B744	1540		280	320	B579 L759		L750	350		0531
	WMKK	LFPG	MAS20	B744	1530		280	320	B579 L759		L750	350		0531
	WMKK	EDDF	MAS6	B772	1550		320	340	B579 L759		L750	350		0542
	WSSS	EDDF	QFA5	B744	1605	1647	320	280	R325 L759		L750	350		0546

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WSSS	EGLL	QFA9	B744	1605	1700	320	320	R325 L759		L750	350		0546
	WSSS	EGLL	SIA322	B744	1520	1546	300	280	B579 L759		L750	350		0548
	WSSS	EHAM	SIA324	B772	1545	1628	300	320	B579 L759		L750	350		0600
	RPLL	OMDB	UAE335	B773	1555	1609	340	320	R468 L301					
	VTBD	LLBG	ELY082	B762	1710	1748	300	300	R468 L301					
	VTBD	OMDB	MKA902	B742	1730	1817	320	240	R468 L301					
	VVTS	UUDD	HVN527	B772	1735	1826	340	320	L507		A466	350		0534
	VVTS	LFPG	HVN533	B772	1605	1631	360	320	P646		L750	350		0533
	VHHH	FAJS	SAA287	A346	1550	1624	300	260	R468 P762					

INDIA Ahmedadad TRAFFIC DATA for ATFM IMPLEMENTATION
TRAFFIC MOVEMENTS - 3 April to 9 April, 2005
TRANSIT KABUL FIR 1900 -2330 UTC

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ENTRY POINT	ENTRY TIME	EXIT POINT	EXIT TIME	FPL LEVEL	LEVEL ASSIGNED	CLIMB/DESCEND		REMARKS
											POINT	FL	
03/04/2005	VGZR	OMDB	IYE853	A310	EKIGA	1756	TASOP	1839		F340			
	WSSS	LSZH	SIA346	B744	MONPI	2048	SASRO	2127		F340			
	VHHH	OMDB	HDA530	B744	EKIGA	2203	TASOP	2243		F320			
04/04/2005	VGZR	OEJN	BBC035	DC10	EKIGA	1656	TASOP	1735		F280			
	RKSI	OMDB	KAL951	A333	EKIGA	2053	TASOP	2137		F400			
	VABB	UUEE	AFL568	T204	APANO	2057	SASRO	2128		F320			
05/04/2005	VHHH	OMDB	HDA530	B744	EKIGA	2141	TASOP	2222		F320			
	VABB	EDDF	DLH757	B744	APANO	2235	SASRO	2257		F320			
06/04/2005	RKSI	OMDB	KAL951	A333	EKIGA	2018	TASOP	2103		F400			
	VHHH	OMDB	HDA530	B744	EKIGA	2150	TASOP	2227		F280			
	VABB	LFPG	AFR135	A333	APANO	2059	SASRO	2125		F340			
	VABB	EDDF	DLH757	B744	APANO	2204	SASRO	2226		F300			
	VOMM	EDDF	DLH759	B744	APANO	2150	SASRO	2212		F320			
	VABB	UUEE	AFL568	T204	APANO	2221	SASRO	2247		F320			
07/04/2005	VGZR	OMRK	IAX777	L101	EKIGA	1716	TASOP	1754		F280			
	VHHH	OMDB	CPA067	B744	EKIGA	1848	TASOP	1930		F340			
	VABB	LFPG	AFR135	A333	APANO	2121	SASRO	2146		F340			
	VOMM	EDDF	DLH759	B744	APANO	2155	SASRO	2219		F320			
	VABB	EDDF	DLH757	B744	APANO	2203	SASRO	2226		F300			
	VABB	LFPG	AFR135	A333	APANO	2119	SASRO	2143		F340			
08/04/2005	RKSS	OMDB	KAL951	A333	EKIGA	2019	TASOP	2103		F380			
	VHHH	OMDB	CPA063	B744	EKIGA	2131	TASOP	2212	F300	F340	XW13	F340	
	VABB	EDDF	DLH757	B744	APANO	2207	SASRO	2229		F300			
	VGZR	OMDB	IYE859	A310	EKIGA	2229	TASOP	2313	F340	F360	XW13	F360	
09/04/2005	WMKK	OIII	IRA841	B744	MONPI	1949	SASRO	2031		F360			
	VHHH	OMDB	HDA530	B744	EKIGA	2136	TASOP	2218		F300			

INDIA Chennai TRAFFIC DATA for ATFM Implementation
Traffic Movements - 3 April to 9 April 2005
Transit KABUL FIR 1900-2330UTC

DATE	DEP.	DEST	FLIGHT NO.	ACFT.TYPE	ETD	ATD	ASSIGNED	DEP.LEVEL (PLAN)	ROUTE OVER BOB	FURTHER CLIMB PX	ROUTE THRU KABUL	ASSIGNED	KABUL LEVEL (PLAN)	ETA ENTRY PT. KABUL FIR	REMARKS
030405	WSSS	EHAM	KLM838	B744	1455	1510	320	320	P628						
030405	WSSS	EDDF	DLH777	B744	1505	1531	320	320	P628						
030405	WMKK	EHAM	KLM810	B744	1510	1528	300	320	P628						
030405	WSSS	EGLL	SIA322	B744	1520	1618	320	320	P628						
030405	WSSS	LSZH	SIA346	B744	1545	1636	320	320	N877						
040405	WSSS	EHAM	KLM838	B744	1455	1515	280	320	P628	IGREX /320					
040405	WSSS	EDDF	DLH777	B744	1505	1527	280	280	P628						
040405	WSSS	LFPG	AFR257	B773	1520	1546	280	320	P628						
040405	WSSS	EGLL	SIA322	B744	1520	1603	320	280	P628						
040405	WSSS	LFPG	SIA334	B744	1540	1617	320	280	P628						
040405	WSSS	EDDF	SIA026	B744	1550	1629	320	280	P628						
040405	WMKK	LIRF	MAS14	B744	1559	1614	320	280	P628						
050405	WSSS	EDDF	DLH777	B744	1505	1522	280	280	P628						
050405	WMKK	EHAM	KLM810	B744	1510	1526	320	280	P628						
050405	WSSS	LSZH	SIA346	B744	1545	1604	320	280	N877						
060405	WSSS	EDDF	DLH777	B744	1505	1532	320	320	P628						
060405	WSSS	LFPG	SIA334	B744	1540	1558	320	280	P628						
060405	WSSS	EDDF	SIA026	B744	1550	1611	320	280	P628						
070405	WSSS	EDDF	DLH777	B744	1505	1529	320	320	P628						
070405	WSSS	EGLL	SIA322	B744	1520	1542	320	320	P628						
070405	WSSS	LFPG	SIA334	B744	1540	1620	320	280	P628						
070405	WSSS	EDDF	SIA026	B744	1550	1655	320	320	P628						
070405	WSSS	EGLL	MAS14	B744	1559	1623	320	320	P628						
080405	WSSS	EDDF	DLH777	B744	1505	1527	320	280	P628						
080405	WSSS	EGLL	SIA322	B744	1520	1545	320	320	P628						
080405	WSSS	EDDF	SIA026	B744	1550	1639	320	320	P628						
090405	WMKK	OIII	IRA841	B742	1530	1548	320	280	P628						
090405	WSSS	LFPG	SIA334	B744	1540	1620	320	280	P628						
090405	WSSS	EDDF	SIA026	B744	1550	1632	280	320	P628						
090405	WMKK	LIRF	MAS14	B744	1559	1609	320	320	P628						

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 03-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	WMKK	EHAM	KLM810	B744	1510	1510	320	320	P628	IBANI	V390	-	-	V/2020
2	WSSS	EHAM	KLM838	B744	1455	1511	320	340	P628	IBANI	V390	-	-	V/2023
3	WSSS	EGLL	QFA9	B744	1455	1525	320	340	L759	VILOP	L750	-	-	T/2027
4	WSSS	EDDF	DLH777	B744	1505	1529	320	320	P628	IBANI	V390	-	-	V/2039
5	WMKK	LFPG	MAS20	B744	1530	1530	340	320	L759	KKJ	L750	-	-	T/2100
6	WSSS	EDDF	QFA5	B744	1500	1539	320	340	L759	KKJ	L750	-	-	T/2045
7	WMKK	EGLL	MAS2	B744	1540	1540	300	320	L759	KKJ	L750	-	-	T/2110
8	WMKK	LOWW	MAS22	B772	1545	1545	320	340	L759	KKJ	L750	-	-	T/2137
9	WMKK	EDDF	MAS6	B773	1550	1550	320	340	L759	KKJ	L750	-	-	T/2152
10	WSSS	LFPG	AFR257	B773	1520	1551	320	280	L759	KKJ	L750	-	-	T/2109
11	WMKK	EHAM	MAS16	B744	1555	1555	300	320	L759	KKJ	L750	-	-	T/2210
12	VTBD	LFPG	AFR169	A343	1605	1605	320	300	L507	LLK	N644	-	-	S/2015
13	WSSS	EGCC	SIA328	B772	1550	1606	300	320	L759	KKJ	L750	-	-	T/2127
14	WSSS	LFPG	SIA334	B744	1540	1608	320	340	P628	IBANI	L750	-	-	V/2119
15	WSSS	EGLL	SIA322	B744	520	1618	300	340	P628	IBANI	V390	-	-	V/2131
16	VTBD	EGLL	BAW10	B744	1610	1626	300	340	L759	LLK	A466	-	-	S/2031
17	VTBD	EHAM	KLM878	B744	1605	1629	320	320	L759	LLK	N644	-	-	S/2028
18	VTBD	EDDM	DLH773	A346	1610	1631	300	300	L759	LLK	N644	-	-	S/2038
19	VTBD	LOWW	EVA61	A332	1615	1639	320	320	P646	LLK	A466	-	-	S/2054
20	VTBD	LSZH	SWR183	A343	1635	1650	340	320	P646	LLK	N644	-	-	S/2105
21	VTBD	LOWW	AUA26	B763	1630	1656	320	280	L759	LLK	N644	-	-	S/2111
22	VTBD	EDDF	DLH779	B744	1655	1709	300	340	P646	LLK	N644	-	-	S/2110
23	VTBD	EDDF	THA920	B744	1645	1730	320	340	L507	LLK	A466	-	-	S/2139
24	VTBD	EFHK	FIN098	MD11	1720	1733	300	300	L507	LLK	A466	-	-	S/2135
25	VTBD	LIRF	THA942	B744	1705	1735	320	340	L507	LLK	A466	-	-	S/2149
26	VTBD	EGLL	QFA1	B744	1725	1741	320	320	P646	LLK	L750	-	-	T/2147
27	VTBD	LFPG	THA930	B744	1705	1744	320	320	L507	LLK	N644	-	-	S/2144
28	VTBD	LSZH	THA970	MD11	1730	1753	320	320	L507	LLK	A466	-	-	S/2203
29	VIDP	LFPG	AFR147	A343	1905	1915	320	320	-	-	N644	-	-	S/1950
30	VIDP	EHAM	KLM872	MD11	1920	1937	300	300	-	-	L750	-	-	T/2019
31	VIDP	CYYZ	ACA053	A343	1900	1942	300	280	-	-	A466	-	-	S/2018
32	VIDP	LOWW	AUA34	B763	2020	2051	320	280	-	-	L750	-	-	T/2130
33	VIDP	EGLL	BAW142	B744	2040	2055	320	340	-	-	A466	-	-	S/2128
34	VIDP	EGLL	CPA037	B744	2105	2126	320	280	-	-	A466	-	-	S/2159

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 04-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	WMKK	EHAM	KLM810	B744	1510	1510	320	320	L759	KKJ	L750	-	-	T/2018
2	WSSS	EHAM	KLM838	B744	1455	1512	320	320	P628	IBANI	V390	-	-	V/2018
3	WSSS	EDDF	QFA5	B744	1500	1523	320	320	L759	KKJ	L750	-	-	T/2030
4	WSSS	EDDF	DLH777	B744	1505	1525	320	320	P628	IBANI	L750	-	-	V/2034
5	WMKK	LFPG	MAS20	B744	1530	1530	300	300	L759	KKJ	L750	-	-	T/2041
6	WMKK	EGLL	MAS2	B744	1540	1540	300	320	L759	KKJ	L750	-	-	T/2114
7	WSSS	LFPG	AFR257	B773	1520	1546	320	320	P628	IBANI	V390	-	-	V/2047
8	WMKK	EDDF	MAS6	B772	1550	1550	380	340	L759	KKJ	L750	-	-	T/2121
9	ZGGG	EDDF	DLH789	A346	1530	1551	300	300	-	LLK	A466	-	-	S/2134
10	WMKK	LIRF	MAS14	B744	1600	1557	280	320	L759	IBANI	V390	-	-	V/2108
11	WSSS	EGLL	SIA322	B744	1520	1603	320	340	P628	IBANI	V390	-	-	V/2107
12	WSSS	LFPG	SIA334	B744	1540	1617	280	320	P628	IBANI	V390	-	-	V/2126
13	VTBD	EHAM	KLM878	B744	1605	1622	300	340	L507	LLK	N644	-	-	S/2015
14	VTBD	LFPG	AFR171	A343	1605	1626	320	340	L507	LLK	A466	-	-	S/2040
15	WSSS	LSZH	SIA346	B744	1545	1626	300	320	L759	KKJ	L750	-	-	T/2137
16	WSSS	EDDF	SIA026	B744	1550	1626	280	320	P628	IBANI	V390	-	-	V/2138
17	VVTS	LFPG	HVN533	B772	1605	1633	360	340	P646	KKJ	L750	-	-	T/2132
18	VTBD	EDDM	DLH783	A346	1610	1634	320	340	P646	KKJ	L750	-	-	T/2048
19	VTBD	EGLL	BAW10	B744	1610	1641	300	320	L507	LLK	N644	-	-	S/2037
20	VTBD	LOWW	AUA26	B763	1630	1646	300	300	L507	LLK	N644	-	-	S/2054
21	WSSS	EGLL	QFA15	B744	1640	1650	320	340	L759	KKJ	L750	-	-	T/2154
22	VVNB	UUEE	AFL542	IL96	1610	1651	320	340	-	LLK	A466	-	-	S/2138
23	VTBD	LSZH	SWR183	A343	1635	1655	320	320	P646	LLK	N644	-	-	S/2104
24	VTBD	EDDF	RBA33	B763	1630	1709	320	300	L507	LLK	N644	-	-	S/2122
25	VTBD	EDDF	THA920	B744	1645	1711	300	340	L507	LLK	N644	-	-	S/2113
26	VTBD	EDDF	DLH779	B744	1655	1714	300	340	L507	LLK	N644	-	-	S/2103
27	VTBD	LFPG	THA930	B744	1705	1732	300	320	L507	LLK	N644	-	-	S/2128
28	VTBD	LIMC	THA940	MD11	1715	1741	320	340	L507	LLK	N644	-	-	S/2148
29	VTBD	EKCH	SAS972	A343	1720	1744	340	320	L507	LLK	A466	-	-	S/2154
30	VTBD	EFHK	FIN098	MD11	1720	1746	300	300	L507	LLK	A466	-	-	S/2140
31	VIDP	CYQB	ACA055	A343	1800	1830	280	280	-	-	A466	-	-	S/1904
32	VIDP	LFPG	AFR147	A343	1905	1925	320	320	-	-	N644	-	-	S/2001
33	VIDP	EHAM	KLM872	MD11	1920	1935	320	280	-	-	A466	-	-	S/2007
34	VIDP	EGLL	BAW142	B744	2040	2111	300	280	-	-	N644	-	-	S/2145
35	VIDP	LOWW	AUA34	B763	2020	2121	300	280	-	-	A466	-	-	S/2155
36	VIDP	EDDF	DLH761	B744	2055	2125	300	300	-	-	L750	-	-	T/2203
37	VIDP	UUEE	AFL536	IL96	2030	2131	320	320	-	-	A466	-	-	S/2206

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 05-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	VHHH	UBBB	CLX753D	B744	1330	1328	320	320	-	LLK	N644	-	-	S/1916
2	WSSS	EHAM	KLM838	B744	1500	1508	320	320	L759	KKJ	L750	-	-	T/2015
3	WMKK	EHAM	KLM810	B744	1510	1509	280	320	P628	IBANI	V390	-	-	V/2015
4	WSSS	EGLL	QFA9	B744	1455	1518	320	320	L759	KKJ	L750	-	-	T/2025
5	WSSS	EDDF	DLH777	B744	1505	1522	280	320	P628	IBANI	L750	-	-	V/2029
6	WSSS	LFPG	AFR257	B773	1520	1535	320	320	L759	KKJ	L750	-	-	T/2041
7	WMKK	EGLL	MAS2	B744	1540	1540	300	300	L759	KKJ	L750	-	-	T/2051
8	WSSS	EGLL	SIA322	B744	1520	1545	300	320	L759	KKJ	L750	-	-	T/2054
9	WMKK	LSZH	MAS10	B772	1545	1545	340	340	L759	KKJ	L750	-	-	T/2106
10	WMKK	EDDF	MAS6	B772	1550	1550	380	340	L759	KKJ	L750	-	-	T/2123
11	WMKK	EHAM	MAS16	B744	1555	1555	320	320	L759	KKJ	L750	-	-	T/2105
12	ZGGG	EDDF	DLH789	A346	1530	1602	300	320	-	LLK	N644	-	-	S/2145
13	WSSS	LSZH	SIA346	B744	1545	1604	340	340	P628	IBANI	V390	-	-	V/2113
14	WSSS	EDDF	SIA026	B744	1550	1613	300	320	L759	KKJ	L750	-	-	T/2119
15	VTBD	LFPG	AFR169	A343	1605	1617	320	320	L507	LLK	N644	-	-	S/2031
16	VTBD	EHAM	KLM878	B744	1605	1620	300	280	L507	LLK	N644	-	-	S/2010
17	VTBD	EGLL	BAW10	B744	1610	1627	300	300	L507	LLK	N644	-	-	S/2019
18	WSSS	EHAM	SIA324	B772	1545	1629	300	320	L759	KKJ	L750	-	-	T/2146
19	VTBD	EDDM	DLH773	A346	1610	1636	320	340	P646	KKJ	L750	-	-	T/2049
20	VTBD	LOWW	AUA26	B763	1630	1644	300	300	L507	LLK	N644	-	-	S/2048
21	WSSS	LOWW	AUA8	B763	1535	1646	300	320	L759	KKJ	L750	-	-	T/2209
22	VTBD	EDDF	DLH779	B744	1655	1711	300	300	L507	LLK	N644	-	-	S/2101
23	VVNB	LFPG	HVN535	B772	1625	1712	360	340	L759	KKJ	L750	-	-	T/2145
24	VTBD	EFHK	FIN092	MD11	1720	1728	300	300	L507	LLK	A466	-	-	S/2126
25	VTBD	EGLL	QFA1	B744	1725	1732	320	340	P646	KKJ	L750	-	-	T/2133
26	VTBD	EDDF	THA920	B744	1645	1734	340	340	L507	LLK	N644	-	-	S/2135
27	VTBD	LFPG	THA930	B744	1705	1745	300	320	L507	LLK	N644	-	-	S/2143
28	VTBD	LIRF	THA944	B743	1720	1746	340	320	L507	LLK	N644	-	-	S/2157
29	VTBD	LSZH	THA970	MD11	1730	1759	320	300	L507	LLK	N644	-	-	S/2200
30	VIDP	CYYZ	ACA055	A343	1800	1853	280	280	-	-	A466	-	-	S/1925
31	VIDP	LFPG	AFR147	A343	1905	1920	320	320	-	-	N644	-	-	S/1955
32	VIDP	EHAM	KLM872	MD11	1920	1940	300	300	-	-	N644	-	-	S/2015
33	VIDP	LOWW	AUA34	B763	2020	2049	260	280	-	-	N644	-	-	S/2125
34	VIDP	EGLL	BAW142	B744	2040	2113	300	280	-	-	N644	-	-	S/2150
35	VIDP	EDDF	DLH761	B744	2055	2125	280	280	-	-	L750	-	-	S/2204

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 06-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGA	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	WMKK	LOWW	MAS22	B772	1540	-	320	360	L759	KKJ	L750	-	-	T/2112
2	WSSS	EDDF	SIA026	B744	1550	-	280	320	P628	IBANI	L750	-	-	V/2119
3	WMKK	EDDF	MAS6	B772	1550	-	-	340	L759	KKJ		-	-	T/2127
4	WMKK	UTTT	UZB554	B752	1435	-	360	360	P646	LLK	A466	-	-	S/2034
5	WSSS	EHAM	KLM836	B744	1455	1511	320	320	L759	KKJ	L750	-	-	T/2011
6	WSSS	EGLL	QFA9	B744	1455	1521	320	320	L759	KKJ	L750	-	-	T/2033
7	WSSS	EDDF	DLH777	B744	1505	1532	320	320	L759	KKJ	L750	-	-	V/2036
8	WMKK	EGLL	MAS2	B744	1540	1540	320	340	L759	KKJ	L750	-	-	T/2055
9	WSSS	EDDF	QFA5	B744	1500	1541	320	320	L759	KKJ	L750	-	-	T/2053
10	ZGGG	EDDF	DLH0789	EA34	1530	1545	300	320	-	LLK	N644	-	-	S/2135
11	WMKK	EHAM	MAS16	B744	1555	1555	320	320	L759	KKJ	L750	-	-	T/2105
12	WSSS	LFPG	SIA334	B744	1540	1558	300	320	P628	IBANI	L750	-	-	V/2106
13	WSSS	EGLL	SIA322	B744	1520	1603	300	320	L759	KKJ	L750	-	-	T/2115
14	VTBD	LFPG	AFR171	A343	1605	1615	320	340	L507	LLK	N644	-	-	S/2030
15	VVTS	UTTT	UZB568	B752	1510	1618	320	320	L507	LLK	A466	-	-	S/2028
16	VTBD	EHAM	KLM878	B744	1605	1618	300	300	L507	LLK	A466	-	-	S/2010
17	WSSS	EGLL	BAW16	B744	1525	1618	280	320	L759	KKJ	A466	-	-	S/2117
18	VVTS	LFPG	HVN533	B772	1605	1619	360	360	L759	KKJ	L750	-	-	T/2059
19	VTBD	EGLL	BAW10	B744	1610	1630	300	300	L507	LLK	A466	-	-	S/2010
20	WSSS	LSZH	SIA346	B744	1545	1630	300	300	L759	KKJ	L750	-	-	T/2128
21	WMKK	LOWW	AUA2	B772	1635	1635	320	320	L759	KKJ	L750	-	-	T/2129
22	VTBD	LOWW	EVA61	A332	1615	1640	300	300	L507	LLK	N644	-	-	S/2048
23	WSSS	EHAM	SIA324	B772	1545	1641	320	320	L759	KKJ	L750	-	-	T/2159
24	VTBD	LOWW	AUA26	B763	1630	1642	300	280	L507	LLK	A466	-	-	S/2054
25	VTBD	EDDM	DLH783	A346	1610	1646	320	360	P646	KKJ	L750	-	-	T/2102
26	VTBD	LSZH	SWR183	A343	1635	1657	320	340	P646	LLK	N644	-	-	S/2054
27	VTBD	EDDF	DLH779	B744	1655	1713	300	340	L507	LLK	N644	-	-	S/2105
28	VTBD	EDDF	THA920	B744	1645	1722	300	320	L507	LLK	A466	-	-	S/2111
29	VTBD	EGLL	QFA1	B744	1725	1725	300	300	L507	LLK	A466	-	-	S/2152
30	VTBD	LIRF	THA942	B744	1705	1734	300	340	L507	LLK	A466	-	-	S/2138
31	VTBD	EFHK	FIN098	MD11	1720	1739	300	300	L507	LLK	A466	-	-	S/2138
32	VTBD	LFPG	THA930	B744	1705	1745	300	340	L507	LLK	N644	-	-	S/2149
33	VTBD	EKCH	SAS972	A343	1720	1747	340	340	L507	LLK	A466	-	-	S/2203
34	VTBD	LGAV	THA946	MD11	1735	1754	320	280	L507	LLK	N644	-	-	S/2156
35	VTBD	LSZH	THA970	B744	1730	1803	320	320	L507	-	A466	-	-	S/2208
36	VIDP	LFPG	AFR147	A343	1905	1920	320	320	-	-	A466	-	-	S/1956
37	VIDP	EHAM	KLM872	MD11	1920	1931	280	340	-	-	A466	-	-	S/2007
38	VIDP	CYOW	ACA055	A343	1800	1945	220	280	-	-	A466	-	-	S/2020
39	VIDP	UTTT	UZB424	B752	1940	2003	300	320	-	-	A466	-	-	S/2036
40	VIDP	EGLL	CPA037	B744	1940	2024	320	320	-	-	A466	-	-	S/2058
41	VIDP	LOWW	AUA34	B763	2020	2041	240	280	-	-	L750	-	-	T/2124
42	VIDP	EGLL	BAW142	B744	2040	2057	260	280	-	-	N644	-	-	S/2131
43	VIDP	EDDF	DLH761	B744	2055	2129	280	280	-	-	N644	-	-	S/2200

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 07-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	WMKK	EHAM	KLM810	B747				320	L759	KKJ	L750	-	-	T/2024
2	WSSS	EHAM	KLM838	B744	1455	1527	320	300	L759	KKJ	L750	-	-	T/2040
3	WSSS	EDDF	DLH777	B744	1505	1529	320	320	P628	IBANI	L750	-	-	V/2036
4	WMKK	LFPG	MAS20	B744	1530	1530	320	320	L759	KKJ	L750	-	-	T/2045
5	WSSS	EGLL	QFA9	B744	1455	1536	320	300	L759	KKJ	L750	-	-	T/2055
6	WMKK	EGLL	MAS2	B744	1540	1540	320	320	L759	KKJ	L750	-	-	T/2147
7	WSSS	EGLL	SIA322	B744	1520	1542	320	320	P628	IBANI	L750	-	-	V/2053
8	WMKK	LSZH	MAS10	B772	1545	1545	360	340	L759	KKJ	L750	-	-	T/2110
9	WSSS	LFPG	AFR257	B773	1520	1549	320	320	L759	KKJ	L750	-	-	T/2105
10	WMKK	EDDF	MAS6	B772	1550	1550	340	320	L759	KKJ	L750	-	-	T/2040
11	WSSS	EDDF	SIA026	B744	1550	1550	300	320	P628	IBANI	L750	-	-	V/2155
12	WMKK	EHAM	MAS16	B744	1555	1555	320	320	L759	KKJ	L750	-	-	S/2123
13	WMKK	LIRF	MAS14	B744	1559	1559	320	320	P628	IBANI	V390	-	-	V/2114
14	ZGGG	EDDF	DLH789	A346	1530	1600	320	320	-	LLK	N644	-	-	S/2143
15	WSSS	EGLL	BAW16	B744	1525	1604	300	340	L759	KKJ	N644	-	-	S/2123
16	VTBD	LFPG	AFR169	A343	1605	1616	340	320	L507	LLK	N644	-	-	S/2026
17	WSSS	LFPG	SIA334	B744	1540	1620	300	300	L759	KKJ	L750	-	-	T/2153
18	VTBD	EHAM	KLM878	B744	1605	1621	300	280	L507	LLK	N644	-	-	S/2012
19	VTBD	EGLL	BAW10	B744	1610	1627	300	300	L507	LLK	N644	-	-	S/2022
20	WSSS	EHAM	SIA324	B772	1545	1628	320	300	L759	KKJ	L750	-	-	T/2153
21	VTBD	EDDM	DLH783	A346	1610	1632	340	340	P646	LLK	L750	-	-	T/2057
22	WMKK	LOWW	AUA2	B772	1635	1635	320	320	L759	KKJ	N644	-	-	S/2201
23	WSSS	LSZH	SIA346	B744	1545	1648	300	340	L759	KKJ	L750	-	-	T/2207
24	VTBD	LOWW	AUA26	B763	1630	1654	300	300	N895	KKJ	L750	-	-	T/2116
25	VTBD	LSZH	SWR183	A343	1635	1659	320	320	P646	LLK	N644	-	-	S/2110
26	VVNB	LFPG	HVN535	B772	1630	1701	340	340	L759	KKJ	L750	-	-	T/2139
27	VTBD	EDDF	DLH779	B744	1655	1707	300	340	L507	LLK	N644	-	-	S/2110
28	VTBD	EDDF	THA920	B744	1645	1722	320	320	L507	LLK	N644	-	-	S/2130
29	VTBD	EFHK	FIN092	MD11	1720	1730	300	300	L507	LLK	A466	-	-	S/2135
30	VTBD	EKCH	SAS972	A343	1720	1745	340	300	L507	LLK	A466	-	-	S/2151
31	VTBD	LIMC	THA940	MD11	1715	1747	320	320	L507	LLK	N644	-	-	S/2151
32	VTBD	LFPG	THA930	B744	1705	1758	320	340	L507	LLK	N644	-	-	S/2206
33	VTBD	LIRF	THA944	B743	1720	1801	320	300	L507	LLK	N644	-	-	S/2209
34	VIDP	CYYZ	ACA055	A434	1800	1845	280	280	-		A466	-	-	T/1921
35	VNKT	LOWW	AUA32	A343	1915	1923	320	300	-	LLK	N644	-	-	S/2120
36	VIDP	LFPG	AFR147	A343	1905	1925	340	340	-		N644	-	-	S/2002
37	VIDP	EHAM	KLM872	MD11	1920	1947	280	280	-	-	N644	-	-	S/2023
38	VIDP	LOWW	AUA34	B763	2020	2105	280	280	-	-	L750	-	-	T/2148
39	VIDP	EGLL	BAW142	B744	2040	2108	280	280	-	-	N644	-	-	S/2141
40	VIDP	EDDF	DLH761	B744	2055	2120	280	320	-	-	L750	-	-	T/2000

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 08-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	VTBD	LIMC	BPA3017	B763	1500	-	320	320	N895, P628	IBANI	L750	-	-	V/2005
2	WMKK	LFPG	MAS20	B744	1530	-	280	320	L759	KKJ	L750	-	-	T/2056
3	WMKK	LOWW	AUA2	B772	1635	-	320	320	L759	KKJ	N644	-	-	S/2150
4	VTBD	UBBB	CLX791	B747	1430	1448	300	320	L507	LLK	N644	-	-	S/1848
5	WSSS	EHAM	KLM836	B744	1455	1501	300	340	L759	KKJ	A466	-	-	S/2016
6	WSSS	EGLL	QFA9	B744	1455	1512	280	320	L759	KKJ	L750	-	-	T/2022
7	WSSS	EDDF	DLH777	B744	1505	1527	280	320	P628	IBANI	L750	-	-	V/2034
8	WSSS	EDDF	QFA5	B744	1500	1531	320	320	L759	KKJ	L750	-	-	T/2045
9	WSSS	EGLL	SIA322	B744	1520	1542	300	320	P628	IBANI	L750	-	-	V/2053
10	WSSS	LFPG	AFR257	B773	1520	1545	300	280	L759	KKJ	L750	-	-	T/2052
11	WSSS	EGLL	BAW16	B744	1525	1557	300	280	L759	KKJ	N644	-	-	S/2112
12	WSSS	LFPG	SIA334	B744	1540	1608	300	320	L759	KKJ	L750	-	-	T/2121
13	WMKK	LOWW	MAS22	B772	1545	1610	280	340	L759	KKJ	L750	-	-	T/2117
14	WMKK	EHAM	MAS16	B744	1555	1616	280	320	L759	KKJ	L750	-	-	T/2115
15	VTBD	EHAM	KLM878	B744	1605	1618	280	300	L507	LLK	A466	-	-	S/2011
16	WSSS	EGLL	BAW18	B744	1555	1623	300	340	L759	KKJ	N644	-	-	S/2142
17	WMKK	EDDF	MAS6	B772	1550	1624	280	360	L759	KKJ	L750	-	-	T/2131
18	VTBD	LFPG	AFR171	A343	1605	1626	320	320	L507	LLK	N644	-	-	S/2042
19	WSSS	EHAM	SIA324	B772	1545	1633	320	320	L759	KKJ	L750	-	-	T/2158
20	WMKK	EGLL	MAS2	B744	1540	1634	280	280	L759	KKJ	L750	-	-	T/2128
21	VTBD	EDDF	RBA35	B763	1550	1636	320	340	L507	LLK	N644	-	-	S/2104
22	VTBD	EDDM	DLH773	A343	1610	1641	320	320	P646	LLK	N644	-	-	S/2053
23	VTBD	LOWW	EVA61	A332	1615	1643	300	360	P646	LLK	N644	-	-	S/2054
24	VVTS	LFPG	HVN533	B772	1605	1644	320	340	P646	LLK	L750	-	-	T/2149
25	VTBD	EGLL	BAW10	B744	1610	1646	300	340	L507	LLK	N644	-	-	S/2041
26	VTBD	LOWW	AUA26	B763	1630	1649	300	280	L507	LLK	N644	-	-	S/2057
27	WSSS	EDDF	SIA026	B744	1550	1654	300	320	P628	IBANI	L750	-	-	V/2144
28	VTBD	LSZH	SWR183	A343	1635	1658	320	300	P646	LLK	N644	-	-	S/2104
29	VTBD	EDDF	THA920	B744	1645	1710	320	340	L507	LLK	N644	-	-	S/2114
30	VTBD	EDDF	DLH779	B744	1655	1716	280	320	P646	LLK	N644	-	-	S/2114
31	VTBD	EFHK	FIN098	MD11	1720	1741	300	300	L507	LLK	A466	-	-	S/2142
32	VTBD	LIRF	THA942	B744	1705	1744	320	340	L507	LLK	N644	-	-	S/2152
33	VTBD	EGLL	QFA1	B744	1725	1749	300	280	L507	LLK	N644	-	-	S2143
34	VTBD	LFPG	THA930	B744	1705	1755	300	320	L507	LLK	A466	-	-	S/2201
35	VTBD	LSZH	THA970	MD11	1730	1758	300	300	L507	LLK	N644	-	-	S/2203
36	VIDP	CYYZ	ACA055	A343	1800	1833	280	280	-	-	A466	-	-	S/1908
37	VIDP	EHAM	KLM872	MD11	1920	1921	280	320	-	-	N644	-	-	S/1953
38	VIDP	LFPG	AFR147	A343	1905	1936	320	320	-	-	N644	-	-	S/2011
39	VIDP	LOWW	AUA34	B763	2020	2049	280	280	-	-	N644	-	-	S/2123
40	VIDP	EGLL	BAW142	B744	2040	2119	260	280	-	-	N644	-	-	S/2154

INDIA Delhi TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements – 3 April to 9 April, 2005
Transit KABUL FIR 1900-2330 UTC. Date: 09-04-2005

S.No.	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP. LEVEL		ROUTE OVER BAY OF BENGAL	FURTHER CLIMB FIX	ROUTE THROUGH KABUL	KABUL LEVEL	ETA ENTRY PT. KABUL FIR	REMARKS EXIT POINT EST T- TIGER S-SAMAR V- VIKIT
							PLAN	ASSIGNED (VIDF)						
1	WMKK	LSZH	MAS10	B772	1545	-	360	320	L759	KKJ	L750	-	-	T/2058
2	WMK	EDDF	MAS6	B772	1550	-	360	360	L759	KKJ	L750-	-	-	T/2115
3	WMKK	EGLL	MAS2	B744	1540	-	320	320	L759	KKJ	L750	-	-	T/2114
4	WMKK	LIRF	MAS14	B744	1559	-	320	320	P628	LLK	V390	-	-	V/2100
5	WSSS	EHAM	KLM838	B744	1455	1505	320	320	L759	KKJ	A466	-	-	S/2017
6	WMKK	EHAM	KLM810	B744	1510	1510	340	340	L759	KKJ	A466	-	-	S/2016
7	WMKK	LFPG	MAS20	B744	1530	1530	320	320	L759	KKJ	L750	-	-	T/2036
8	WSSS	EGLL	SIA322	B744	1520	1546	320	300	L759	KKJ	L750	-	-	T/2055
9	ZGGG	EDDF	DLH789	A346	1530	1550	320	360	-	LLK	N644	-	-	S/2139
10	WMKK	EHAM	MAS16	B744	1555	1555	320	320	L759	KKJ	L750	-	-	T/2118
11	WSSS	LFPG	AFR257	B773	1520	1601	320	300	L759	KKJ	L750	-	-	T2116
12	WSSS	EGLL	BAW16	B744	1525	1614	320	320	L759	KKJ	N644	-	-	S/2126
13	WSSS	LFPG	SIA334	B744	1540	1620	320	320	P628	IBANI	L750	-	-	V/2127
14	VTBD	LFPG	AFR169	A343	1605	1621	320	300	L507	KKJ	N644	-	-	S/2029
15	VTBD	EDDF	RBA033	B763	1550	1625	320	320	L507	LLK	N644	-	-	S/2039
16	WSSS	EHAM	SIA324	B772	1545	1628	320	320	L507	KKJ	L750	-	-	T/2145
17	VTBD	EGLL	BAW10	B744	1610	1630	300	340	L507	KKJ	N644	-	-	S/2022
18	VVTS	LFPG	HVN533	B772	1605	1631	360	340	P646	LLK	L750	-	-	T/2120
19	WSSS	EDDF	SIA026	B744	1550	1632	320	320	P628	IBANI	L750	-	-	V/2129
20	VTBD	EDDM	DLH783	A346	1610	1636	320	320	P646	LLK	N644	-	-	S/2044
21	VTBD	LOWW	AUA26	B763	1630	1647	300	300	L507	KKJ	L750	-	-	T/2106
22	WSSS	EDDF	QFA5	B744	1605	1647	320	320	L759	KKJ	L750	-	-	T/2156
23	VTBD	LSZH	SWR183	A343	1635	1653	320	320	P646	LLK	N644	-	-	S/2058
24	VTBD	EHAM	KLM878	B744	1605	1709	300	340	L507	KKJ	A466	-	-	S/2103
25	VTBD	EHAM	DLH779	B744	1655	1725	300	300	P646	LLK	A466	-	-	S/2111
26	VTBD	EDDF	THA920	B744	1645	1740	300	340	L507	KKJ	N644	-	-	S/2138
27	VTBD	EFHK	FIN092	MD11	1720	1759	300	300	L507	LLK	A466	-	-	S/2159
28	VTBD	LSZH	THA970	B744	1730	1801	300	340	L507	KKJ	N644	-	-	S/2200
29	VIDP	CYYZ	ACA055	A343	1800	1829	280	300	-		A466	-	-	S/1907
30	VIDP	EFHK	N92AE	GLF4	1830	1852	380	380	-	-	A466	-	-	S/1930
31	VIDP	EHAM	KLM872	MD11	1920	1919	300	300	-	-	A466	-	-	S/1953
32	VIDP	LFPG	AFR147	A343	1905	1931	340	300	-	-	N644	-	-	S/2005
33	VIDP	UTTT	UZB424	B763	1940	2016	380	380	-	-	A466	-	-	S/2048
34	VIDP	LOWW	AUA34	B763	2020	2046	280	280	-	-	N644	-	-	S/2123
35	VIDP	EDDF	DLH761	B744	2055	2118	280	280	-	-	A466	-	-	S/2152

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
3-Apr-2005	VTBD	LFPG	AFR169	A343	1605	1605	300	300	L507		N644	350/NA		
3-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1551	300	280	L759	BBS	L750	350/NA		FL300
3-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1656	300	300	L507		N644	310/NA		
3-Apr-2005	VTBD	EGLL	BAW10	B744	1610	1626	280	280	L507		N644	350/NA		
3-Apr-2005	VTBD	EDDM	DLH773	A346	1610	1631	300	300	L507		N644	350/NA		
3-Apr-2005	WSSS	EDDF	DLH777	B744	1505	1529	300	320	P628		V390	NA		
3-Apr-2005	WSSS	EDDF	DLH779	B744	1655	1709	280	300	P646	JJS	N644	310/NA		FL340
3-Apr-2005	ZGGG	EDDF	DLH789	A346	1640	1658	280	340	A201		N644	310/NA		
3-Apr-2005	VTBD	LOWW	EVA61	A332	1615	1639	280	320	P646		N644	310/NA		
3-Apr-2005	VTBD	EFHK	FIN098	MD11	1720	1733	280	280	L507		A466	310/NA		
3-Apr-2005	WMKK	EHAM	KLM810	B744	1510	NA	300	280	P628	DORIL	V390	310/NA		FL320
3-Apr-2005	WSSS	EHAM	KLM838	B744	NFPL	1511	NA	320	P628	OPONI	NA	NA		FL 340
3-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1629	280	320	L507	CEA	N644	310/NA		FL320
3-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	280	L759	BBS	L750	310/NA		FL320
3-Apr-2005	WMKK	EGLL	MAS2	B744	1540	NA	280	320	L759		L750	310/NA		
3-Apr-2005	WMKK	LFPG	MAS20	B744	1530	NA	300	320	L759		L750	350/NA		
3-Apr-2005	WMKK	LOWW	MAS22	B772	1545	NA	280	340	L759		L750	350/NA		
3-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	280	320	L759		L750	350/NA		
3-Apr-2005	VTBD	EGLL	QFA1	B744	1725	1741	300	300	P646	PUPAM	L750	350/NA		FL320
3-Apr-2005	WSSS	EDDF	QFA5	B744	1500	1539	320	320	L759		L750	350/NA		
3-Apr-2005	WSSS	EGLL	QFA9	B744	1455	1525	320	320	L759		L750	350/NA		
3-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1801	300	300	L507		A466	310/NA		
3-Apr-2005	WSSS	EGLL	SIA322	B744	1520	1620	300	320	P628		V390	350/NA		
3-Apr-2005	WSSS	EGCC	SIA328	B772	1550	1606	320	320	L759		L750	350/NA		
3-Apr-2005	WSSS	LFPG	SIA334	B744	1540	1608	300	320	P628	LARIK	L750	310/NA		FL340
3-Apr-2005	WSSS	LSZH	SIA346	B744	1545	1634	300	320	N877		V390	360/NA		
3-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1650	320	320	P646		N644	NA		
3-Apr-2005	VTBD	EGLL	THA910	B744	1810	1841	300	300	L507		N644	350/NA		
3-Apr-2005	VTBD	EDDF	THA920	B744	1645	1730	300	320	L507	GGC	N644	350/NA		FL340
3-Apr-2005	VTBD	LFPG	THA930	B744	1705	1744	280	300	L507		N644	350/NA		
3-Apr-2005	VTBD	LIRF	THA942	B744	1705	1735	300	340	L507		N644	350/NA		

TRAFFIC DATA FOR ATFM IMPLEMENTATION
TRAFFIC MOVEMENT - 3 APRIL to 9 april 2005
TRANSIT KABULFIR 1900 - 2330 UTC
Lahore Pakistan

N1: FLIGHT PLAN NOT AVAILABLE N2 : DEP MESSAGE NOT AVAILABLE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
3/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	310	310	2030 PAVLO
3/4/2005	VTBD	LFPG	AFR169	A343	1605	N2	300	300	N644	D.I.K.	N644	310	310	2050 PAVLO
3/4/2005	VIDP	CYYZ	ACA53	A343	1900	N2	300	280	A466	D.I.K.	N644	280	280	2058 SITAX
3/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	340	N644	D.I.K.	N644	350	350	2107 PAVLO
3/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	320	N644	D.I.K.	N644	310	310	2108 PAVLO
3/4/2005	VTBD	EDDM	DLH773	A340	1610	N2	300	300	N644	D.I.K.	N644	310	310	2118 PAVLO
3/4/2005	VTBD	LOWW	EVA61	A330	1615	N2	280	320	N644	D.I.K.	N644	310	310	2134 PAVLO
3/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	340	N644	D.I.K.	N644	350	350	2148 PAVLO
3/4/2005	VTBD	LOWW	AUA26	B767	1630	N2	300	300	N644	**D.I.K.**	N644	280	280	2150 PAVLO
3/4/2005	VTBD	EDDF	DLH779	B747	1655	N2	280	340	N644	D.I.K.	N644	310	310	2155 PAVLO
3/4/2005	VIDP	EGLL	BAW142	B744	2040	N2	320	340	N644	D.I.K.	N644	350	350	2205 PAVLO
3/4/2005	VTBD	EFHK	FIN98	MD11	1720	N2	280	300	A466	D.I.K.	A466	310	310	2213 SITAX
3/4/2005	VTBD	EDDF	THA920	B744	1645	N2	300	340	N644	D.I.K.	N644	350	350	2218 PAVLO
3/4/2005	VTBD	LFPG	THA930	B744	1705	N2	280	300	N644	D.I.K.	N644	310	310	2224 PAVLO
3/4/2005	VTBD	LIRF	THA942	B744	1705	N2	300	340	N644	D.I.K.	N644	350	350	2229 PAVLO
3/4/2005	VIDP	EGCC	CPA37	B744	2105	N2	320	280	N644	D.I.K.	N644	280	280	2240 PAVLO
3/4/2005	VTBD	LSZH	THA970	MD11	1730	N2	280	300	N644	**D.I.K.**	N644	310	310	2239 PAVLO
3/4/2005	VTBD	EKCH	SAS972	A343	1720	N2	300	340	A466	D.I.K.	A466	350	350	2300 SITAX
3/4/2005	VTBD	EGLL	THA910	B744	1810	N2	300	320	N644	D.I.K.	N644	310	310	2318 PAVLO
3/4/2005	VTBD	EKCH	THA950	B743	1820	N2	300	300	A466	D.I.K.	N644	310	310	2335 SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
3/4/2005	ZGGG	EDDF	DLH789	A340	1640	N2	340	340	N644	D.I.K.	N644	350	350	2331 PAVLO
3/4/2005	VIDP	EHAM	KLM872	B747	1920	N2	300	300	L750	ZHOB	L750	310	310	2055 ROSIE
3/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	300	320	G792	AMBER	G792	310	310	2106 ASLUM
3/4/2005	WSSS	EHAM	KLM838	B744	1455	N2	300	340	G792	AMBER	G792	350	350	2110 ASLUM
3/4/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	340	L750	ZHOB	L750	350	350	2110 ROSIE
3/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2128 ROSIE
3/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	300	320	G792	AMBER	G792	310	310	2125 ASLUM
3/4/2005	WSSS	LFPG	MAS20	B744	1530	N2	300	320	L750	ZHOB	L750	350	350	2133 ROSIE
3/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	280	280	2136 ROSIE
3/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	L750	ZHOB	L750	310	310	2142 ROSIE
3/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	300	340	L750	ZHOB	L750	350	350	2158 ROSIE
3/4/2005	WSSS	EGCC	SIA328	B772	1550	N2	320	320	L750	ZHOB	L750	310	310	2158 ROSIE
3/4/2005	WMKK	LOWW	MAS22	B772	1545	N2	280	340	L750	ZHOB	L750	350	350	2210 ROSIE
3/4/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	320	L750	ZHOB	L750	310	310	2220 ROSIE
3/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	G792	AMBER	G792	310	310	2215 ASLUM
3/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	320	280	L750	ZHOB	L750	280	280	2202 ROSIE
3/4/2005	WMKK	EDDF	MAS06	B744	1550	N2	280	340	L750	ZHOB	L750	350	350	2226 ROSIE
3/4/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	310	310	2244 ROSIE
3/4/2005	VHHH	LFPG	HVN535	B777	N1	N2	N1	340	L750	ZHOB	L750	350	350	2241 ROSIE
4/4/2005	VIDP	CYYZ	ACA55	A340	1800	N2	280	280	A466	D.I.K.	A466	310	310	1942 SITAX
4/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	A466	D.I.K.	A466	310	310	2040 SITAX
4/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	320	280	N644	D.I.K.	N644	310	310	2049 PAVLO
4/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	300	A466	D.I.K.	A466	350	350	2055 SITAX
4/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	320	N644	D.I.K.	N644	310	310	2115 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
4/4/2005	VTBD	LFPG	AFR171	A340	1605	N2	300	320	N644	D.I.K.	N644	350	350	2120 PAVLO
4/4/2005	VTBD	LOWW	AUA26	B763	N1	N2	N1	300	N644	D.I.K.	N644	310	310	2132 PAVLO
4/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	340	N644	D.I.K.	N644	350	350	2152 PAVLO
4/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	320	N644	D.I.K.	N644	310	310	2143 PAVLO
4/4/2005	VTBD	EDDF	THA920	B744	1645	N2	300	340	N644	D.I.K.	N644	350	350	2151 PAVLO
4/4/2005	VTBD	EDDF	RBA33	B767	1630	N2	320	320	N644	D.I.K.	N644	310	310	2200 PAVLO
4/4/2005	VTBD	LFPG	THA930	B744	1705	N2	300	340	N644	D.I.K.	N644	310	310	2206 PAVLO
4/4/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	320	N644	D.I.K.	N644	350	350	2212 PAVLO
4/4/2005	VVNB	UUEE	AFL542	IL96	1610	N2	280	340	A466	D.I.K.	A466	280	280	2213 SITAX
4/4/2005	VTBD	EFHK	FIN98	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2218 SITAX
4/4/2005	VIDP	EGLL	BAW142	B747	2040	N2	300	280	N644	D.I.K.	N644	310	310	2223 PAVLO
4/4/2005	VTBD	LIMC	THA940	MD11	1715	N2	300	340	N644	D.I.K.	N644	350	350	2226 PAVLO
4/4/2005	VTBD	EKCH	SAS972	A343	1720	N2	320	320	A466	D.I.K.	A466	310	310	2232 SITAX
4/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	300	280	N644	D.I.K.	N644	280	280	2233 PAVLO
4/4/2005	VIDP	UUEE	AFL536	IL96	N1	N2	N1	320	A466	D.I.K.	A466	310	310	2249 SITAX
4/4/2005	VTBD	EGLL	THA910	B744	1810	N2	300	320	N644	D.I.K.	N644	310	310	2313 PAVLO
4/4/2005	VTBD	ESSA	THA960	B744	1810	N2	300	340	A466	D.I.K.	A466	310	310	2314 SITAX
4/4/2005	VTBD	LSZH	THA970	B744	1730	N2	300	320	N644	D.I.K.	N644	310	310	2323 PAVLO
4/4/2005	VVNB	UUDD	HVN525	B777	1730	1835	350	340	A466	D.I.K.	A466	350	350	2358 SITAX
4/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	280	320	HILAL - ROSI	ZHOB	L750	280	280	2116 ROSIE
4/4/2005	WMKK	LFPG	MAS20	B744	1530	N2	300	320	L750	ZHOB	L750	310	310	2113 ROSIE
4/4/2005	VTBD	EDDM	DLH783	A346	1610	N2	320	340	L750	ZHOB	L750	350	350	2121 ROSIE
4/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2102 ROSIE
4/4/2005	WSSS	EHAM	KLM838	B744	1455	N2	280	320	G792	AMBER	G792	280	280	2100 ASLUM

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
4/4/2005	WSSS	LFPG	AFR257	B777	1520	N2	300	320	G792	AMBER	G792	310	310	2139 ASLUM
4/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	260	320	HILAL - ROSIE	ZHOB	L750	310	310	2145 ROSIE
4/4/2005	WMKK	LIRF	MAS14	B744	1559	N2	280	320	G792	AMBER	G792	310	310	2152 ASLUM
4/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	G792	AMBER	G792	280	280	2145 ASLUM
4/4/2005	WMKK	EDDF	MAS06	B772	1550	N2	280	340	G792		G792	350	350	2152 ASLUM
4/4/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	G792	AMBER	G792	310	310	2228 ASLUM
4/4/2005	WSSS	EGLL	QFA15	B744	1640	N2	280	340	G792	AMBER	G792	350	350	2226 ASLUM
4/4/2005	VIDP	EDDF	DLH761	B744	2058	N2	300	280	G792	AMBER	G792	280	280	2232 ASLUM
4/4/2005	WSSS	LSZH	SIA346	B744	1545	N2	300	320	L750	ZHOB	L750	310	310	2208 ROSIE
4/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	280	320	G792	AMBER	G792	280	280	2219 ASLUM
4/4/2005	VVTS	LFPG	HVN533	B772	1605	N2	320	340	L750	ZHOB	L750	350	350	2203 ROSIE
4/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	340	G792	AMBER	G792	350	350	2209 ASLUM
4/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	280	320	L750	ZHOB	L750	310	310	2050 ROSIE
4/4/2005	VTBD	EGLL	QFA01	B744	1855	N2	300	320	L750	ZHOB	L750	350	350	2357 ROSIE
5/5/2005	VVTS	LRBS	HBIHQ	GLEX	1400		400	430	N644	D.I.K.	N644	390	390	1955 PAVLO
5/5/2005	VHHH	UBBB	CLX753D	B744	N1	N2	N1	320	N644	D.I.K.	N644	310	310	1956 PAVLO
5/5/2005	VIDP	CYYZ	ACA055A	A340	1800	N2	280	280	A466	D.I.K.	A466	280	280	2005 SITAX
5/5/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	280	N644	D.I.K.	N644	280	280	2036 PAVLO
5/5/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	280	N644	D.I.K.	N644	280	280	2048 PAVLO
5/5/2005	VTBD	EGLL	BAW10	B747	1610	N2	300	300	N644	D.I.K.	N644	310	310	2059PAVLO
5/5/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	280	N644	D.I.K.	N644	280	280	2059 PAVLO
5/5/2005	VTBD	LFPG	AFR169	A343	N1	N2	N1	340	N644	D.I.K.	N644	350	350	2112 PAVLO
5/5/2005	VTBD	LOWW	AUA26	B767	1630	N2	280	300	N644	D.I.K.	N644	310	310	2128 PAVLO
5/5/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	300	N644	D.I.K.	N644	310	310	2142 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
5/5/2005	VIDP	LOWW	AUA34	B763	2020	N2	260	280	N644	D.I.K.	N644	280	280	2205 PAVLO
5/5/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2206SITAX
5/5/2005	VTBD	EDDF	THA920	B744	1645	N2	320	340	N644	D.I.K.	N644	350	350	2215PAVLO
5/5/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	340	N644	D.I.K.	N644	350	350	2226 PAVLO
5/5/2005	VTBD	LFPG	THA930	B744	1705	N2	300	320	N644	D.I.K.	N644	310	310	2225 PAVLO
5/5/2005	VIDP	EGLL	BAW142	B744	2040	N2	300	280	N644	D.I.K.	N644	280	280	2224 PAVLO
5/5/2005	VTBD	LIRF	THA944	B743	1720	N2	320	340	N644	D.I.K.	N644	350	350	2234 PAVLO
5/5/2005	VTBD	LSZH	THA970	MD11	1730	N2	300	300	N644	D.I.K.	N644	310	310	2240 PAVLO
5/5/2005	VTBD	EGLL	THA910	B744	1810	N2	320	340	N644	D.I.K.	N644	350	350	2303 PAVLO
5/5/2005	VTBD	EKCH	THA950	B744	1820	N2	320	300	A466	D.I.K.	A466	310	310	2327 SITAX
5/5/2005	WSSS	EHAM	KLM838	B744	1501	N2	300	320	L750	ZHOB	L750	310	310	2027 ROSIE
5/5/2005	WMKK	EHAM	KLM810	B744	N1	N2	N1	320	G792	AMBER	G792	310	310	2048 ASLUM
5/5/2005	VTBD	EDDM	DLH773	A346	1610	N2	320	340	L750	ZHOB	L750	350	350	2119 ROSIE
5/5/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	320	L750	ZHOB	L750	310	310	2113 ROSIE
5/5/2005	WSSS	EDDF	DLH777	B744	1505	N2	280	320	L750	ZHOB	L750	310	310	2102 ROSIE
5/5/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	320	L750	ZHOB	L750	350	350	2055ROSIE
5/5/2005	WSSS	LOWW	AUA08	B763	1535	N2	300	320	L750	ZHOB	L750	310	310	2240ROSIE
5/5/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	300	L750	ZHOB	L750	310	310	2123ROSIE
5/5/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	280	280	2137 ROSIE
5/5/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	L750	ZHOB	L750	350	350	2126ROSIE
5/5/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	340	L750	ZHOB	L750	350	350	2204ROSIE
5/5/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	L750	ZHOB	L750	310	310	2150 ROSIE
5/5/2005	WMKK	EDDF	MAS06	B777	1550	N2	280	340	L750	ZHOB	L750	350	350	2155 ROSIE
5/5/2005	VVNB	LFPG	HVN535	B772	1625	N2	310	340	L750	ZHOB	L750	350	350	2216 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
5/5/2005	WSSS	EHAM	SIA324	B772	1645	N2	300	320	L750	ZHOB	L750	310	310	2218 ROSIE
5/5/2005	WMKK	LSZH	MAS10	B772	1545	N2	280	350	L750	ZHOB	L750	350	350	2136 ROSIE
5/5/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	280	L750	ZHOB	L750	280	280	2239 ROSIE
6/6/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	310	310	2040 PAVLO
6/6/2005	VIDP	EHAM	KLM872	MD11	1920	N2	320	340	N644	D.I.K.	N644	350	350	2045 PAVLO
6/6/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	300	N644	D.I.K.	N644	280	280	2052PAVLO
6/6/2005	VIDP	CYYZ	ACA55	A343	1800	N2	220	340	N644	D.I.K.	N644	350	350	2104 PAVLO
6/6/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	300	N644	D.I.K.	N644	280	280	2104 PAVLO
6/6/2005	VVTS	UTTT	UZB568	B757	1510	N2	340	320	A466	D.I.K.	A466	310	310	2111 SITAX
6/6/2005	VTBD	LFPG	AFR171	A340	1605	N2	320	340	N644	D.I.K.	N644	350	350	2112 PAVLO
6/6/2005	WMKK	UTTT	UZB554	B752	1435	N2	350	360	A466	D.I.K.	A466	390	390	2112 SITAX
6/6/2005	VIDP	UTTT	UZB424	B752	1940	N2	300	320	A466	D.I.K.	A466	310	310	2118 SITAX
6/6/2005	VTBD	LOWW	EVA61	A330	1615	N2	300	300	N644	D.I.K.	N644	310	310	2128 PAVLO
6/6/2005	VTBD	LOWW	AUA26	B767	1630	N2	300	340	N644	D.I.K.	N644	350	350	2134 PAVLO
6/6/2005	VIDP	EGLL	CPA37	B747	1940	N2	320	300	N644	D.I.K.	N644	310	310	2138 PAVLO
6/6/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	340	N644	D.I.K.	N644	350	350	2144PAVLO
6/6/2005	VTBD	EDDF	DLH779	B744	1655	N2	300	340	N644	D.I.K.	N644	310	310	2156 PAVLO
6/6/2005	VTBD	EDDF	THA920	B744	1645	N2	320	320	N644	D.I.K.	N644	350	350	2204PAVLO
6/6/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	340	N644	D.I.K.	N644	310	310	2205PAVLO
6/6/2005	VIDP	EGLL	BAW142	B747	2040	N2	260	280	N644	D.I.K.	N644	280	280	2211 PAVLO
6/6/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	320	N644	D.I.K.	N644	310	310	2215 PAVLO
6/6/2005	VTBD	LIRF	THA942	B744	1705	N2	320	340	N644	D.I.K.	N644	390	390	2217 PAVLO
6/6/2005	VTBD	EFHK	FIN98	MD11	1720	N2	300	300	N644	D.I.K.	N644	350	350	2218 PAVLO
6/6/2005	VTBD	LFPG	THA930	B743	1705	N2	300	340	N644	D.I.K.	N644	310	310	2227PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
6/6/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	300	N644	D.I.K.	N644	350	350	2228 PAVLO
6/6/2005	VIDP	EDDF	DLH761	B747	2055	N2	280	280	N644	D.I.K.	N644	280	280	2241PAVLO
6/6/2005	VTBD	EKCH	SAS972	A340	1720	N2	320	340	A466	D.I.K.	A466	350	350	2242 SITAX
6/6/2005	VTBD	LSZH	THA970	B744	1730	N2	300	320	N644	D.I.K.	N644	310	310	2248 PAVLO
6/6/2005	VTBD	LGAT	THA946	MD11	1735	N2	320	340	N644	D.I.K.	N644	350	350	2252 PAVLO
6/6/2005	WSSS	EGLL	BAW18	B747	1555	N2	300	320	N644	D.I.K.	N644	310	310	2258 PAVLO
6/6/2005	VTBD	EGLL	THA910	B744	1810	N2	300	340	N644	D.I.K.	N644	350	350	2305PAVLO
6/6/2005	VTBD	ESSA	THA960	B744	1810	N2	320	300	A466	D.I.K.	A466	310	310	2305SITAX
6/6/2005	VTBD	EKCH	THA950	B744	1820	N2	320	340	A466	D.I.K.	A466	350	350	2319SITAX
6/6/2005	VIDP	UUEE	AFL536	B763	N1	N2	N1	300	A466	D.I.K.	A466	310	310	2331 SITAX
6/6/2005	WSSS	EHAM	KLM836	B744	1455	N2	280	320	L750	ZHOB	L750	310	310	2054 ROSIE
6/6/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	320	L750	ZHOB	L750	310	310	2106ROSIE
6/6/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2122 ROSIE
6/6/2005	WMKK	EGLL	MAS02	B744	N1	N2	N1	340	L750	ZHOB	L750	350	350	2122 ROSIE
6/6/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	280	280	2141 ROSIE
6/6/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	310	310	2138 ROSIE
6/6/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	340	L750	ZHOB	L750	350	350	2146 ROSIE
6/6/2005	WSSS	EDDF	DLH777	B747	1505	N2	300	320	L750	ZHOB	L750	310	310	2118 ROSIE
6/6/2005	VTBD	EHAM	DLH783	A346	1610	N2	320	360	L750	ZHOB	L750	350	350	2134 ROSIE
6/6/2005	WMKK	LOWW	MAS22	B777	N1	N2	N1	360	L750	ZHOB	L750	350	350	2145 ROSIE
6/6/2005	WSSS	EGLL	SIA322	B747	1528	N2	280	320	L750	ZHOB	L750	310	310	2148 ROSIE
6/6/2005	WSSS	EDDF	SIA26	B744	1550	N2	280	340	L750	ZHOB	L750	350	350	2159ROSIE
6/6/2005	WSSS	EKCH	SIA352	B744	1700	N2	320	340	L750	ZHOB	L750	350	350	2319ROSIE
6/6/2005	WSSS	EGLL	QFA15	B744	1640	N2	320	320	L750	ZHOB	L750	310	310	2300 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
6/6/2005	WSSS	LSZH	SIA346	B744	1545	N2	280	320	L750	ZHOB	L750	350	350	2203 ROSIE
6/6/2005	VVTS	LFPG	HVN533	B772	1605	N2	320	360	L750	ZHOB	L750	390	390	2152 ROSIE
6/6/2005	WMKK	EDDF	MAS06	B777	N1	N2	N1	320	L750	ZHOB	L750	310	310	2200 ROSIE
6/6/2005	VIDP	LOWW	AUA34	B767	N1	N2	N1	280	L750	ZHOB	L750	280	280	2159 ROSIE
6/6/2005	WMKK	LOWW	AUA02	B772	1635	N2	320	320	L750	ZHOB	L750	310	310	2221 ROSIE
6/6/2005	WSSS	EHAM	SIA324	B772	1545	N2	300	320	L750	ZHOB	L750	310	310	2247 ROSIE
6/6/2005	VABB	LFPG	AFR135	A332	2030	N2	340	340	L750	ZHOB	L750	350	350	2237 ROSIE
6/6/2005	VOMM	EDDF	DLH759	B744	2015	N2	320	320	L750	ZHOB	L750	310	310	2324 ROSIE
6/6/2005	VABB	EDDF	DLH757	B747	N1	N2	N1	300	L750	ZHOB	L750	310	310	2337ROSIE
7/4/2005	VIDP	CYYZ	ACA55	A340	1800	N2	280	280	A466	D.I.K.	A466	280	280	2001SITAX
7/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	340	340	N644	D.I.K.	N644	350	350	2042PAVLO
7/4/2005	VTBD	EHAM	KLM878	B747	1605	N2	280	300	N644	D.I.K.	N644	310	310	2050PAVLO
7/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	280	N644	D.I.K.	N644	280	280	2059PAVLO
7/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	300	300	N644	D.I.K.	N644	310	310	2100PAVLO
7/4/2005	VTBD	LFPG	AFR169	A343	1605	N2	320	340	A466	D.I.K.	A466	350	350	2056SITAX
7/4/2005	VTBD	EDDF	DLH779	B747	1655	N2	300	340	A466	D.I.K.	A466	350	350	2150SITAX
7/4/2005	VTBD	LSZH	SWR183	A340	1635	N2	320	320	N644	D.I.K.	N644	310	310	2150PAVLO
7/4/2005	VNKT	LOWW	AUA32	A343	1915	N2	320	360	N644	D.I.K.	N644	310	310	2200PAVLO
7/4/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	320	N644	D.I.K.	N644	350	350	2203PAVLO
7/4/2005	VTBD	EDDF	THA920	B744	1645	N2	320	340	N644	D.I.K.	N644	350	350	2215PAVLO
7/4/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2215SITAX
7/4/2005	VIDP	EGLL	BAW142	B747	2040	N2	260	280	N644	D.I.K.	N644	280	280	2221PAVLO
7/4/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	340	N644	D.I.K.	N644	350	350	2223PAVLO
7/4/2005	VIAR	UTTT	UZB448	B767	2200	N2	340	340	N644	D.I.K.	A466	310	310	2230SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
7/4/2005	VTBD	EKCH	SAS792	A343	1720	N2	300	300	A466	D.I.K.	A466	280	280	2231SITAX
7/4/2005	VTBD	LIMC	THA940	MD11	1715	N2	300	340	N644	D.I.K.	N644	350	350	2134PAVLO
7/4/2005	WMKK	LOWW	AUA2	B772	1635	N2	320	320	N644	D.I.K.	N644	310	310	2241PAVLO
7/4/2005	VTBD	LFPG	THA930	B744	1705	N2	320	280	N644	D.I.K.	N644	280	280	2246PAVLO
7/4/2005	VTBD	LIRF	THA944	B743	1720	N2	320	340	N644	D.I.K.	N644	350	350	2249PAVLO
7/4/2005	VTBD	LSZH	THA970	B744	1730	N2	320	340	N644	D.I.K.	N644	310	310	2256PAVLO
7/4/2005	VTBD	EGLL	THA910	B744	1810	N2	320	300	A466	D.I.K.	A466	280	280	2309 SITAX
7/4/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	320	N644	D.I.K.	N644	310	310	2315PAVLO
7/4/2005	WSSS	EGLL	BAW18	B744	1555	N2	300	340	N644	D.I.K.	N644	350	350	2316 PAVLO
7/4/2005	WSSS	LOWW	AUA08	B763	1535	N2	300	320	N644	D.I.K.	N644	310	310	2325 PAVLO
7/4/2005	VTBD	ESSA	THA960	B744	N1	N2	N1	340	N644	D.I.K.	N644	350	350	2327 PAVLO
7/4/2005	VTBD	EKCH	THA950	B743	1820	N2	320	300	A466	D.I.K.	A466	280	280	2330 SITAX
7/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	300	320	L750	ZHOB	L750	310	310	2057ROSIE
7/4/2005	WSSS	EGLL	QFA09	B747	N1	N2	N1	320	L750	ZHOB	L750	310	310	2132ROSIE
7/4/2005	VTBD	LOWW	AUA26	B763	1630	N2	280	300	L750	ZHOB	L750	280	280	2147 ROSIE
7/4/2005	WSSS	EHAM	KLM838	B747	1455	N2	300	340	L750	ZHOB	L750	350	350	2111ROSIE
7/4/2005	WMKK	LFPG	MAS20	B747	1530	N2	280	320	L750	ZHOB	L750	310	310	2118ROSIE
7/4/2005	VTBD	EHAM	DLH783	B746	1610	N2	340	340	L750	ZHOB	L750	350	350	2121 ROSIE
7/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	300	340	HILAL - ROSI	ZHOB	L750	350	350	2139 ROSIE
7/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	320	L750	ZHOB	L750	310	310	2136 ROSIE
7/4/2005	WMKK	LSZH	MAS10	B772	1545	N2	300	340	L750	ZHOB	L750	350	350	2140 ROSIE
7/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	300	300	L750	ZHOB	L750	310	310	2207ROSIE
7/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	L750	ZHOB	L750	310	310	2231ROSIE
7/4/2005	WMKK	EHAM	MAS16	B747	1555	N2	280	340	L750	ZHOB	L750	350	350	2152 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
7/4/2005	VVNB	LFPG	HVN535	B777	1625	N2	310	340	L750	ZHOB	L750	350	350	2214ROSIE
7/4/2005	WMKK	LIRF	MAS14	B747	N1	N2	N1	340	L750	ZHOB	L750	310	310	2156ROSIE
7/4/2005	WMKK	EDDF	MAS6	B772	1550	N2	300	280	L750	ZHOB	L750	280	280	2209ROSIE
7/4/2005	VIDP	LOWW	AUA34	B767	2020	N2	280	280	L750	ZHOB	L750	280	280	2219ROSIE
7/4/2005	WSSS	EHAM	SIA324	B777	N1	N2	N1	360	L750	ZHOB	L750	390	390	2227 ROSIE
7/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	L750	ZHOB	L750	310	310	2239 ROSIE
7/4/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	320	L750	ZHOB	L750	350	350	2221 ROSIE
7/4/2005	WSSS	LSZH	SIA346	B747	N1	N2	N1	340	L750	ZHOB	L750	350	350	2241ROSIE
7/4/2005	WSSS	EGLL	SIA328	B772	1550	N2	300	340	L750	ZHOB	L750	350	350	2259 ROSIE
7/4/2005	VABB	LFPG	AFR135	A332	2045	N2	340	340	L750	ZHOB	L750	310	310	2306 ROSIE
7/4/2005	WSSS	LIRF	SIA340	B772	1700	N2	300	340	L750	ZHOB	L750	350	350	2231 ROSIE
7/4/2005	VOMM	EDDF	DLH759	B744	1950	N2	320	320	L750	ZHOB	L750	280	280	2339 ROSIE
7/4/2005	VABB	EDDF	DLH757	B744	2120	N2	320	300	L750	ZHOB	L750	350	350	2345 ROSIE
7/4/2005	WSSS	EDDF	QFA05	B744	N1	N2	N1	340	L750	ZHOB	L750	310	310	2346 ROSIE
8/4/2005	VTBD	UBBB	CLX791	B744	1430	N2	300	320	N644	D.I.K.	N644	310	310	1926 PAVLO
8/4/2005	VIDP	CYYZ	ACA55	A343	1800	N2	280	280	A466	D.I.K.	A466	280	280	1948SITAX
8/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	320	N644	D.I.K.	N644	310	310	2033PAVLO
8/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	280	280	2051 PAVLO
8/4/2005	VTBD	EHAM	KLM878	B747	1605	1618	280	300	A466	D.I.K.	A466	310	310	2051 SITAX
8/4/2005	WSSS	EHAM	KLM836	B744	1455	N2	300	340	A466	D.I.K.	A466	350	350	2056 SITAX
8/4/2005	VTBD	EGLL	BAW10	B744	1610	1646	300	340	N644	D.I.K.	N644	350	350	2144 PAVLO
8/4/2005	VTBD	LFPG	AFR171	A343	1605	1626	320	320	N644	D.I.K.	N644	310	310	2122 PAVLO
8/4/2005	VTBD	LOWW	DLH773	A340	1610	1641	320	320	N644	D.I.K.	N644	310	310	2133 PAVLO
8/4/2005	VTBD	LOWW	EVA61	A330	1615	1643	300	360	N644	D.I.K.	N644	350	350	2134PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
8/4/2005	VTBD	LOWW	AUA26	B767	1630	1649	300	280	N644	D.I.K.	N644	280	280	2137 PAVLO
8/4/2005	VTBD	LSZH	SWR183	A340	1635	1658	320	300	N644	D.I.K.	N644	310	310	2144PAVLO
8/4/2005	VTBD	EDDF	RBA35	B767	1550	1636	320	340	N644	D.I.K.	N644	350	350	2144PAVLO
8/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	320	N644	D.I.K.	N644	310	310	2154 PAVLO
8/4/2005	WSSS	EGLL	BAW16	B744	1525	1557	300	280	N644	D.I.K.	N644	390	390	2154 PAVLO
8/4/2005	VTBD	EDDF	THA920	B744	1645	1710	320	340	N644	D.I.K.	N644	350	350	2154 PAVLO
8/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	280	280	N644	D.I.K.	N644	280	280	2213 PAVLO
8/4/2005	WSSS	EGLL	BAW18	B744	1555	1623	300	340	N644	D.I.K.	N644	350	350	2222 PAVLO
8/4/2005	VTBD	EFHK	FIN98	MD11	1720	1641	300	300	A466	D.I.K.	A466	310	310	2220 SITAX
8/4/2005	VTBD	EGLL	QFA01	B744	1725	1749	300	280	N644	D.I.K.	N644	280	280	2223 PAVLO
8/4/2005	WMKK	LOWW	AUA02	B772	1635	N2	320	320	N644	D.I.K.	N644	310	310	2230PAVLO
8/4/2005	VTBD	LIRF	THA942	B744	1705	1744	320	340	N644	D.I.K.	N644	350	350	2232 PAVLO
8/4/2005	VIDP	EGLL	BAW142	B744	2040	N2	260	280	N644	D.I.K.	N644	280	280	2233PAVLO
8/4/2005	VTBD	LFPG	THA930	B744	1705	1755	300	320	A466	D.I.K.	A466	310	310	2241 SITAX
8/4/2005	VTBD	LSZH	THA970	MD11	1730	1758	300	300	N644	D.I.K.	N644	280	280	2243 PAVLO
8/4/2005	VIDP	EDDF	DLH761	B747	2055	N2	280	280	N644	D.I.K.	N644	280	280	2252 PAVLO
8/4/2005	VTBD	LGAT	THA946	MD11	1735	1808	300	300	N644	D.I.K.	N644	280	280	2253 PAVLO
8/4/2005	VTBD	EKCH	SAS972	A343	1720	1806	300	320	A466	D.I.K.	A466	280	280	2303 SITAX
8/4/2005	VTBD	EGLL	THA910	B744	1810	1823	320	340	A466	D.I.K.	A466	310	310	2312 SITAX
8/4/2005	WMKK	UBBB	CLX795	B744	1745	N2	300	300	N644	D.I.K.	N644	280	280	2313 PAVLO
8/4/2005	VTBD	EKCH	THA950	B744	1820	1836	320	340	A466	D.I.K.	A466	350	350	2323 SITAX
8/4/2005	VHHH	UBBB	CLX741	B744	1725	N2	280	320	N644	D.I.K.	N644	310	310	2330 PAVLO
8/4/2005	ZGGG	EDDF	DLH789	A340	1700	1721	360	320	N644	D.I.K.	N644	310	310	2350PAVLO
8/4/2005	VIDP	UUEE	AFL536	B767	2130	N2	300	300	A466	D.I.K.	A466	280	280	2356 SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
8/4/2005	WSSS	EGLL	QFA09	B747	1455	N2	280	320	L750	ZHOB	L750	310	310	2055ROSIE
8/4/2005	WSSS	EDDF	DLH777	B747	1505	N2	280	320	L750	ZHOB	L750	310	310	2125ROSIE
8/4/2005	VTBD	LIMC	BPA3017	B767	1500	N2	320	320	L750	ZHOB	L750	310	310	2045 ROSIE
8/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	340	HILAL - ROSIE	ZHOB	L750	350	350	2139 ROSIE
8/4/2005	WMKK	LFPG	MAS20	B744	1530	N2	280	320	L750	ZHOB	L750	310	310	2128 ROSIE
8/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	280	280	2119ROSIE
8/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	350	350	2124ROSIE
8/4/2005	WMKK	LOWW	MAS22	B777	1545	N2	280	340	L750	ZHOB	L750	350	350	2148ROSIE
8/4/2005	WMKK	EHAM	MAS16	B747	1555	N2	280	320	L750	ZHOB	L750	310	310	2149ROSIE
8/4/2005	WMKK	EGLL	MAS02	B747	1540	N2	280	280	L750	ZHOB	L750	280	280	2158 ROSIE
8/4/2005	VVTS	LFPG	HVN533	B777	1605	N2	320	340	L750	ZHOB	L750	350	350	2233ROSIE
8/4/2005	WMKK	EDDF	MAS06	B747	1550	N2	280	360	L750	ZHOB	L750	350	350	2206 ROSIE
8/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	HILAL - ROSIE	ZHOB	L750	310	310	2226 ROSIE
8/4/2005	WSSS	EGLL	QFA15	B747	1640	N2	320	320	L750	ZHOB	L750	310	310	2249ROSIE
8/4/2005	WSSS	EHAM	SIA324	B772	1545	N2	300	320	L750	ZHOB	L750	310	310	2232 ROSIE
8/4/2005	WSSS	EKCH	SIA352	B777	1700	N2	320	360	L750	ZHOB	L750	350	350	2312ROSIE
9/4/2005	VIDP	CYYZ	ACA55	A343	1800	N2	280	280	A466	D.I.K.	A466	280	280	1945SITAX
9/4/2005	VIDP	EKCH	N92AE	GLF4	1830	N2	380	380	A466	D.I.K.	A466	390	390	2010SITAX
9/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	340	340	N644	D.I.K.	N644	350	350	2045PAVLO
9/4/2005	WMKK	EHAM	KLM810	B747	N1	N2	340	340	A466	D.I.K.	A466	350	350	2056 SITAX
9/4/2005	VTBD	EGLL	BAW10	B747	1610	N2	300	360	N644	D.I.K.	N644	310	310	2102 PAVLO
9/4/2005	VTBD	LFPG	AFR169	A340	1605	N2	300	300	N644	D.I.K.	N644	310	310	2111 PAVLO
9/4/2005	VTBD	EDDF	RBA33	B763	1550	N2	320	320	N644	D.I.K.	N644	350	350	2120 PAVLO
9/4/2005	VTBD	EDDL	DLH783	A340	1610	N2	320	340	N644	D.I.K.	N644	390	390	2125 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
9/4/2005	VIDP	UTTT	UZB424	B763	1940	N2	380	380	A466	D.I.K.	A466	350	350	2130SITAX
9/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	280	N644	D.I.K.	N644	280	280	2139 PAVLO
9/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	340	N644	D.I.K.	N644	350	350	2143PAVLO
9/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	300	N644	D.I.K.	N644	310	310	2151 PAVLO
9/4/2005	VTBD	LOWW	AUA34	B763	2020	N2	280	280	N644	D.I.K.	N644	280	280	2204PAVLO
9/4/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	340	N644	D.I.K.	N644	350	350	2204PAVLO
9/4/2005	VTBD	EDDF	THA920	B744	1645	N2	320	320	N644	D.I.K.	N644	350	350	2218PAVLO
9/4/2005	ZGGG	EDDF	DLH789	A340	1530	1550	360	360	N644	D.I.K.	N644	310	310	2220 PAVLO
9/4/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	280	A466	D.I.K.	A466	310	310	2230SITAX
9/4/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	280	280	2241SITAX
9/4/2005	VTBD	LSZH	THA970	B744	1730	N2	320	340	N644	D.I.K.	N644	350	350	2240PAVLO
9/4/2005	VTBD	LIRF	THA944	B743	1720	N2	300	340	N644	D.I.K.	N644	310	310	2250PAVLO
9/4/2005	VTBD	LFPG	THA930	B744	1705	N2	300	320	N644	D.I.K.	N644	350	350	2253PAVLO
9/4/2005	VTBD	EKCH	SAS972	A340	1720	N2	300	360	A466	D.I.K.	A466	280	280	2254 SITAX
9/4/2005	WSSS	EGLL	BAW18	B744	1555	N2	300	320	N644	D.I.K.	N644	280	280	2303 PAVLO
9/4/2005	VTBD	EGLL	THA910	B744	1810	N2	320	340	A466	D.I.K.	A466	350	350	2309SITAX
9/4/2005	VTBD	ESSA	THA960	B744	1810	N2	320	300	A466	D.I.K.	A466	310	310	2311SITAX
9/4/2005	VTBD	EKCH	THA950	B744	1820	N2	320	340	A466	D.I.K.	A466	350	350	2329 SITAX
9/4/2005	VIDP	EGLL	BAW142	B744	2200	N2	300	320	N644	D.I.K.	N644	310	310	2347 PAVLO
9/4/2005	VVTS	UUDD	HVN527	B772	1735	N2	340	340	A466	D.I.K.	A466	350	350	2356 SITAX
9/4/2005	VIDP	UUEE	AFL534	T204	2145	N2	300	300	A466	D.I.K.	A466	310	310	2340SITAX
9/4/2005	WMKK	LSZH	MAS10	B772	1545	N2	280	340	L750	ZHOB	L750	280	280	2130 ROSIE
9/4/2005	WMKK	LFPG	NMAS20	B744	1530	N2	280	320	L750	ZHOB	L750	350	350	2108ROSIE
9/4/2005	VTBD	LOWW	AUA26	B763	1630	N2	300	300	L750	ZHOB	L750	310	310	2139 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
9/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	L750	ZHOB	L750	310	310	2126 ROSIE
9/4/2005	WMKK	LIRF	MAS14	B744	1559	N2	280	320	G792	AMBER	G792	350	350	2141 ASLUM
9/4/2005	VVTS	LFPG	HVN533	B772	1605	N2	340	340	L750	ZHOB	L750	310	310	2157 ROSIE
9/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	320	G792	AMBER	G792	280	280	2151 ASLUM
9/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	300	L750	ZHOB	L750	310	310	2151 ROSIE
9/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	380	L750	ZHOB	L750	280	280	2200 ROSIE
9/4/2005	WMKK	EDDF	MAS06	B772	1550	N2	300	360	L750	ZHOB	L750	350	350	2149 ROSIE
9/4/2005	WSSS	EHAM	SIA324	B747	N1	N2	320	320	L750	ZHOB	L750	350	350	2214 ROSIE
9/4/2005	WMKK	EHAM	MAS16	B744	N1	N2	320	320	L750	ZHOB	L750	310	310	2202 ROSIE
9/4/2005	WSSS	EDDF	QFA05	B744	1605	N2	320	340	L750	ZHOB	L750	310	310	2229 ROSIE
9/4/2005	WSSS	EGLL	QFA09	B744	1605	N2	320	340	L750	ZHOB	L750	350	350	2243 ROSIE
9/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	340	HILAL - ROSI	ZHOB	L750	350	350	2219ROSIE

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
3-Apr-2005	VTBD	EKCH	THA950	B743	1820	1855	300	300	L507		A466	350/NA		
3-Apr-2005	VTBD	LSZH	THA970	MD11	1730	1753	280	300	L507		N644	350/NA		
4-Apr-2005	VVNB	UUEE	AFL542	IL96	1610	NA	280	340	A201		A466	350/NA		
4-Apr-2005	VTBD	LFPG	AFR171	A343	1605	1626	300	320	L507		N644	350/NA		
4-Apr-2005	WSSS	LFPG	AFR257	B773	1520	NA	300	280	P628	LARIK	V390	NA		FL300
4-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1646	300	300	L507		N644	310/NA		
4-Apr-2005	VTBD	EGLL	BAW010	B744	1610	1641	280	280	L507	CEA	N644	350/NA		FL300
4-Apr-2005	WSSS	EDDF	DLH777	B744	1505	NA	280	320	P628		L750	310/NA		
4-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1714	280	280	L507		N644	310/NA		
4-Apr-2005	VTBD	EDDM	DLH783	A346	1610	1634	320	320	P646	DOPID	L750	310/NA		FL340
4-Apr-2005	ZGGG	EDDF	DLH789	A343	1530	NA	280	320	A201		N644	310/NA		
4-Apr-2005	VTBD	EFHK	FIN098	MD11	1720	1746	300	280	L507		A466	310/NA		
4-Apr-2005	VVNB	UUDD	HVN525	B772	1730	NA	340	340	B465		A466	350/NA		
4-Apr-2005	VVTS	LFPG	HVN533	B772	1605	1633	340	340	P646		L750	350/NA		
4-Apr-2005	WMKK	EHAM	KLM810	B744	1510	NA	280	320	L759		L750	280/NA		
4-Apr-2005	WSSS	EHAM	KLM838	B744	1455	NA	280	320	P628		V390	310/NA		
4-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1622	280	300	L507		N644	350/NA		
4-Apr-2005	WMKK	LIRF	MAS14	B744	1559	NA	280	320	P628		V390	310/NA		
4-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	310/NA		
4-Apr-2005	WMKK	EGLL	MAS2	B744	1540	NA	280	280	L759	BBS	L750	310/NA		FL300
4-Apr-2005	WMKK	LFPG	MAS20	B744	1530	NA	280	280	L759	BBS	L750	310/NA		FL300
4-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	340	340	L759		L750	390/NA		
4-Apr-2005	WSSS	EGLL	QFA15	B744	1640	1650	280	280	L759	BBS	L750	350/NA		FL300
4-Apr-2005	WSSS	EDDF	QFA5	B744	1500	NA	320	320	L759		L750	350/NA		
4-Apr-2005	VTBD	EDDF	RBA033	B763	1630	1709	320	300	L507		N644	310/NA		
4-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1744	320	320	L507		A466	350/NA		
4-Apr-2005	WSSS	EDDF	SIA026	B744	1550	1629	280	320	P628		V390	350/NA		
4-Apr-2005	WSSS	EGLL	SIA322	B744	1520	NA	280	280	P628	LARIK	V390	350/NA		FL340
4-Apr-2005	WSSS	LFPG	SIA334	B744	1540	1617	280	320	P628		V390	350/NA		
4-Apr-2005	WSSS	LSZH	SIA346	B744	1545	1626	300	320	L759		L750	350/NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
4-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1655	320	320	P646		N644	350/NA		
4-Apr-2005	VTBD	EGLL	THA910	B744	1810	1834	300	320	L507		N644	310/NA		
4-Apr-2005	VTBD	EDDF	THA920	B744	1645	1711	300	320	L507	GGC	N644	350/NA		FL340
4-Apr-2005	VTBD	LFPG	THA930	B744	1705	1732	300	320	L507		N644	350/NA		
4-Apr-2005	VTBD	LIMC	THA940	MD11	1715	1741	300	300	L507		N644	350/NA		
4-Apr-2005	VTBD	ESSA	THA960	B744	1810	1836	300	300	L507		A466	350/NA		
4-Apr-2005	VTBD	LSZH	THA970	B744	1730	1846	300	320	L507		N644	350/NA		
5-Apr-2005	VTBD	LFPG	AFR169	A343	1605	1617	300	320	L507		N644	350/NA		
5-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1535	300	280	L759	OTABA	L750	NA		FL320
5-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1644	280	300	L507		N644	310/NA		
5-Apr-2005	WSSS	LOWW	AUA8	B763	1535	1646	320	320	L759		L750	NA		
5-Apr-2005	VTBD	EGLL	BAW10	B744	1610	1627	300	300	L507		N644	350/NA		
5-Apr-2005	VHHH	UBBB	CLX753D	B744	1329	NA	320	320	A201		N644	3502/NA		
5-Apr-2005	VTBD	EDDM	DLH773	A346	1610	1636	320	320	P646	LEGOS	L750	310/NA		FL340
5-Apr-2005	WSSS	EDDF	DLH777	B744	1505	1522	280	320	P628		L750	310/NA		
5-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1711	280	280	L507		N644	310/NA		
5-Apr-2005	ZGGG	EDDF	DLH789	A346	1530	1602	300	360	A201		N644	310/NA		
5-Apr-2005	VTBD	EFHK	FIN092	MD11	1720	1728	300	300	L507		A466	310/NA		
5-Apr-2005	VVTS	LRBS	HBIHK	GLEX	1400	1401	400	400	P646		N644	NA		
5-Apr-2005	VVNB	LFPG	HVN535	B772	1625	1712	360	340	B465		L750	350/NA		
5-Apr-2005	WMKK	EHAM	KLM810	B744	1510	NA	280	320	P628		G792	310/NA		
5-Apr-2005	WSSS	EHAM	KLM838	B744	1501	1508	280	280	L759	BBS	L750	350/NA		FL320
5-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1620	280	280	L507		N644	350/NA		
5-Apr-2005	WMKK	LSZH	MAS10	B772	1545	NA	340	340	L759		L750	390/NA		
5-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	310/NA		
5-Apr-2005	WMKK	EGLL	MAS2	B744	NFPL	NA	NA	280	L759	BBS	NA	NA		FL300
5-Apr-2005	LFPG	WMKK	MAS21	B744	NFPL	NA	NA	390	L759	LIBDI	NA	NA		FL410
5-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	340	340	L759		L750	390/NA		
5-Apr-2005	VTBD	EGLL	QFA1	B744	1725	1732	300	300	P646	JJS	L750	310/NA		FL340
5-Apr-2005	WSSS	EGLL	QFA9	B744	1455	1518	320	320	L759		L750	350/NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
5-Apr-2005	WSSS	EDDF	SIA026	B744	1550	NA	300	320	L759		L750	310/NA		
5-Apr-2005	WSSS	EGLL	SIA322	B744	1520	1545	300	320	L759		L750	310/NA		
5-Apr-2005	WSSS	EHAM	SIA324	B772	1545	1629	300	320	L759		L750	350/NA		
5-Apr-2005	WSSS	LSZH	SIA346	B744	1545	1604	280	320	P628		V390	350/NA		
5-Apr-2005	VTBD	EGLL	THA910	B744	1810	NA	340	320	L507	CEA	N644	350/NA		FL340
5-Apr-2005	VTBD	EDDF	THA920	B744	NFPL	1734	NA	320	L507	CEA	NA	NA		FL340
5-Apr-2005	VTBD	LFPG	THA930	B743	1705	1745	300	320	L507		N644	310/NA		
5-Apr-2005	VTBD	LIRF	THA944	B743	1720	1746	320	300	L507	TEPAL	N644	350/NA		FL320
5-Apr-2005	VTBD	EKCH	THA950	B743	1820	1847	320	320	L507	CEA	A466	350/NA		FL340
5-Apr-2005	VTBD	LSZH	THA970	MD11	1730	1759	300	280	L507		N644	350/NA		
6-Apr-2005	VTBD	LFPG	AFR171	A343	1605	1615	320	320	L507		N644	350/NA		
6-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1551	300	280	L759	OTABA	L750	310/NA		FL300
6-Apr-2005	WMKK	LOWW	AUA2	B772	1635	NA	320	320	L759		L750	310/NA		
6-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1642	300	300	L507		N644	310/NA		
6-Apr-2005	VTBD	EGLL	BAW10	B744	1610	1630	280	300	L507		N644	350/NA		
6-Apr-2005	WSSS	EGLL	BAW16	B744	1525	NA	300	280	L759		N644	350/NA		
6-Apr-2005	WSSS	EGLL	BAW18	B744	1555	1654	300	300	L759	IBUDA	N644	350/NA		FL320
6-Apr-2005	WSSS	EDDF	DLH777	B744	1505	1532	300	320	P628		L750	350/NA		
6-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1715	300	300	L507	TEPAL	N644	310/NA		FL340
6-Apr-2005	VTBD	EDDM	DLH783	A346	1610	1646	320	320	P646	JJS	L750	350/NA		FL360
6-Apr-2005	ZGGG	EDDF	DLH789	A343	1530	1545	280	320	A201		N644	310/NA		
6-Apr-2005	VTBD	LOWW	EVA61	A332	1615	1640	300	300	P646		N644	NA		
6-Apr-2005	VTBD	EFHK	FIN098	MD11	1720	1739	300	280	L507	CEA	A466	310/NA		FL300
6-Apr-2005	VVTS	LFPG	HVN533	B772	1605	1619	320	320	P646	JJS	L750	350/NA		FL360
6-Apr-2005	WSSS	EHAM	KLM836	B744	1455	1511	280	320	L759		L750	310/NA		
6-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1618	280	280	L507	CEA	N644	350/NA		FL300
6-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	310/NA		
6-Apr-2005	WMKK	EGLL	MAS2	B744	1540	NA	280	280	L759	BBS	L750	310/NA		FL300
6-Apr-2005	WMKK	LOWW	MAS25	B772	1545	NA	280	340	L759		L750	390/NA		
6-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	280	340	L759		L750	390/NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
6-Apr-2005	VTBD	EGLL	QFA1	B744	1725	1800	300	300	L507		N644	310/NA		
6-Apr-2005	WSSS	EGLL	QFA15	B744	1640	1714	320	320	L759		L750	350/NA		
6-Apr-2005	WSSS	EDDF	QFA5	B744	1500	1541	320	320	L759		L750	350/NA		
6-Apr-2005	WSSS	EGLL	QFA9	B744	1455	1521	320	320	L759		L750	350/NA		
6-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1747	320	320	L507		A466	310/NA		
6-Apr-2005	WSSS	EDDF	SIA026	B744	1550	1611	280	320	P628		L750	310/NA		
6-Apr-2005	WSSS	EGLL	SIA322	B744	1520	1603	280	320	L759		L750	310/NA		
6-Apr-2005	WSSS	EHAM	SIA324	B772	1545	1641	300	320	L759		L750	350/NA		
6-Apr-2005	WSSS	LFPG	SIA334	B744	1540	1558	300	320	P628		L750	310/NA		
6-Apr-2005	WSSS	LSZH	SIA346	B744	1545	1630	280	280	L759	BBS	L750	310/NA		FL300
6-Apr-2005	WSSS	EKCH	SIA352	B772	1700	1726	320	320	L759		L750	350/NA		
6-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1657	320	300	P646		N644	350/NA		
6-Apr-2005	VTBD	EGLL	THA910	B744	1810	1824	300	300	L507		N644	310/NA		
6-Apr-2005	VTBD	EDDF	THA920	B744	1645	1722	300	320	L507		N644	310/NA		
6-Apr-2005	VTBD	LFPG	THA930	B744	1705	1745	300	300	L507	CEA	N644	310/NA		FL320
6-Apr-2005	VTBD	LIRF	THA942	B743	1705	1734	300	320	L507		N644	350/NA		
6-Apr-2005	VTBD	LGAV	THA946	MD11	1735	1754	320	280	L507		N644	350/NA		
6-Apr-2005	VTBD	EKCH	THA950	B744	1820	1833	320	320	P646		A466	350/NA		
6-Apr-2005	VTBD	ESSA	THA960	B744	1810	1828	320	300	P646		A466	350/NA		
6-Apr-2005	VTBD	LSZH	THA970	B744	1730	1803	320	320	L507		N644	350/NA		
6-Apr-2005	WMKK	UTTT	UZB554	B752	1435	NA	340	360	M770		A466	390/NA		
6-Apr-2005	VVTS	UTTT	UZB568	B752	1510	1618	340	340	L507		A466	350/NA		
7-Apr-2005	VTBD	LFPG	AFR169	A343	1605	1616	320	320	L507		N644	350/NA		
7-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1549	300	280	L759	BBS	L750	NA	FL320	
7-Apr-2005	WMKK	LOWW	AUA2	B772	NFPL	NA	NA	320	L759		NA	NA		
7-Apr-2005	Vtbd	LOWW	AUA26	B763	1630	1654	280	300	N895/L759		L750	310/NA		
7-Apr-2005	WSSS	LOWW	AUA8	B763	1535	1708	300	320	L759		N644	350/NA		
7-Apr-2005	VTBD	EGLL	BAW10	B744	1610	NA	300	300	L507		N644	350/NA		
7-Apr-2005	WSSS	EGLL	BAW16	B744	NFPL	1604	NA	280	L759	BBS	NA	NA		FL340
7-Apr-2005	WSSS	EGLL	BAW18	B744	NFPL	1727	NA	280	L759	BBS	NA	NA		FL340

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
7-Apr-2005	VHHH	LIRF	CPA293	B744	NFPL	1719	NA	320	A201		NA	NA		
7-Apr-2005	WSSS	EDDF	DLH777	B744	1505	1529	300	320	P628		L750	350/NA		
7-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1707	300	320	L507	CEA	N644	310/NA		FL340
7-Apr-2005	VTBD	EDDM	DLH783	A346	1610	1632	340	340	P646		L750	350/NA		
7-Apr-2005	ZGGG	EDDF	DLH789	A343	1530	1600	320	320	A201		N644	350/NA		
7-Apr-2005	VTBD	EFHK	FIN092	MD11	NFPL	1730	NA	300	L507		NA	NA		
7-Apr-2005	VVNB	LFPG	HVN535	B772	NFPL	1701	NA	340	B465		NA	NA		
7-Apr-2005	Wmkk	EHAM	KLM810	B747	1510	NA	300	280	L759	BBS	L750	350/NA		FL320
7-Apr-2005	WSSS	EHAM	KLM838	B744	1455	1527	300	280	L759	BBS	L750	350/NA		FL300
7-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1621	280	280	L507		N644	350/NA		
7-Apr-2005	WMKK	LSZH	MAS10	B772	1545	NA	300	320	L759	BBS	L750	390/NA		FL340
7-Apr-2005	WMKK	LIRF	MAS14	B744	1559	NA	280	320	P628		V390	320/NA		
7-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	350/NA		
7-Apr-2005	WMKK	EGLL	MAS2	B744	1540	NA	280	320	L759		L750	350/NA		
7-Apr-2005	WMKK	LFPG	MAS20	B744	1530	NA	280	320	L759		L750	310/NA		
7-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	300	320	L759		L750	350/NA		
7-Apr-2005	VTBD	EGLL	QFA1	B744	1725	1830	300	300	L507	TEPAL	N644	310/NA		FL320
7-Apr-2005	WSSS	EDDF	QFA5	B744	NFPL	1751	NA	320	L759		NA	NA		
7-Apr-2005	WSSS	EGLL	QFA9	B744	NFPL	1536	NA	280	L759	BBS	NA	NA		FL300
7-Apr-2005	VTBD	EDDF	RBA033	B763	1850	1916	320	320	L507		N644	310/NA		
7-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1745	300	300	L507		A466	350/NA		
7-Apr-2005	WSSS	EDDF	SIA026	B744	1550	1654	280	320	P628		L750	350/NA		
7-Apr-2005	WSSS	EGLL	SIA322	B744	NFPL	1542	NA	320	p628		NA	NA		
7-Apr-2005	WSSS	EHAM	SIA324	B772	NFPL	1628	NA	280	L759	BBS	NA	NA		FL300
7-Apr-2005	WSSS	EGCC	SIA328	B772	NFPL	1657	NA	340	I759		NA	NA		
7-Apr-2005	WSSS	LFPG	SIA334	B744	NFPL	1620	NA	280	L759	OTABA	NA	NA		FL300
7-Apr-2005	WSSS	Lirf	SIA340	B772	1700	1737	300	320	I759		L750	350/NA		
7-Apr-2005	WSSS	LSZH	SIA346	B744	NFPL	1648	NA	340	I759		NA	NA		
7-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1659	320	320	P646		N644	350/NA		
7-Apr-2005	VTBD	EGLL	THA910	B744	NFPL	1833	NA	300	p646		NA	NA		
7-Apr-2005	VTBD	EDDF	THA920	B744	NFPL	1722	NA	320	L507		NA	NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
7-Apr-2005	VTBD	LFPG	THA930	B744	1705	1758	320	320	L507		N644	350/NA		
7-Apr-2005	VTBD	LIMC	THA940	MD11	1715	1747	300	320	L507		N644	350/NA		
7-Apr-2005	VTBD	LIRF	THA944	B744	NFPL	1801	NA	300	L507		NA	NA		
7-Apr-2005	VTBD	EKCH	THA950	B743	1820	1850	320	300	L507		A466	350/NA		
7-Apr-2005	VTBD	ESSA	THA960	B744	1810	1844	320	320	P646		A466	350/NA		
7-Apr-2005	VTBD	LSZH	THA970	MD11	1730	NA	320	320	L507		N644	350/NA		
7-Apr-2005	VTBD	LTBA	THY71	A343	NFPL	NA	NA	280	L507		NA	NA		
8-Apr-2005	VTBD	LFPG	AFR171	A343	1605	1626	320	320	L507		N644	350/NA		
8-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1545	300	280	L759	BBS	L750	350/NA		FL300
8-Apr-2005	WMKK	LOWW	AUA2	B772	1635	NA	320	340	L759		N644	310/NA		
8-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1649	300	280	L507		N644	310/NA		
8-Apr-2005	VTBD	EGLL	BAW010	B744	1610	1646	300	300	L507		N644	350/NA		
8-Apr-2005	WSSS	EGLL	BAW16	B744	1525	1557	300	280	L759	BBS	N644	350/NA		FL300
8-Apr-2005	WSSS	EGLL	BAW18	B744	1555	1623	300	320	L759		N644	350/NA		
8-Apr-2005	VTBD	LIMC	BPA3017	B763	1500	1544	320	320	N895		L750	350/NA		
8-Apr-2005	VHHH	UBBB	CLX741	B744	1725	NA	280	320	A201		N644	350/NA		
8-Apr-2005	VTBD	UBBB	CLX791	B744	1430	NA	300	300	L507		N644	350/NA		
8-Apr-2005	WMKK	UBBB	CLX795	B744	1745	NA	300	320	M770		N644	350/NA		
8-Apr-2005	VTBD	EDDM	DLH773	A346	1610	1641	320	320	P646		N644	310/NA		
8-Apr-2005	WSSS	EDDF	DLH777	B744	1505	NA	280	320	P628		L750	310/NA		
8-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1716	280	320	P646		N644	310/NA		
8-Apr-2005	ZGGG	EDDF	DLH789	A346	1700	1721	320	320	A201		N644	310/NA		
8-Apr-2005	VTBD	LOWW	EVA61	A332	1615	1643	300	300	P646		N644	350/NA		
8-Apr-2005	VTBD	EFHK	FIN098	MD11	1720	1741	300	300	L507		A466	310/NA		
8-Apr-2005	VVTS	LFPG	HVN533	B772	1605	1644	320	340	P646		L750	350/NA		
8-Apr-2005	WSSS	EHAM	KLM836	B744	1455	1501	300	320	L759		A466	310/NA		
8-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1618	280	300	L507		A466	310/NA		
8-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	NA		
8-Apr-2005	WMKK	EGLL	MAS2	B747	1540	NA	280	280	L759	BBS	L750	NA		FL300
8-Apr-2005	WMKK	LFPG	MAS20	B744	1530	NA	280	320	L759		L750	310/NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
8-Apr-2005	WMKK	LOWW	MAS22	B772	1545	NA	280	340	L759		L750	390/NA		
8-Apr-2005	WMKK	EDDF	MAS6	B772	1550	NA	280	340	L759		L750	390/NA		
8-Apr-2005	VTBD	EGLL	QFA1	B744	1725	1749	300	280	L507		N644	310/NA		
8-Apr-2005	WSSS	EGLL	QFA15	B744	1640	1701	320	320	L759		L750	350/NA		
8-Apr-2005	WSSS	EDDF	QFA5	B744	1500	NA	320	320	L759		L750	350/NA		
8-Apr-2005	WSSS	EGLL	QFA9	B744	1455	1512	280	320	L759		L750	350/NA		
8-Apr-2005	VTBD	EDDF	RBA035	B763	NFPL	1636	NA	320	L507		NA	NA		
8-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1806	300	320	L507		A466	350/NA		
8-Apr-2005	WSSS	EDDF	SIA026	B744	1550	1636	300	320	P628		L750	310/NA		
8-Apr-2005	WSSS	EGLL	SIA322	B744	1520	1542	300	320	P628		L750	310/NA		
8-Apr-2005	WSSS	EHAM	SIA324	B772	1545	1633	300	320	L759		L750	310/NA		
8-Apr-2005	WSSS	LFPG	SIA334	B744	1540	1608	300	320	L759		L750	310/NA		
8-Apr-2005	WSSS	EKCH	SIA352	B772	1700	1717	320	320	L759	OTABA	L750	310/NA		FL340
8-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1658	320	300	P646		N644	350/NA		
8-Apr-2005	VTBD	EGLL	THA910	B744	1810	1823	320	320	L507		A466	310/NA		
8-Apr-2005	VTBD	EDDF	THA920	B744	1645	1710	320	320	L507	TEPAL	N644	310/NA		FL340
8-Apr-2005	VTBD	LFPG	THA930	B744	1705	1755	300	320	L507		A466	310/NA		
8-Apr-2005	VTBD	LIRF	THA942	B744	1705	1744	320	320	L507		N644	350/NA		
8-Apr-2005	VTBD	LGAV	THA946	MD11	1735	1808	300	300	L507		N644	350/NA		
8-Apr-2005	VTBD	EKCH	THA950	B744	1820	1836	320	340	L507		A466	350/NA		
8-Apr-2005	VTBD	LSZH	THA970	MD11	1730	1758	300	300	L507		N644	350/NA		
9-Apr-2005	VTBD	LFPG	AFR169	A343	1605	1621	300	300	L507		N644	350/NA		
9-Apr-2005	WSSS	LFPG	AFR257	B773	1520	1601	300	280	L759	BBS	L750	NA		FL300
9-Apr-2005	VTBD	LOWW	AUA26	B763	1630	1647	300	300	L507		L750	310/NA		
9-Apr-2005	VTBD	EGLL	BAW10	B744	1610	1630	300	280	L507	TEPAL	N644	350/NA		FL340
9-Apr-2005	WSSS	EGLL	BAW16	B744	1525	1614	300	280	L759		N644	350/NA		
9-Apr-2005	WSSS	EGLL	BAW18	B744	1555	1711	300	320	L759		N644	350/NA		
9-Apr-2005	VTBD	EDDF	DLH779	B744	1655	1725	280	280	P646	LEGOS	A466	310/NA		FL300
9-Apr-2005	VTBD	EDDM	DLH783	A346	1610	1636	320	320	P646		N644	350/NA		
9-Apr-2005	VTBD	EFHK	FIN092	MD11	1720	1759	300	300	L507		A466	310/NA		

Combined FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix D to the Report of the ATFM/TF/1 Meeting

INDIA Kolkata FLOW DATA April 2005

DATE	DEP	DEST	FLIGHT NO.	ACFT TYPE	ETD	ATD	DEP	LEVEL	ROUTE OVER BAY OF BENGAL	FUTHER CLIMB PT.	ROUTE THRU KABUL	KABUL LEVEL PLAN/ASSIGNED	ETA ENTRY POINT KABUL FIR	REMARKS
							PLAN	ASSIGNED						
9-Apr-2005	VVTS	UUDD	HVN527	B772	1735	1826	340	320	L507	TEPAL	A466	350/NA		FL340
9-Apr-2005	VVTS	LFPG	HVN533	B772	1605	1631	340	320	P646	LEGOS	L750	350/NA		FL340
9-Apr-2005	WMKK	EHAM	KLM810	B744	1510	NA	300	320	L759	BBS	A466	350/NA		FL340
9-Apr-2005	WSSS	EHAM	KLM838	B744	1455	1505	300	280	L759	BBS	A466	310/NA		FL320
9-Apr-2005	VTBD	EHAM	KLM878	B744	1605	1709	280	300	L507		A466	310/NA		
9-Apr-2005	WMKK	LSZH	MAS10	B744	NFPL	NA	NA	320	L759		NA	NA		
9-Apr-2005	WMKK	LIRF	MAS14	B744	1559	NA	280	320	P628		V390	360/NA		
9-Apr-2005	WMKK	EHAM	MAS16	B744	1555	NA	280	320	L759		L750	350/NA		
9-Apr-2005	WMKK	EGLL	MAS2	B744	1540	NA	280	320	L759		L750	350/NA		
9-Apr-2005	WMKK	LFPG	MAS20	B744	NFPL	NA	NA	320	L759		NA	NA		
9-Apr-2005	WMKK	EDDF	MAS6	B772	NFPL	NA	NA	340	L759	BBS	NA	NA		FL360
9-Apr-2005	WSSS	EDDF	QFA5	B744	1605	1647	320	280	L759	OTABA	L750	350/NA		FL320
9-Apr-2005	WSSS	EGLL	QFA9	B744	1605	1700	320	320	L759		L750	350/NA		
9-Apr-2005	VTBD	EDDF	RBA033	B763	1550	1625	320	320	L507		N644	310/NA		
9-Apr-2005	VTBD	EKCH	SAS972	A343	1720	1755	300	320	L507		A466	NA		
9-Apr-2005	WSSS	EDDF	SIA026	B744	1550	1632	300	320	P628		L750	350/NA		
9-Apr-2005	WSSS	EGLL	SIA322	B744	1520	1546	300	280	L759	BBS	L750	350/NA		FL300
9-Apr-2005	WSSS	EHAM	SIA324	B772	1545	1628	300	320	L759		L750	350/NA		
9-Apr-2005	WSSS	LFPG	SIA334	B744	1540	1620	280	320	P628		L750	350/NA		
9-Apr-2005	VTBD	LSZH	SWR183	A343	1635	1653	320	300	P646	LEGOS	N644	350/NA		FL320
9-Apr-2005	VTBD	EGLL	THA910	B744	1810	1831	320	320	L507	TEPAL	A466	350/NA		FL340
9-Apr-2005	VTBD	EDDF	THA920	B744	1645	1740	320	300	L507	TEPAL	N644	350/NA		FL340
9-Apr-2005	VTBD	LFPG	THA930	B744	1705	1811	300	320	L507		N644	310/NA		
9-Apr-2005	VTBD	LIRF	THA944	B743	1720	1806	300	280	L507	CEA	N644	350/NA		FL340
9-Apr-2005	VTBD	EKCH	THA950	B744	1820	1852	320	320	L507		A466	350/NA		
9-Apr-2005	VTBD	ESSA	THA960	B744	1810	1835	320	300	L507		A466	350/NA		
9-Apr-2005	VTBD	LSZH	THA970	B744	1730	1801	320	260	L507	CEA	N644	350/NA		FL340

TRAFFIC DATA FOR ATFM IMPLEMENTATION
TRAFFIC MOVEMENT - 3 APRIL to 9 april 2005
TRANSIT KABULFIR 1900 - 2330 UTC
Lahore Pakistan

N1: FLIGHT PLAN NOT AVAILABLE N2 : DEP MESSAGE NOT AVAILABLE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
3/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	310	310	2030 PAVLO
3/4/2005	VTBD	LFPG	AFR169	A343	1605	N2	300	300	N644	D.I.K.	N644	310	310	2050 PAVLO
3/4/2005	VIDP	CYYZ	ACA53	A343	1900	N2	300	280	A466	D.I.K.	N644	280	280	2058 SITAX
3/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	340	N644	D.I.K.	N644	350	350	2107 PAVLO
3/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	320	N644	D.I.K.	N644	310	310	2108 PAVLO
3/4/2005	VTBD	EDDM	DLH773	A340	1610	N2	300	300	N644	D.I.K.	N644	310	310	2118 PAVLO
3/4/2005	VTBD	LOWW	EVA61	A330	1615	N2	280	320	N644	D.I.K.	N644	310	310	2134 PAVLO
3/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	340	N644	D.I.K.	N644	350	350	2148 PAVLO
3/4/2005	VTBD	LOWW	AUA26	B767	1630	N2	300	300	N644	**D.I.K.**	N644	280	280	2150 PAVLO
3/4/2005	VTBD	EDDF	DLH779	B747	1655	N2	280	340	N644	D.I.K.	N644	310	310	2155 PAVLO
3/4/2005	VIDP	EGLL	BAW142	B744	2040	N2	320	340	N644	D.I.K.	N644	350	350	2205 PAVLO
3/4/2005	VTBD	EFHK	FIN98	MD11	1720	N2	280	300	A466	D.I.K.	A466	310	310	2213 SITAX
3/4/2005	VTBD	EDDF	THA920	B744	1645	N2	300	340	N644	D.I.K.	N644	350	350	2218 PAVLO
3/4/2005	VTBD	LFPG	THA930	B744	1705	N2	280	300	N644	D.I.K.	N644	310	310	2224 PAVLO
3/4/2005	VTBD	LIRF	THA942	B744	1705	N2	300	340	N644	D.I.K.	N644	350	350	2229 PAVLO
3/4/2005	VIDP	EGCC	CPA37	B744	2105	N2	320	280	N644	D.I.K.	N644	280	280	2240 PAVLO
3/4/2005	VTBD	LSZH	THA970	MD11	1730	N2	280	300	N644	**D.I.K.**	N644	310	310	2239 PAVLO
3/4/2005	VTBD	EKCH	SAS972	A343	1720	N2	300	340	A466	D.I.K.	A466	350	350	2300 SITAX
3/4/2005	VTBD	EGLL	THA910	B744	1810	N2	300	320	N644	D.I.K.	N644	310	310	2318 PAVLO
3/4/2005	VTBD	EKCH	THA950	B743	1820	N2	300	300	A466	D.I.K.	N644	310	310	2335 SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
3/4/2005	ZGGG	EDDF	DLH789	A340	1640	N2	340	340	N644	D.I.K.	N644	350	350	2331 PAVLO
3/4/2005	VIDP	EHAM	KLM872	B747	1920	N2	300	300	L750	ZHOB	L750	310	310	2055 ROSIE
3/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	300	320	G792	AMBER	G792	310	310	2106 ASLUM
3/4/2005	WSSS	EHAM	KLM838	B744	1455	N2	300	340	G792	AMBER	G792	350	350	2110 ASLUM
3/4/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	340	L750	ZHOB	L750	350	350	2110 ROSIE
3/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2128 ROSIE
3/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	300	320	G792	AMBER	G792	310	310	2125 ASLUM
3/4/2005	WSSS	LFPG	MAS20	B744	1530	N2	300	320	L750	ZHOB	L750	350	350	2133 ROSIE
3/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	280	280	2136 ROSIE
3/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	L750	ZHOB	L750	310	310	2142 ROSIE
3/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	300	340	L750	ZHOB	L750	350	350	2158 ROSIE
3/4/2005	WSSS	EGCC	SIA328	B772	1550	N2	320	320	L750	ZHOB	L750	310	310	2158 ROSIE
3/4/2005	WMKK	LOWW	MAS22	B772	1545	N2	280	340	L750	ZHOB	L750	350	350	2210 ROSIE
3/4/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	320	L750	ZHOB	L750	310	310	2220 ROSIE
3/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	G792	AMBER	G792	310	310	2215 ASLUM
3/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	320	280	L750	ZHOB	L750	280	280	2202 ROSIE
3/4/2005	WMKK	EDDF	MAS06	B744	1550	N2	280	340	L750	ZHOB	L750	350	350	2226 ROSIE
3/4/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	310	310	2244 ROSIE
3/4/2005	VHHH	LFPG	HVN535	B777	N1	N2	N1	340	L750	ZHOB	L750	350	350	2241 ROSIE
4/4/2005	VIDP	CYYZ	ACA55	A340	1800	N2	280	280	A466	D.I.K.	A466	310	310	1942 SITAX
4/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	A466	D.I.K.	A466	310	310	2040 SITAX
4/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	320	280	N644	D.I.K.	N644	310	310	2049 PAVLO
4/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	300	A466	D.I.K.	A466	350	350	2055 SITAX
4/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	320	N644	D.I.K.	N644	310	310	2115 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
4/4/2005	VTBD	LFPG	AFR171	A340	1605	N2	300	320	N644	D.I.K.	N644	350	350	2120 PAVLO
4/4/2005	VTBD	LOWW	AUA26	B763	N1	N2	N1	300	N644	D.I.K.	N644	310	310	2132 PAVLO
4/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	340	N644	D.I.K.	N644	350	350	2152 PAVLO
4/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	320	N644	D.I.K.	N644	310	310	2143 PAVLO
4/4/2005	VTBD	EDDF	THA920	B744	1645	N2	300	340	N644	D.I.K.	N644	350	350	2151 PAVLO
4/4/2005	VTBD	EDDF	RBA33	B767	1630	N2	320	320	N644	D.I.K.	N644	310	310	2200 PAVLO
4/4/2005	VTBD	LFPG	THA930	B744	1705	N2	300	340	N644	D.I.K.	N644	310	310	2206 PAVLO
4/4/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	320	N644	D.I.K.	N644	350	350	2212 PAVLO
4/4/2005	VVNB	UUEE	AFL542	IL96	1610	N2	280	340	A466	D.I.K.	A466	280	280	2213 SITAX
4/4/2005	VTBD	EFHK	FIN98	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2218 SITAX
4/4/2005	VIDP	EGLL	BAW142	B747	2040	N2	300	280	N644	D.I.K.	N644	310	310	2223 PAVLO
4/4/2005	VTBD	LIMC	THA940	MD11	1715	N2	300	340	N644	D.I.K.	N644	350	350	2226 PAVLO
4/4/2005	VTBD	EKCH	SAS972	A343	1720	N2	320	320	A466	D.I.K.	A466	310	310	2232 SITAX
4/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	300	280	N644	D.I.K.	N644	280	280	2233 PAVLO
4/4/2005	VIDP	UUEE	AFL536	IL96	N1	N2	N1	320	A466	D.I.K.	A466	310	310	2249 SITAX
4/4/2005	VTBD	EGLL	THA910	B744	1810	N2	300	320	N644	D.I.K.	N644	310	310	2313 PAVLO
4/4/2005	VTBD	ESSA	THA960	B744	1810	N2	300	340	A466	D.I.K.	A466	310	310	2314 SITAX
4/4/2005	VTBD	LSZH	THA970	B744	1730	N2	300	320	N644	D.I.K.	N644	310	310	2323 PAVLO
4/4/2005	VVNB	UUDD	HVN525	B777	1730	1835	350	340	A466	D.I.K.	A466	350	350	2358 SITAX
4/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	280	320	HILAL - ROSI	ZHOB	L750	280	280	2116 ROSIE
4/4/2005	WMKK	LFPG	MAS20	B744	1530	N2	300	320	L750	ZHOB	L750	310	310	2113 ROSIE
4/4/2005	VTBD	EDDM	DLH783	A346	1610	N2	320	340	L750	ZHOB	L750	350	350	2121 ROSIE
4/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2102 ROSIE
4/4/2005	WSSS	EHAM	KLM838	B744	1455	N2	280	320	G792	AMBER	G792	280	280	2100 ASLUM

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
4/4/2005	WSSS	LFPG	AFR257	B777	1520	N2	300	320	G792	AMBER	G792	310	310	2139 ASLUM
4/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	260	320	HILAL - ROSIE	ZHOB	L750	310	310	2145 ROSIE
4/4/2005	WMKK	LIRF	MAS14	B744	1559	N2	280	320	G792	AMBER	G792	310	310	2152 ASLUM
4/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	G792	AMBER	G792	280	280	2145 ASLUM
4/4/2005	WMKK	EDDF	MAS06	B772	1550	N2	280	340	G792		G792	350	350	2152 ASLUM
4/4/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	G792	AMBER	G792	310	310	2228 ASLUM
4/4/2005	WSSS	EGLL	QFA15	B744	1640	N2	280	340	G792	AMBER	G792	350	350	2226 ASLUM
4/4/2005	VIDP	EDDF	DLH761	B744	2058	N2	300	280	G792	AMBER	G792	280	280	2232 ASLUM
4/4/2005	WSSS	LSZH	SIA346	B744	1545	N2	300	320	L750	ZHOB	L750	310	310	2208 ROSIE
4/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	280	320	G792	AMBER	G792	280	280	2219 ASLUM
4/4/2005	VVTS	LFPG	HVN533	B772	1605	N2	320	340	L750	ZHOB	L750	350	350	2203 ROSIE
4/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	340	G792	AMBER	G792	350	350	2209 ASLUM
4/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	280	320	L750	ZHOB	L750	310	310	2050 ROSIE
4/4/2005	VTBD	EGLL	QFA01	B744	1855	N2	300	320	L750	ZHOB	L750	350	350	2357 ROSIE
5/5/2005	VVTS	LRBS	HBIHQ	GLEX	1400		400	430	N644	D.I.K.	N644	390	390	1955 PAVLO
5/5/2005	VHHH	UBBB	CLX753D	B744	N1	N2	N1	320	N644	D.I.K.	N644	310	310	1956 PAVLO
5/5/2005	VIDP	CYYZ	ACA055A	A340	1800	N2	280	280	A466	D.I.K.	A466	280	280	2005 SITAX
5/5/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	280	N644	D.I.K.	N644	280	280	2036 PAVLO
5/5/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	280	N644	D.I.K.	N644	280	280	2048 PAVLO
5/5/2005	VTBD	EGLL	BAW10	B747	1610	N2	300	300	N644	D.I.K.	N644	310	310	2059PAVLO
5/5/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	280	N644	D.I.K.	N644	280	280	2059 PAVLO
5/5/2005	VTBD	LFPG	AFR169	A343	N1	N2	N1	340	N644	D.I.K.	N644	350	350	2112 PAVLO
5/5/2005	VTBD	LOWW	AUA26	B767	1630	N2	280	300	N644	D.I.K.	N644	310	310	2128 PAVLO
5/5/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	300	N644	D.I.K.	N644	310	310	2142 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
5/5/2005	VIDP	LOWW	AUA34	B763	2020	N2	260	280	N644	D.I.K.	N644	280	280	2205 PAVLO
5/5/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2206SITAX
5/5/2005	VTBD	EDDF	THA920	B744	1645	N2	320	340	N644	D.I.K.	N644	350	350	2215PAVLO
5/5/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	340	N644	D.I.K.	N644	350	350	2226 PAVLO
5/5/2005	VTBD	LFPG	THA930	B744	1705	N2	300	320	N644	D.I.K.	N644	310	310	2225 PAVLO
5/5/2005	VIDP	EGLL	BAW142	B744	2040	N2	300	280	N644	D.I.K.	N644	280	280	2224 PAVLO
5/5/2005	VTBD	LIRF	THA944	B743	1720	N2	320	340	N644	D.I.K.	N644	350	350	2234 PAVLO
5/5/2005	VTBD	LSZH	THA970	MD11	1730	N2	300	300	N644	D.I.K.	N644	310	310	2240 PAVLO
5/5/2005	VTBD	EGLL	THA910	B744	1810	N2	320	340	N644	D.I.K.	N644	350	350	2303 PAVLO
5/5/2005	VTBD	EKCH	THA950	B744	1820	N2	320	300	A466	D.I.K.	A466	310	310	2327 SITAX
5/5/2005	WSSS	EHAM	KLM838	B744	1501	N2	300	320	L750	ZHOB	L750	310	310	2027 ROSIE
5/5/2005	WMKK	EHAM	KLM810	B744	N1	N2	N1	320	G792	AMBER	G792	310	310	2048 ASLUM
5/5/2005	VTBD	EDDM	DLH773	A346	1610	N2	320	340	L750	ZHOB	L750	350	350	2119 ROSIE
5/5/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	320	L750	ZHOB	L750	310	310	2113 ROSIE
5/5/2005	WSSS	EDDF	DLH777	B744	1505	N2	280	320	L750	ZHOB	L750	310	310	2102 ROSIE
5/5/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	320	L750	ZHOB	L750	350	350	2055ROSIE
5/5/2005	WSSS	LOWW	AUA08	B763	1535	N2	300	320	L750	ZHOB	L750	310	310	2240ROSIE
5/5/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	300	L750	ZHOB	L750	310	310	2123ROSIE
5/5/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	280	280	2137 ROSIE
5/5/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	L750	ZHOB	L750	350	350	2126ROSIE
5/5/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	340	L750	ZHOB	L750	350	350	2204ROSIE
5/5/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	L750	ZHOB	L750	310	310	2150 ROSIE
5/5/2005	WMKK	EDDF	MAS06	B777	1550	N2	280	340	L750	ZHOB	L750	350	350	2155 ROSIE
5/5/2005	VVNB	LFPG	HVN535	B772	1625	N2	310	340	L750	ZHOB	L750	350	350	2216 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
5/5/2005	WSSS	EHAM	SIA324	B772	1645	N2	300	320	L750	ZHOB	L750	310	310	2218 ROSIE
5/5/2005	WMKK	LSZH	MAS10	B772	1545	N2	280	350	L750	ZHOB	L750	350	350	2136 ROSIE
5/5/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	280	L750	ZHOB	L750	280	280	2239 ROSIE
6/6/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	310	310	2040 PAVLO
6/6/2005	VIDP	EHAM	KLM872	MD11	1920	N2	320	340	N644	D.I.K.	N644	350	350	2045 PAVLO
6/6/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	300	N644	D.I.K.	N644	280	280	2052PAVLO
6/6/2005	VIDP	CYYZ	ACA55	A343	1800	N2	220	340	N644	D.I.K.	N644	350	350	2104 PAVLO
6/6/2005	VTBD	EGLL	BAW10	B744	1610	N2	280	300	N644	D.I.K.	N644	280	280	2104 PAVLO
6/6/2005	VVTS	UTTT	UZB568	B757	1510	N2	340	320	A466	D.I.K.	A466	310	310	2111 SITAX
6/6/2005	VTBD	LFPG	AFR171	A340	1605	N2	320	340	N644	D.I.K.	N644	350	350	2112 PAVLO
6/6/2005	WMKK	UTTT	UZB554	B752	1435	N2	350	360	A466	D.I.K.	A466	390	390	2112 SITAX
6/6/2005	VIDP	UTTT	UZB424	B752	1940	N2	300	320	A466	D.I.K.	A466	310	310	2118 SITAX
6/6/2005	VTBD	LOWW	EVA61	A330	1615	N2	300	300	N644	D.I.K.	N644	310	310	2128 PAVLO
6/6/2005	VTBD	LOWW	AUA26	B767	1630	N2	300	340	N644	D.I.K.	N644	350	350	2134 PAVLO
6/6/2005	VIDP	EGLL	CPA37	B747	1940	N2	320	300	N644	D.I.K.	N644	310	310	2138 PAVLO
6/6/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	340	N644	D.I.K.	N644	350	350	2144PAVLO
6/6/2005	VTBD	EDDF	DLH779	B744	1655	N2	300	340	N644	D.I.K.	N644	310	310	2156 PAVLO
6/6/2005	VTBD	EDDF	THA920	B744	1645	N2	320	320	N644	D.I.K.	N644	350	350	2204PAVLO
6/6/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	340	N644	D.I.K.	N644	310	310	2205PAVLO
6/6/2005	VIDP	EGLL	BAW142	B747	2040	N2	260	280	N644	D.I.K.	N644	280	280	2211 PAVLO
6/6/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	320	N644	D.I.K.	N644	310	310	2215 PAVLO
6/6/2005	VTBD	LIRF	THA942	B744	1705	N2	320	340	N644	D.I.K.	N644	390	390	2217 PAVLO
6/6/2005	VTBD	EFHK	FIN98	MD11	1720	N2	300	300	N644	D.I.K.	N644	350	350	2218 PAVLO
6/6/2005	VTBD	LFPG	THA930	B743	1705	N2	300	340	N644	D.I.K.	N644	310	310	2227PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
6/6/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	300	N644	D.I.K.	N644	350	350	2228 PAVLO
6/6/2005	VIDP	EDDF	DLH761	B747	2055	N2	280	280	N644	D.I.K.	N644	280	280	2241PAVLO
6/6/2005	VTBD	EKCH	SAS972	A340	1720	N2	320	340	A466	D.I.K.	A466	350	350	2242 SITAX
6/6/2005	VTBD	LSZH	THA970	B744	1730	N2	300	320	N644	D.I.K.	N644	310	310	2248 PAVLO
6/6/2005	VTBD	LGAT	THA946	MD11	1735	N2	320	340	N644	D.I.K.	N644	350	350	2252 PAVLO
6/6/2005	WSSS	EGLL	BAW18	B747	1555	N2	300	320	N644	D.I.K.	N644	310	310	2258 PAVLO
6/6/2005	VTBD	EGLL	THA910	B744	1810	N2	300	340	N644	D.I.K.	N644	350	350	2305PAVLO
6/6/2005	VTBD	ESSA	THA960	B744	1810	N2	320	300	A466	D.I.K.	A466	310	310	2305SITAX
6/6/2005	VTBD	EKCH	THA950	B744	1820	N2	320	340	A466	D.I.K.	A466	350	350	2319SITAX
6/6/2005	VIDP	UUEE	AFL536	B763	N1	N2	N1	300	A466	D.I.K.	A466	310	310	2331 SITAX
6/6/2005	WSSS	EHAM	KLM836	B744	1455	N2	280	320	L750	ZHOB	L750	310	310	2054 ROSIE
6/6/2005	WSSS	EGLL	QFA09	B744	1455	N2	320	320	L750	ZHOB	L750	310	310	2106ROSIE
6/6/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	310	310	2122 ROSIE
6/6/2005	WMKK	EGLL	MAS02	B744	N1	N2	N1	340	L750	ZHOB	L750	350	350	2122 ROSIE
6/6/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	280	280	2141 ROSIE
6/6/2005	WMKK	EHAM	MAS16	B744	1555	N2	280	320	L750	ZHOB	L750	310	310	2138 ROSIE
6/6/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	340	L750	ZHOB	L750	350	350	2146 ROSIE
6/6/2005	WSSS	EDDF	DLH777	B747	1505	N2	300	320	L750	ZHOB	L750	310	310	2118 ROSIE
6/6/2005	VTBD	EHAM	DLH783	A346	1610	N2	320	360	L750	ZHOB	L750	350	350	2134 ROSIE
6/6/2005	WMKK	LOWW	MAS22	B777	N1	N2	N1	360	L750	ZHOB	L750	350	350	2145 ROSIE
6/6/2005	WSSS	EGLL	SIA322	B747	1528	N2	280	320	L750	ZHOB	L750	310	310	2148 ROSIE
6/6/2005	WSSS	EDDF	SIA26	B744	1550	N2	280	340	L750	ZHOB	L750	350	350	2159ROSIE
6/6/2005	WSSS	EKCH	SIA352	B744	1700	N2	320	340	L750	ZHOB	L750	350	350	2319ROSIE
6/6/2005	WSSS	EGLL	QFA15	B744	1640	N2	320	320	L750	ZHOB	L750	310	310	2300 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
6/6/2005	WSSS	LSZH	SIA346	B744	1545	N2	280	320	L750	ZHOB	L750	350	350	2203 ROSIE
6/6/2005	VVTS	LFPG	HVN533	B772	1605	N2	320	360	L750	ZHOB	L750	390	390	2152 ROSIE
6/6/2005	WMKK	EDDF	MAS06	B777	N1	N2	N1	320	L750	ZHOB	L750	310	310	2200 ROSIE
6/6/2005	VIDP	LOWW	AUA34	B767	N1	N2	N1	280	L750	ZHOB	L750	280	280	2159 ROSIE
6/6/2005	WMKK	LOWW	AUA02	B772	1635	N2	320	320	L750	ZHOB	L750	310	310	2221 ROSIE
6/6/2005	WSSS	EHAM	SIA324	B772	1545	N2	300	320	L750	ZHOB	L750	310	310	2247 ROSIE
6/6/2005	VABB	LFPG	AFR135	A332	2030	N2	340	340	L750	ZHOB	L750	350	350	2237 ROSIE
6/6/2005	VOMM	EDDF	DLH759	B744	2015	N2	320	320	L750	ZHOB	L750	310	310	2324 ROSIE
6/6/2005	VABB	EDDF	DLH757	B747	N1	N2	N1	300	L750	ZHOB	L750	310	310	2337ROSIE
7/4/2005	VIDP	CYYZ	ACA55	A340	1800	N2	280	280	A466	D.I.K.	A466	280	280	2001SITAX
7/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	340	340	N644	D.I.K.	N644	350	350	2042PAVLO
7/4/2005	VTBD	EHAM	KLM878	B747	1605	N2	280	300	N644	D.I.K.	N644	310	310	2050PAVLO
7/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	280	N644	D.I.K.	N644	280	280	2059PAVLO
7/4/2005	VTBD	EGLL	BAW10	B744	1610	N2	300	300	N644	D.I.K.	N644	310	310	2100PAVLO
7/4/2005	VTBD	LFPG	AFR169	A343	1605	N2	320	340	A466	D.I.K.	A466	350	350	2056SITAX
7/4/2005	VTBD	EDDF	DLH779	B747	1655	N2	300	340	A466	D.I.K.	A466	350	350	2150SITAX
7/4/2005	VTBD	LSZH	SWR183	A340	1635	N2	320	320	N644	D.I.K.	N644	310	310	2150PAVLO
7/4/2005	VNKT	LOWW	AUA32	A343	1915	N2	320	360	N644	D.I.K.	N644	310	310	2200PAVLO
7/4/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	320	N644	D.I.K.	N644	350	350	2203PAVLO
7/4/2005	VTBD	EDDF	THA920	B744	1645	N2	320	340	N644	D.I.K.	N644	350	350	2215PAVLO
7/4/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	310	310	2215SITAX
7/4/2005	VIDP	EGLL	BAW142	B747	2040	N2	260	280	N644	D.I.K.	N644	280	280	2221PAVLO
7/4/2005	ZGGG	EDDF	DLH789	A340	1530	N2	340	340	N644	D.I.K.	N644	350	350	2223PAVLO
7/4/2005	VIAR	UTTT	UZB448	B767	2200	N2	340	340	N644	D.I.K.	A466	310	310	2230SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
7/4/2005	VTBD	EKCH	SAS792	A343	1720	N2	300	300	A466	D.I.K.	A466	280	280	2231SITAX
7/4/2005	VTBD	LIMC	THA940	MD11	1715	N2	300	340	N644	D.I.K.	N644	350	350	2134PAVLO
7/4/2005	WMKK	LOWW	AUA2	B772	1635	N2	320	320	N644	D.I.K.	N644	310	310	2241PAVLO
7/4/2005	VTBD	LFPG	THA930	B744	1705	N2	320	280	N644	D.I.K.	N644	280	280	2246PAVLO
7/4/2005	VTBD	LIRF	THA944	B743	1720	N2	320	340	N644	D.I.K.	N644	350	350	2249PAVLO
7/4/2005	VTBD	LSZH	THA970	B744	1730	N2	320	340	N644	D.I.K.	N644	310	310	2256PAVLO
7/4/2005	VTBD	EGLL	THA910	B744	1810	N2	320	300	A466	D.I.K.	A466	280	280	2309 SITAX
7/4/2005	VTBD	EGLL	QFA01	B744	1725	N2	300	320	N644	D.I.K.	N644	310	310	2315PAVLO
7/4/2005	WSSS	EGLL	BAW18	B744	1555	N2	300	340	N644	D.I.K.	N644	350	350	2316 PAVLO
7/4/2005	WSSS	LOWW	AUA08	B763	1535	N2	300	320	N644	D.I.K.	N644	310	310	2325 PAVLO
7/4/2005	VTBD	ESSA	THA960	B744	N1	N2	N1	340	N644	D.I.K.	N644	350	350	2327 PAVLO
7/4/2005	VTBD	EKCH	THA950	B743	1820	N2	320	300	A466	D.I.K.	A466	280	280	2330 SITAX
7/4/2005	WMKK	EHAM	KLM810	B744	1510	N2	300	320	L750	ZHOB	L750	310	310	2057ROSIE
7/4/2005	WSSS	EGLL	QFA09	B747	N1	N2	N1	320	L750	ZHOB	L750	310	310	2132ROSIE
7/4/2005	VTBD	LOWW	AUA26	B763	1630	N2	280	300	L750	ZHOB	L750	280	280	2147 ROSIE
7/4/2005	WSSS	EHAM	KLM838	B747	1455	N2	300	340	L750	ZHOB	L750	350	350	2111ROSIE
7/4/2005	WMKK	LFPG	MAS20	B747	1530	N2	280	320	L750	ZHOB	L750	310	310	2118ROSIE
7/4/2005	VTBD	EHAM	DLH783	B746	1610	N2	340	340	L750	ZHOB	L750	350	350	2121 ROSIE
7/4/2005	WSSS	EDDF	DLH777	B744	1505	N2	300	340	HILAL - ROSI	ZHOB	L750	350	350	2139 ROSIE
7/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	320	L750	ZHOB	L750	310	310	2136 ROSIE
7/4/2005	WMKK	LSZH	MAS10	B772	1545	N2	300	340	L750	ZHOB	L750	350	350	2140 ROSIE
7/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	300	300	L750	ZHOB	L750	310	310	2207ROSIE
7/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	320	L750	ZHOB	L750	310	310	2231ROSIE
7/4/2005	WMKK	EHAM	MAS16	B747	1555	N2	280	340	L750	ZHOB	L750	350	350	2152 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
7/4/2005	VVNB	LFPG	HVN535	B777	1625	N2	310	340	L750	ZHOB	L750	350	350	2214ROSIE
7/4/2005	WMKK	LIRF	MAS14	B747	N1	N2	N1	340	L750	ZHOB	L750	310	310	2156ROSIE
7/4/2005	WMKK	EDDF	MAS6	B772	1550	N2	300	280	L750	ZHOB	L750	280	280	2209ROSIE
7/4/2005	VIDP	LOWW	AUA34	B767	2020	N2	280	280	L750	ZHOB	L750	280	280	2219ROSIE
7/4/2005	WSSS	EHAM	SIA324	B777	N1	N2	N1	360	L750	ZHOB	L750	390	390	2227 ROSIE
7/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	L750	ZHOB	L750	310	310	2239 ROSIE
7/4/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	320	L750	ZHOB	L750	350	350	2221 ROSIE
7/4/2005	WSSS	LSZH	SIA346	B747	N1	N2	N1	340	L750	ZHOB	L750	350	350	2241ROSIE
7/4/2005	WSSS	EGLL	SIA328	B772	1550	N2	300	340	L750	ZHOB	L750	350	350	2259 ROSIE
7/4/2005	VABB	LFPG	AFR135	A332	2045	N2	340	340	L750	ZHOB	L750	310	310	2306 ROSIE
7/4/2005	WSSS	LIRF	SIA340	B772	1700	N2	300	340	L750	ZHOB	L750	350	350	2231 ROSIE
7/4/2005	VOMM	EDDF	DLH759	B744	1950	N2	320	320	L750	ZHOB	L750	280	280	2339 ROSIE
7/4/2005	VABB	EDDF	DLH757	B744	2120	N2	320	300	L750	ZHOB	L750	350	350	2345 ROSIE
7/4/2005	WSSS	EDDF	QFA05	B744	N1	N2	N1	340	L750	ZHOB	L750	310	310	2346 ROSIE
8/4/2005	VTBD	UBBB	CLX791	B744	1430	N2	300	320	N644	D.I.K.	N644	310	310	1926 PAVLO
8/4/2005	VIDP	CYYZ	ACA55	A343	1800	N2	280	280	A466	D.I.K.	A466	280	280	1948SITAX
8/4/2005	VIDP	EHAM	KLM872	MD11	1920	N2	280	320	N644	D.I.K.	N644	310	310	2033PAVLO
8/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	320	320	N644	D.I.K.	N644	280	280	2051 PAVLO
8/4/2005	VTBD	EHAM	KLM878	B747	1605	1618	280	300	A466	D.I.K.	A466	310	310	2051 SITAX
8/4/2005	WSSS	EHAM	KLM836	B744	1455	N2	300	340	A466	D.I.K.	A466	350	350	2056 SITAX
8/4/2005	VTBD	EGLL	BAW10	B744	1610	1646	300	340	N644	D.I.K.	N644	350	350	2144 PAVLO
8/4/2005	VTBD	LFPG	AFR171	A343	1605	1626	320	320	N644	D.I.K.	N644	310	310	2122 PAVLO
8/4/2005	VTBD	LOWW	DLH773	A340	1610	1641	320	320	N644	D.I.K.	N644	310	310	2133 PAVLO
8/4/2005	VTBD	LOWW	EVA61	A330	1615	1643	300	360	N644	D.I.K.	N644	350	350	2134PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
8/4/2005	VTBD	LOWW	AUA26	B767	1630	1649	300	280	N644	D.I.K.	N644	280	280	2137 PAVLO
8/4/2005	VTBD	LSZH	SWR183	A340	1635	1658	320	300	N644	D.I.K.	N644	310	310	2144PAVLO
8/4/2005	VTBD	EDDF	RBA35	B767	1550	1636	320	340	N644	D.I.K.	N644	350	350	2144PAVLO
8/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	320	N644	D.I.K.	N644	310	310	2154 PAVLO
8/4/2005	WSSS	EGLL	BAW16	B744	1525	1557	300	280	N644	D.I.K.	N644	390	390	2154 PAVLO
8/4/2005	VTBD	EDDF	THA920	B744	1645	1710	320	340	N644	D.I.K.	N644	350	350	2154 PAVLO
8/4/2005	VIDP	LOWW	AUA34	B763	2020	N2	280	280	N644	D.I.K.	N644	280	280	2213 PAVLO
8/4/2005	WSSS	EGLL	BAW18	B744	1555	1623	300	340	N644	D.I.K.	N644	350	350	2222 PAVLO
8/4/2005	VTBD	EFHK	FIN98	MD11	1720	1641	300	300	A466	D.I.K.	A466	310	310	2220 SITAX
8/4/2005	VTBD	EGLL	QFA01	B744	1725	1749	300	280	N644	D.I.K.	N644	280	280	2223 PAVLO
8/4/2005	WMKK	LOWW	AUA02	B772	1635	N2	320	320	N644	D.I.K.	N644	310	310	2230PAVLO
8/4/2005	VTBD	LIRF	THA942	B744	1705	1744	320	340	N644	D.I.K.	N644	350	350	2232 PAVLO
8/4/2005	VIDP	EGLL	BAW142	B744	2040	N2	260	280	N644	D.I.K.	N644	280	280	2233PAVLO
8/4/2005	VTBD	LFPG	THA930	B744	1705	1755	300	320	A466	D.I.K.	A466	310	310	2241 SITAX
8/4/2005	VTBD	LSZH	THA970	MD11	1730	1758	300	300	N644	D.I.K.	N644	280	280	2243 PAVLO
8/4/2005	VIDP	EDDF	DLH761	B747	2055	N2	280	280	N644	D.I.K.	N644	280	280	2252 PAVLO
8/4/2005	VTBD	LGAT	THA946	MD11	1735	1808	300	300	N644	D.I.K.	N644	280	280	2253 PAVLO
8/4/2005	VTBD	EKCH	SAS972	A343	1720	1806	300	320	A466	D.I.K.	A466	280	280	2303 SITAX
8/4/2005	VTBD	EGLL	THA910	B744	1810	1823	320	340	A466	D.I.K.	A466	310	310	2312 SITAX
8/4/2005	WMKK	UBBB	CLX795	B744	1745	N2	300	300	N644	D.I.K.	N644	280	280	2313 PAVLO
8/4/2005	VTBD	EKCH	THA950	B744	1820	1836	320	340	A466	D.I.K.	A466	350	350	2323 SITAX
8/4/2005	VHHH	UBBB	CLX741	B744	1725	N2	280	320	N644	D.I.K.	N644	310	310	2330 PAVLO
8/4/2005	ZGGG	EDDF	DLH789	A340	1700	1721	360	320	N644	D.I.K.	N644	310	310	2350PAVLO
8/4/2005	VIDP	UUEE	AFL536	B767	2130	N2	300	300	A466	D.I.K.	A466	280	280	2356 SITAX

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
8/4/2005	WSSS	EGLL	QFA09	B747	1455	N2	280	320	L750	ZHOB	L750	310	310	2055ROSIE
8/4/2005	WSSS	EDDF	DLH777	B747	1505	N2	280	320	L750	ZHOB	L750	310	310	2125ROSIE
8/4/2005	VTBD	LIMC	BPA3017	B767	1500	N2	320	320	L750	ZHOB	L750	310	310	2045 ROSIE
8/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	340	HILAL - ROSIE	ZHOB	L750	350	350	2139 ROSIE
8/4/2005	WMKK	LFPG	MAS20	B744	1530	N2	280	320	L750	ZHOB	L750	310	310	2128 ROSIE
8/4/2005	WSSS	EDDF	QFA05	B744	1500	N2	320	320	L750	ZHOB	L750	280	280	2119ROSIE
8/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	280	L750	ZHOB	L750	350	350	2124ROSIE
8/4/2005	WMKK	LOWW	MAS22	B777	1545	N2	280	340	L750	ZHOB	L750	350	350	2148ROSIE
8/4/2005	WMKK	EHAM	MAS16	B747	1555	N2	280	320	L750	ZHOB	L750	310	310	2149ROSIE
8/4/2005	WMKK	EGLL	MAS02	B747	1540	N2	280	280	L750	ZHOB	L750	280	280	2158 ROSIE
8/4/2005	VVTS	LFPG	HVN533	B777	1605	N2	320	340	L750	ZHOB	L750	350	350	2233ROSIE
8/4/2005	WMKK	EDDF	MAS06	B747	1550	N2	280	360	L750	ZHOB	L750	350	350	2206 ROSIE
8/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	320	HILAL - ROSIE	ZHOB	L750	310	310	2226 ROSIE
8/4/2005	WSSS	EGLL	QFA15	B747	1640	N2	320	320	L750	ZHOB	L750	310	310	2249ROSIE
8/4/2005	WSSS	EHAM	SIA324	B772	1545	N2	300	320	L750	ZHOB	L750	310	310	2232 ROSIE
8/4/2005	WSSS	EKCH	SIA352	B777	1700	N2	320	360	L750	ZHOB	L750	350	350	2312ROSIE
9/4/2005	VIDP	CYYZ	ACA55	A343	1800	N2	280	280	A466	D.I.K.	A466	280	280	1945SITAX
9/4/2005	VIDP	EKCH	N92AE	GLF4	1830	N2	380	380	A466	D.I.K.	A466	390	390	2010SITAX
9/4/2005	VIDP	LFPG	AFR147	A343	1905	N2	340	340	N644	D.I.K.	N644	350	350	2045PAVLO
9/4/2005	WMKK	EHAM	KLM810	B747	N1	N2	340	340	A466	D.I.K.	A466	350	350	2056 SITAX
9/4/2005	VTBD	EGLL	BAW10	B747	1610	N2	300	360	N644	D.I.K.	N644	310	310	2102 PAVLO
9/4/2005	VTBD	LFPG	AFR169	A340	1605	N2	300	300	N644	D.I.K.	N644	310	310	2111 PAVLO
9/4/2005	VTBD	EDDF	RBA33	B763	1550	N2	320	320	N644	D.I.K.	N644	350	350	2120 PAVLO
9/4/2005	VTBD	EDDL	DLH783	A340	1610	N2	320	340	N644	D.I.K.	N644	390	390	2125 PAVLO

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
9/4/2005	VIDP	UTTT	UZB424	B763	1940	N2	380	380	A466	D.I.K.	A466	350	350	2130SITAX
9/4/2005	VTBD	LSZH	SWR183	A343	1635	N2	320	280	N644	D.I.K.	N644	280	280	2139 PAVLO
9/4/2005	VTBD	EHAM	KLM878	B744	1605	N2	280	340	N644	D.I.K.	N644	350	350	2143PAVLO
9/4/2005	VTBD	EDDF	DLH779	B744	1655	N2	280	300	N644	D.I.K.	N644	310	310	2151 PAVLO
9/4/2005	VTBD	LOWW	AUA34	B763	2020	N2	280	280	N644	D.I.K.	N644	280	280	2204PAVLO
9/4/2005	WSSS	EGLL	BAW16	B744	1525	N2	300	340	N644	D.I.K.	N644	350	350	2204PAVLO
9/4/2005	VTBD	EDDF	THA920	B744	1645	N2	320	320	N644	D.I.K.	N644	350	350	2218PAVLO
9/4/2005	ZGGG	EDDF	DLH789	A340	1530	1550	360	360	N644	D.I.K.	N644	310	310	2220 PAVLO
9/4/2005	VIDP	EDDF	DLH761	B744	2055	N2	280	280	A466	D.I.K.	A466	310	310	2230SITAX
9/4/2005	VTBD	EFHK	FIN92	MD11	1720	N2	300	300	A466	D.I.K.	A466	280	280	2241SITAX
9/4/2005	VTBD	LSZH	THA970	B744	1730	N2	320	340	N644	D.I.K.	N644	350	350	2240PAVLO
9/4/2005	VTBD	LIRF	THA944	B743	1720	N2	300	340	N644	D.I.K.	N644	310	310	2250PAVLO
9/4/2005	VTBD	LFPG	THA930	B744	1705	N2	300	320	N644	D.I.K.	N644	350	350	2253PAVLO
9/4/2005	VTBD	EKCH	SAS972	A340	1720	N2	300	360	A466	D.I.K.	A466	280	280	2254 SITAX
9/4/2005	WSSS	EGLL	BAW18	B744	1555	N2	300	320	N644	D.I.K.	N644	280	280	2303 PAVLO
9/4/2005	VTBD	EGLL	THA910	B744	1810	N2	320	340	A466	D.I.K.	A466	350	350	2309SITAX
9/4/2005	VTBD	ESSA	THA960	B744	1810	N2	320	300	A466	D.I.K.	A466	310	310	2311SITAX
9/4/2005	VTBD	EKCH	THA950	B744	1820	N2	320	340	A466	D.I.K.	A466	350	350	2329 SITAX
9/4/2005	VIDP	EGLL	BAW142	B744	2200	N2	300	320	N644	D.I.K.	N644	310	310	2347 PAVLO
9/4/2005	VVTS	UUDD	HVN527	B772	1735	N2	340	340	A466	D.I.K.	A466	350	350	2356 SITAX
9/4/2005	VIDP	UUEE	AFL534	T204	2145	N2	300	300	A466	D.I.K.	A466	310	310	2340SITAX
9/4/2005	WMKK	LSZH	MAS10	B772	1545	N2	280	340	L750	ZHOB	L750	280	280	2130 ROSIE
9/4/2005	WMKK	LFPG	NMAS20	B744	1530	N2	280	320	L750	ZHOB	L750	350	350	2108ROSIE
9/4/2005	VTBD	LOWW	AUA26	B763	1630	N2	300	300	L750	ZHOB	L750	310	310	2139 ROSIE

Date	Dep	Dest	Flight No.	Type	ETD	ATD	Dep Level		Route over	Level change	Route Through	Kabul Level		ETA / Entry
							Plan	Assigned	Lahore Fir	PX	Kabul	Plan	Assigned	Point KabulFIR
9/4/2005	WSSS	EGLL	SIA322	B744	1520	N2	300	320	L750	ZHOB	L750	310	310	2126 ROSIE
9/4/2005	WMKK	LIRF	MAS14	B744	1559	N2	280	320	G792	AMBER	G792	350	350	2141 ASLUM
9/4/2005	VVTS	LFPG	HVN533	B772	1605	N2	340	340	L750	ZHOB	L750	310	310	2157 ROSIE
9/4/2005	WSSS	LFPG	SIA334	B744	1540	N2	280	320	G792	AMBER	G792	280	280	2151 ASLUM
9/4/2005	WSSS	LFPG	AFR257	B773	1520	N2	300	300	L750	ZHOB	L750	310	310	2151 ROSIE
9/4/2005	WMKK	EGLL	MAS02	B744	1540	N2	280	380	L750	ZHOB	L750	280	280	2200 ROSIE
9/4/2005	WMKK	EDDF	MAS06	B772	1550	N2	300	360	L750	ZHOB	L750	350	350	2149 ROSIE
9/4/2005	WSSS	EHAM	SIA324	B747	N1	N2	320	320	L750	ZHOB	L750	350	350	2214 ROSIE
9/4/2005	WMKK	EHAM	MAS16	B744	N1	N2	320	320	L750	ZHOB	L750	310	310	2202 ROSIE
9/4/2005	WSSS	EDDF	QFA05	B744	1605	N2	320	340	L750	ZHOB	L750	310	310	2229 ROSIE
9/4/2005	WSSS	EGLL	QFA09	B744	1605	N2	320	340	L750	ZHOB	L750	350	350	2243 ROSIE
9/4/2005	WSSS	EDDF	SIA26	B744	1550	N2	300	340	HILAL - ROSI	ZHOB	L750	350	350	2219ROSIE

AFGHANISTAN TRAFFIC DATA for ATFM IMPLEMENTATION
Traffic Movements - 4 April to 10 April, 2005
Transit KABUL FIR 1900 - 2330 UTC

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
03.04.05		No data recorded for 3rd April 2005												
04.04.05	VIDP	LFPG	AFR147	A343	1905						N644	310	310	PAVLO2023
	VIDP	EHAM	KLM872	MD11	1920						L750	310	310	ROSIE2047
	VTBD	LFPG	AFR169	A343	1605						N644	310	310	PAVLO2055
	VTBD	EHAM	KLM878	B744	1605						N644	310	310	PAVLO2105
	WMKK	EHAM	KLM810	B744	1510						G792	310	310	ASLUM2106
	WSSS	EGLL	QFA9	B744	1455						L750	350	350	ROSIE2110
	WSSS	EDDF	DLH777	B744	1505						G792	310	310	ASLUM2120
	VVTB	EDDM	DLH773	A346	1610						N644	310	310	PAVLO2115
	WSSS	EDDF	QFA5	B744	1500						L750	350	350	ROSIE2128
	WMKK	EDDF	MAS6	B772	1550						L750	350	350	ROSIE2228
	VTBD	LIRF	THA942	B744	1705						N644	350	350	PAVLO2224
	VIDP	EGLL	CPA057	B744	2105						N644	280	280	PAVLO2238
	VTBD	LSZH	THA970	MD11	1730						N644	310	310	PAVLO2239
	VVVB	LFPG	HVN935	B772							L750	350	350	ROSIE2242
	WMKK	EHAM	MAS16	B744	1558						L750	310	310	ROSIE2245
	VTBD	EKCH	SAS972	A343	1720						A460	350	350	SITAX2259
	VTBD	EGLL	THA910	B744	1810						N644	310	310	PAVLO2317
	ZGGG	EDDF	DLH789	A346	1640						N644	350	350	PAVLO 2330
05.04.05	VIDP	CYQB	ACA55	A343							A466	280	280	SITAX1943
	VIDP	LFPG	AFR147	A343	1905						N644	310	310	PAVLO2040
	WMKK	EHAM	KLM810	B744	1510						L750	320	320	ROSIE2050
	VTBD	EHAM	KLM828	B744	1455						N644	310	310	ROSIE2050
	VTBD	EGLL	BAW10	B744	1610						N644	310	310	PAVLO2117
	VTBD	LOWN	AVA26	B763	1630						N644	310	310	PAVLO2135
	VTBD	LFPG	AFR171	A343	1605						N644	350	350	PAVLO2124
	WSSS	EDDF	QFA5	B744	1500						L750	310	310	ROSIE2105
	VTBD	LOWN	AVA26	B763	1630						N644	310	310	PAVLO2135

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VTBD	EDDM	DLH783	A346	1610						L750	350	350	ROSIE2124
	VTBD	EDDF	DLH779	B744	1655						N644	350	350	PAVLO2145
	VTBD	LSZH	SWR183	A343	1635						N644	310	310	PAVLO2145
	VIDP	EHAM	KLM872	MD11	1920						N644	280	280	PAVLO2049
	WSSS	LFPG	AFR257	B773	1520						B466	310	310	ASLUM2139
	VTBD	LFPG	THA930	B744	1705						N644	350	350	PAVLO2210
	VTBD	EDDF	RBA33	B763	1630						N644	310	310	PAVLO2202
	VTBD	EDDF	THA920	B744	1645						N644	350	350	PAVLO2151
	WMKK	LIRF	MAS14	B744	1559						B466	310	310	PAVLO2125
	EGGG	EDDF	DLH789	A346	1530						N644	310	310	PAVLO2216
	WMKK	EGLL	MAS2	B744	1540						L750	310	310	ROSIE2148
	VVNB	UUEE	AFL542	IL90	1610						A466	350	350	SITAX2221
	VTBD	EAHK	FIN098	MD11	1720						A466	310	310	SITAX2218
	WMKK	EDDF	MAS6	B772	1550						L750	350	350	ROSIE2157
	WSSS	EGLL	SIA323	B744	1520						B466	350	350	ASLUM2152
	VTBD	EKCH	SAS972	A343	1720						A466	310	310	SITAX2234
	VTBD	LIMC	THA940	MD11	1715						N644	350	350	PAVLO2234
	VIDP	LOWN	AVA34	B763	2020						N644	280	280	PAVLO2232
	VIDP	EGLL	EA142	B744	2040						N644	280	280	PAVLO2223
	WSSS	LFPG	SIA334	B744	1540						B466	350	350	ASLUM2209
	WSSS	LSZH	SIA346	B744	1545						L750	310	310	ROSIE2204
	VTBD	LGAV	THA940	MD11	1735						N644	350	350	PAVLO2220
	VVTS	LFPG	HVN333	B772	1605						L750	350	350	ROSIE2209
	WSSS	EDDF	SIA026	B744	1550						B466	350	350	ASLUM2221
	WMKK	EHAM,	MAS16	B744	1555						L750	310	310	ROSIE2221
	VIDP	UUEE	AFL536	IL96	2030						A466	350	350	SITAX2253
	VIDP	EDDF	DLH761	B744	2015						L750	280	280	ROSIE2223
	WSSS	EGLL	QFA15	B744	1640						L750	350	350	ROSIE2226
06.04.05	VVTS	LRBS	HBIH9	GLEX							N644	390	390	PAVLO1955
	VHHH	UBBB	W493NC	B747							N644	350	350	PAVLO1956
	VIDP	CYYZ	CFYLC	A343	1800						A466	310	310	SITAX2005
	WSSS	EHAM	PHBFO	B747							L750	350	350	ROSIE2027

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VIDP	LFPG	FCL2B	A343	1905						N644	350	350	PAVLO2036
	VIDP	EGLL	GCIVK	B747							N644	310	310	PAVLO2058
	WMKK	EHAM	PHBFC	B747	1510						G792	310	310	ASLUM2059
	VIDP	EHAM	PHKCK	MD11	1920						N644	280	280	PAVLO2059
	WSSS	EGLL	VHOJP	B747	1455						L750	350	350	ROSIE2059
	VIDP	EHAM	KLM878	B747							N644	310	310	PAVLO2058
	WSSS	EDDF	DLH777	B777							L750	310	310	ROSIE2106
	WSSS	LHPG	AFR257	B777	1520						L750	310	310	ROSIE2116
	WMKK	EGLL	MA52	B747							L750	310	310	ROSIE2128
	VTBD	LFPC	AFR169	A344							N644	350	350	PAVLO2119
	VTBD	EDDF	DLH773	B777							L750	350	350	ROSIE2126
	VTBD	LOWW	AUA26	B767							N644	310	310	PAVLO2128
	WMKK	EHAM	MAS16	B747							L750	310	310	ROSIE2141
	VTBD	EDDF	DLH779	B747							N644	310	310	PAVLO2142
	VTBD	LBLH	THA970	MD11							N644	310	310	PAVLO2152
	WMKK		MAS10	B747							L750	350	350	ROSIE2145
	WSSS	EDDH	SIA026	B747	1550						L750	310	310	ROSIE2155
	VTBD	EMHK	FIN092	MD11							A466	310	310	SITAX2201
	WMKK	EDDF	MIA6	B777							L750	350	350	ROSIE2201
	VTBD	EGLL	QFA1	B747							L750	310	310	ROSIE2204
	VIDP	LOWW	AUA34	B767							N644	310	310	PAVLO2205
	VVNB	LFPG	HVN535	B777							L750	350	350	ROSIE2216
	VTBD	EDDF	THA920	B747							N644	390	390	PAVLO2217
	WSSS	EHAM	SIA324	B772	1545						L750	310	310	ROSIE2223
		EDDF	DLH789	S346	1530						N644	310	310	PAVLO2224
	WSSS	EGLL	SIA322	B747	1520						G792	350	350	SITAX2228
	VTBD	LFPG	THA930	B747							N644	350	350	PAVLO2229
	VIDP	EDDF	DLH761	B747	2055						L750	310	310	ROSIE2239
	WSSS	LOWW	AUS8	B767							L750	310	310	ROSIE2241
	VIDP	EGLL	BAW142	B747	2040						N644	380	380	PAVLO2227
	VTBD	LGAV	THA944	B747							N644	350	350	PAVLO2243
	VTBD	EGLL	THA910	B747							N644	350	350	PAVLO2301
	VTBD	EKCH	THA950	B747							A466	350	350	SITAX2327

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
07.04.05	VVTS	LFPG	HVN533	B777	1605						L750	350	350	ROSIE2118
	WSSS	LFPG	AFR257	B777							L750	280	280	ROSIE2148
	VTBD	EDDF	THA920	B744	1645						N644	310	310	PAVLO2204
	WSSS	EDDF	PIA792	A310	1705						G792	310	310	ASLUM2205
	WMKK	EDDF	MAS6	B747							L750	310	310	ROSIE2206
	WSSS	EGLL	BAW16	B747							N644	350	350	PAVLO2213
		EDDF	DLH789	B747							N644	310	310	PAVLO2215
	VTBD	EFKH	FIN098	MD11							A466	310	310	SITAX2218
	WSSS	LSZH	SIA346	B747	1545						L750	350	350	ROSIE2220
	WMKK	LOWW	AUA2	B772	1635						L750	350	350	ROSIE2221
	VIDP	EGKK	BAW142	B747							N644	280	280	PAVLO2212
	VTBD	LIRF	THA942	B744	1705						N644	350	350	PAVLO2233
	VABB	LFPC	AFR135	A332	2030						L750	350	350	ROSIE2233
	VTBD	LPPC	THA930	B747	1705						N644	350	350	PAVLO2233
	VTBD	EGLL	QFA1	B747	1725						N644	310	310	PAVLO2239
	VTBD	EKCH	SAS972	A343	1720						A466	350	350	SITAX2246
	VTBD	LSZH	THA920	B747	1731						N644	310	310	PAVLO2248
	VTBD	LGAV	THA946	MD11	1735						N644	350	350	PAVLO2300
	WSSS	EGLL	BAW18	B747	1555						N644	310	310	PAVLO2302
	WSSS	EGLL	QFA15	B747	1640						L750	310	310	ROSIE2305
	VTBD	ESSA	THA960	B747	1810						A466	310	310	SITAX2307
	VTBD	EGLL	THA910	B747	1810						N644	350	350	PAVLO2313
	VIDP	LFPG	AFR147	A343	1905						N644	310	310	PAVLO2044
	VIDP	EHAM	KLM872	MD11	1920						N644	350	350	PAVLO2050
	VTBD	VTBD	KLM878	B747	1605						N644	280	280	PAVLO2052
	WSSS	EHAM	KLM836	A343	1455						L750	310	310	ROSIE2059
	VIDP	CYOW	ACA055	A343	1820						A466	310	310	SITAX2101
	VTBD	EGLL	BAW10	B744	1610						N644	310	310	PAVLO2102
	VVTS	UTTT	UZB568	B752	1510						A466	390	390	SITAX2108
	WSSS	EGLL	QFA9	B747	1455						L750	310	310	ROSIE2110
	VTBD	LFPG	AFR171	A343	1605						N644	350	350	PAVLO2118
	WMKK	UTTT	UZB554	B757							A466	350	350	SITAX2118

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VIDP	UTTT	UZB428	B752	1940						N644	350	350	PAVLO2128
	WMKK	EGLL	MAS2	B747							L750	350	350	ROSIE2126
	VTBD	LOWW	AUA26	B767	1630						N644	280	280	PAVLO2130
	VTBD	LOWW	EVA61	A332	1615						N644	350	350	PAVLO2130
	WSSS	EDDF	QFA5	B747	1500						L750	310	310	ROSIE2131
	WMKK	EHAM	MAS16	B747							L750	310	310	ROSIE2138
	VIDP	EELL	CPA037	B747							N644	310	310	PAVLO2138
	VTBD	EDDM	DLH783	A346							L750	350	350	ROSIE2141
	VTBD	L52H	SAS183								N644	350	350	PAVLO2156
	VTBD	LOWW	AUS34								L750	280	280	ROSIE2159
	VTBD	EDDF	DLH779	B747	1655						N644	350	350	PAVLO2159
	WSSS	EDDF	DLH777	B747	1505						L750	350	350	ROSIE2115
	WMKK	LOWW	MAS24	B747							L750	350	350	ROSIE2152
	VOMM	EDFF	DLH759	B747	2015						L750	310	310	ROSIE2318
	VTBD	EKCH	THA950	B747	1820						A466	350	350	SITAX2320
	WSSS	EKCH	SIA352	B777	1700						L750	350	350	ROSIE2325
08.04.05	UUCC	VIDP	AFL535	B767	1520						A466	350	350	SITAX1930
	VIDP	CYYZ	ACA55	A343	800						A466	310	310	SITAX2002
	VIDP	LFPG	AFR147	A343	1905						N644	350	350	PAVLO2042
	EGKK	VTBD	VAP167	B743	1800						N644	310	310	PAVLO2052
	VTBD	LFPG	AFR169	A343	1905						N644	350	350	PAVLO2056
	WMKK	EHAM	KLM816	B747	1400						L750	350	350	ROSIE2057
	VIDP	EHAM	KLM872	MD11	1605						N644	280	280	PAVLO2102
	VTBD	EGLL	BAW10	B747	1510						N644	310	310	PAVLO2102
	WSSS	EDDF	DLH777	B747	1920						L750	310	310	ROSIE2110
	WMKK	LFPG	MAS20	B744	1610						L750	310	310	ROSIE2121
	VTBD	EDDM	DLH783	A346	1455						L750	350	350	ROSIE2128
	WSSS	EGLL	QFA9	B747	1545						L750	310	310	ROSIE2133
	WSSS	LFPG	AFR257	B777	1520						L750	310	310	ROSIE2143
	WMKK	EGLL	MAS12	B747	230						L750	350	350	ROSIE2141
	WSSS	EHAM	KLM838	B744	1455						L750	350	350	ROSIE2147
	WMKK	LSZH	MSA10	B772	1545						L750	350	350	ROSIE2148

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WSSS	EGLL	SIA322	B747	1520						G792	350	350	ASLUM2148
	VTBD	LOWW	AUA26	B767	1630						L750	310	310	ROSIE2148
	VTBD	LSZH	SWR183	A343	1635						N644	310	310	PAVLO2153
	VTBD	EDDF	DLH779	B744	1655						N644	350	350	ROSIE2153
	WMKK	EHAM	BAS16	B747	1555						L750	350	350	ROSIE2158
	WSSS	LSZH	SIA346	B744	1545						L750	350	350	ROSIE2347
	VTBD	EHAM	KLM878	B744	1605						N644	310	310	PAVLO2051
	VTBD	EKCH	SAS992	A343	1720						A466	310	310	SITAX2231
	VIDP	EGLL	BAW142	B744	2040						N644	280	280	PAVLO2242
	VABB	LFPG	AFR135	A332	2045						L750	350	350	ROSIE2250
	VTBD	LSZH	THA970	B744	1730						N644	350	350	ROSIE2250
	VIDP	EDDF	DLH761	B744	2055						N644	310	310	PAVLO2256
	WSSS	EHAM	SIA324	B772	1545						L750	350	350	PAVLO2234
	WSSS	EDDF	SIA026	B744	1550						L750	350	350	ROSIE2233
	VTBD	LFPG	THA930	B772	1705						N644	350	350	ASLUM2247
	WSSS	EGLL	MAS2	B763							L750	310	310	PAVLO2259
	WMKK	EDDF	MAS2	B772	1550						L750	350	350	ROSIE2231
	VIDP	LOWW	AUA34	B763	2020						N644	280	280	ROSIE2209
	VVNB	LFPG	HVN535	B772	1625						L750	350	350	ROSIE2214
	VIAR	UTTT	UZB848	B752	2200						A466	390	390	SITAX2235
	VTBD	LIRF	THA944	B743	1720						N644	280	280	PAVLO2250
	WMKK	LOWW	AUA2	B772	1635						N644	310	310	PAVLO2241
	VTBD	LIRC	THA940	MD11	1715						N644	350	350	PAVLO2245
	ZGGG	EDDF	DLH789	A346	1530						N644	350	350	PAVLO2233
	WSSS	LFPG	SIA334	B744	1540						L750	310	310	ROSIE2203
	VTBD	EFHK	FIN092	MD11	1720						A466	310	310	SITAX2215
	VTBD	EDDF	THA920	B744	1645						N644	350	350	PAVLO2210
	VTBD	EGLL	THA910	B744	1810						A466	350	350	SITAX2305
	WSSS	EGLL	BAW16	B744	1525						N644	310	310	PAVLO2204
09.04.05	VTBD	UBBB	CLX791	V744	1430						N644	350	350	PAVLO1930
	VIDP	CYYZ	ACA55	A343	1800						A466	280	280	SITAX1948
	WSSS	EHAM	KLM836	B744	1455						A466	350	350	SITAX2050

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VIDP	EHAM	KLM872	MD11	1920						N644	310	310	PAVLO2033
	VIDP	LFPG	AFR147	A343	1905						N644	310	310	PAVLO2051
	VTBD	LIMC	BPA3017	B763	1500						L750	310	310	RANAH2141
	VTBD	EETT	KLM878	B744	1605						A466	310	310	SITAX2051
	VTBD	EDDF	DLH779	B744	1655						N644	310	310	PAVLO2157
	WMKK	EHAM	MAS16	B744	1555						L750	310	310	ROSIE2149
	WMKK	LOWW	MAS22	B772	1545						L750	350	350	ROSIE2131
	VIDP	LOWW	AUA34	B763	2020						N644	310	310	PAVLO2203
	WSSS	EGLL	SIA322	B744	1520						L750	350	350	ROSIE2135
	WSSS	LFPG	SIA334	B747	1540						L750	310	310	ROSIE2154
	VTBD	LOWW	EVA61	A332	1615						N644	350	350	PAVLO2134
	VTBD	EDDF	RBA35	B763	1550						N644	350	350	PAVLO2151
	WSSS	EGLL	BAW16	B744	1525						N644	280	280	PAVLO2154
	WSSS	EGLL	QFA9	B744	1455						L750	350	350	ROSIE2103
	WSSS	EDDF	DLH777	B744	1505						L750	350	350	ROSIE2124
	WSSS	EDDF	QFA5	B744	1500						L750	310	310	ROSIE2124
	VTBD	EDDM	DLH773	A346	1610						N644	310	310	PAVLO2136
	VTBD	LFPG	AFR171	A343	1603						N644	310	310	PAVLO2125
	VTBD	EGLL	BAW10	B744	1610						N644	350	350	PAVLO2123
	WSSS	LFPC	AFR257	B773	1520						L750	280	280	ROSIE2133
	VTBD	LSZH	SWR183	A343	1635						N644	310	310	PAVLO2144
	VTBD	LOWW	AUA26	B763	1630						N644	280	280	PAVLO2137
	WMKK	LFPG	MAS20	B744	1530						L750	310	310	ROSIE2135
	WSSS	EGLL	QFA15	B744	1640						L750	350	350	ROSIE2255
	VTBD	LGAV	THA946	MD11	1735						N644	310	310	PAVLO2257
	VTBD	LSZH	THA970	MD11	1730						N644	310	310	PAVLO2245
	VIDP	EDDF	DLH761	B744	2035						N644	280	280	PAVLO2252
	VTBD	EDDF	THA920	B744	1645						N644	350	350	PAVLO 2243
	WSSS	EHAM	SIA324	B772	1545						L750	310	310	ROSIE2236
	VTBD	LFPG	THA930	B744	1705						A466	310	310	SITAX2243
	VTBD	LIRF	THA942	B744	1705						N644	350	350	PUALO2242
	WSSS	EDDF	SIA026	B744	1550						L750	310	310	ROSIE2224
	VIDP	EGLL	BAW142	B744	2040						N644	280	280	PUALO2233

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	VVTS		HVN533	B772	1605						L750	350	350	ROSIE2320
	WMKK	LOWW	AUA26	B772	1635						N644	310	310	PAVLO2232
	VTBD	EFHK	FIN098	MD11	1720						A466	310	310	SITAX2221
	WSSS	EGLL	BAW18		1550						N644	350	350	PAVLO2232
	VTBD	EGLL	QFA15		1725						N644	280	280	PAVLO2225
	WMKK	EDDF	MAS6	B772	1550						L750	350	350	ROSIE2216
	VTBD	EDDF	THA920	B744	1645						N644	350	350	PAVLO2201
	WMKK	EGLL	MAS20	B744	1540						L750	280	280	ROSIE2207
	VTBD	EGLL	THA910	B744	1810						A466	350	350	SITAX2312
	WMKK	UBBB	CLX795	B744	1745						N644	310	310	PAVLO2313
	VTBD	EKCH	SAS972	A343	1720						A466	350	350	SITAX2303
	WSSS	EKCH	SIA352	B772	1700						L750	350	350	ROSIE2320
10.04.05	VIDP	CYYZ	AGA055	A343							A466	310	310	SITAX1945
	VIDP	LFPG	AFR147	A343							N644	350	350	PAVLO2015
	VIDP	EFHK	N92AE	G4							A466	390	390	SITAX2012
	VIDP	EHAM	KLM877	MD11							A466	310	310	SITAX2029
	WSSS	EHAM	KLM838	B744							A466	310	310	SITAX2057
	WMKK	EHAM	KLM810	B744							A466	350	350	SITAX2055
	VTBD	EGLL	BAW10	B747							N644	350	350	PAVLO2102
	WMKK	LFPG	MAS20	B744							L750	310	350	ROSIE2108
	VTBD	LFPG	AFR168	A343							N644	350	310	PAVLO2112
	VTBD	EDDF	RBA033	B763							N644	310	310	PAVLO2120
	WMKK	LFPG	MAS20	B744	1530						L750	350	350	ROSIE2113
	VTBD	EDDM	DLH783	A343							N644	350	350	PAVLO2125
	VTBD	LSEH	SWR183	A343							N644	350	350	PAVLO2140
	VIDP	VTTT	UZB924								A466	390	390	SITAX2134
	WMKK	LSZH	MAS10	B772							L750	350	350	ROSIE2137
	WSSS	EGLL	SIA322	B744							L750	310	310	ROSIE2132
	VTBD	EHAM	KLM878	B744							A466	350	350	SITAX2143
	WSSS	EDDF	DLH779	B744							A466	310	310	SITAX2149
	VTBD	LOWW	AUA26	B763							L750	310	310	ROSIE2145
	WMKK	EDDF	MAS6	B772							L750	350	350	ROSIE2149

Date	Dep.	Dest.	Flight No.	Acft. Type	ETD	ATD	Dep. Level Plan/Assigned		Route over BoB	Further climb PX	Route thru Kabul	Kabul Level Plan/Assigned		EET Kabul FIR
	WMKK	LIRF	MAS14	B744								310	310	ASLUM2149
	WSSS	LFPG	AFR257	B772							L750	310	310	ROSIE2151
	WMKK	EHAM	MAS16	B744							L750	310	310	ROSIE2206
	VVTS	LFPG	HVN533	B772							L750	350	350	ROSIE2205
	WSSS	LFPG	SIA334	B744							N644	350	350	ASLUM2209
	WSSS	EDDF	SIA026	B744							L750	350	350	ROSIE2219
	VTBD	EDDF	THA920	B744							N644	310	310	PAVLO2208
	VTBD	LSZH	THA970	B744							N644	350	350	PAVLO2220
	WSSS	EGLL	BAW16	B744							N644	350	350	PAVLO2204
	WMKK	EGLL	MAS2	B744							L750	280	280	ROSIE2215
	VIDP	LOWW	AUA34	B763							N644	280	280	PAVLO2204
	EGGG	EDDF	DLH789	A346							N644	350	350	PAVLO2220
	VIDP	EDDF	DLH761	B744							A466	280	280	SITAX2222
	WSSS	EHAM	SIA321	B772							L750	310	310	ROSIE2223
	WSSS	EDDF	QFA5	B744							L750	350	350	ROSIE2235
	VTBD	EFHK	FIN092	MD11							A466	310	310	SITAX2232
	VTBD	LFPG	THA930	B744							N644	310	310	PAVLO2253
	VTBD	ERCH	SAS972	A343							A466	350	350	SITAX2254
	VTBD	LIBF	THA944	B743							N644	350	350	PAVLO2250
	WSSS	EGLL	QFA9	B727							L750	350	350	ROSIE2243
	WSSS	EGLL	BAW18	B744							N644	310	310	PAVLO2303
	VTBD	ESSA	THA960	B744							A466	310	310	SITAX2309
	VTBD	EGLL	THA910	B744							A466	350	350	SITAX2325

ato
AIR TRAFFIC ORGANIZATION

Asia to Europe Traffic Planning Using DOTS+ Online Track Advisory

Bay of Bengal ATFM Task Force

19 April, 2005

Kevin Chamness

Project Manager, Oceanic Service Improvements

Federal Aviation Administration

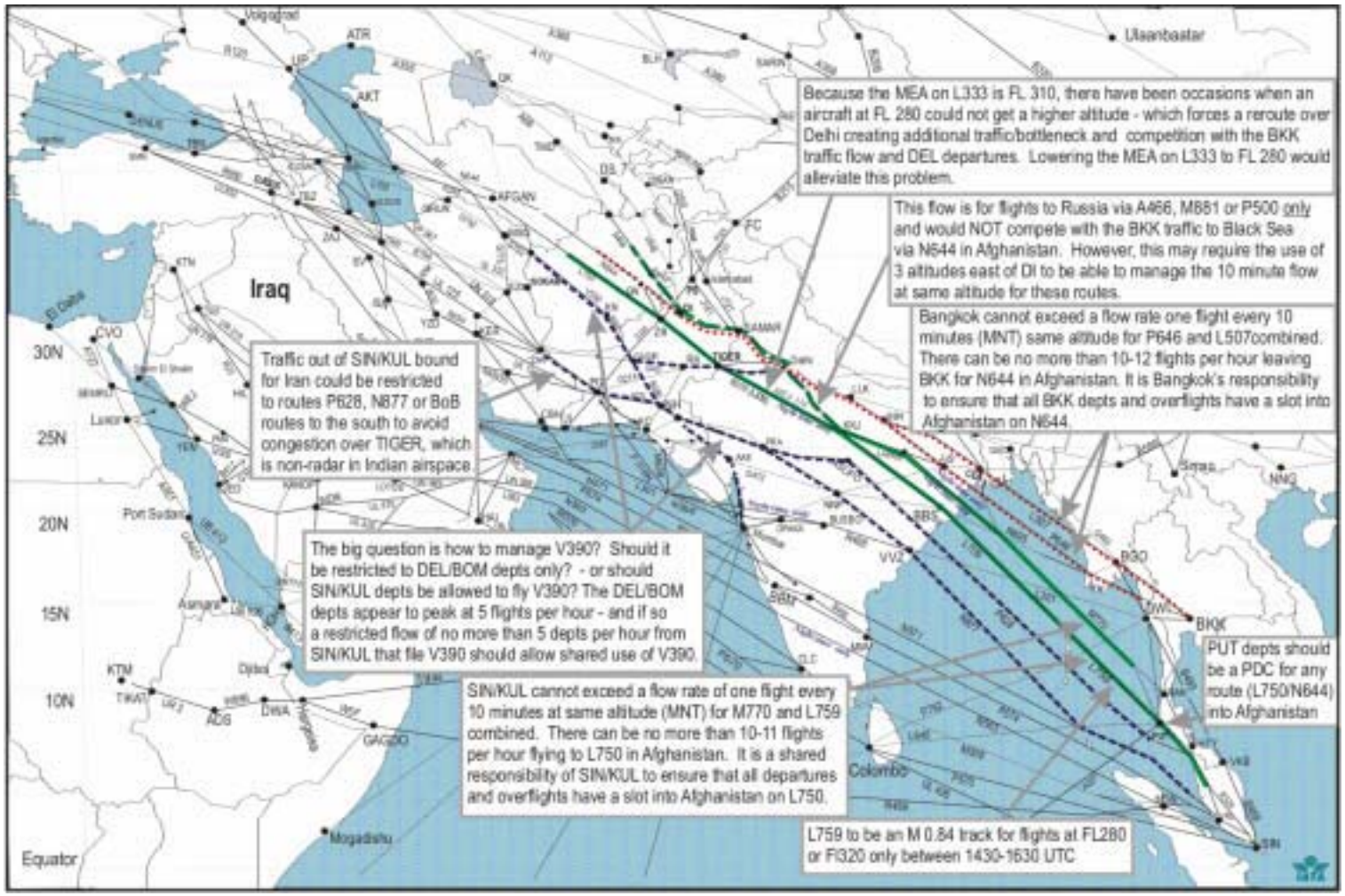
Route Congestion on Afghan Overflights

- Due to congestion and altitude restrictions on the westbound traffic flow from Asia to Europe, the Bay of Bengal states are considering a centralised function for track-advisory flow management over Afghanistan.

- The track-advisory flow management function would be required to coordinate three independent traffic flows, likely over existing airways such as N644, L750 and V390.

- Affected flights involve a multiple air carriers. These flights primarily depart Delhi, Bangkok, Singapore, Kuala Lumpur and Mumbai.

Traffic Flow via V390, L750 and N644



DOTS+ Track Advisory is a Possible Solution

- DOTS+ can designate metered gateway fixes for traffic flow on N644, L750, V390 and others.
- Aircraft operators submit gateway requests for flights including track, altitude and an ETA at the gateway fix for each flight.
- DOTS creates gateway reservation lists including constraints like flow and altitude restrictions for each track.

DOTS+ Track Advisory is a Possible Solution

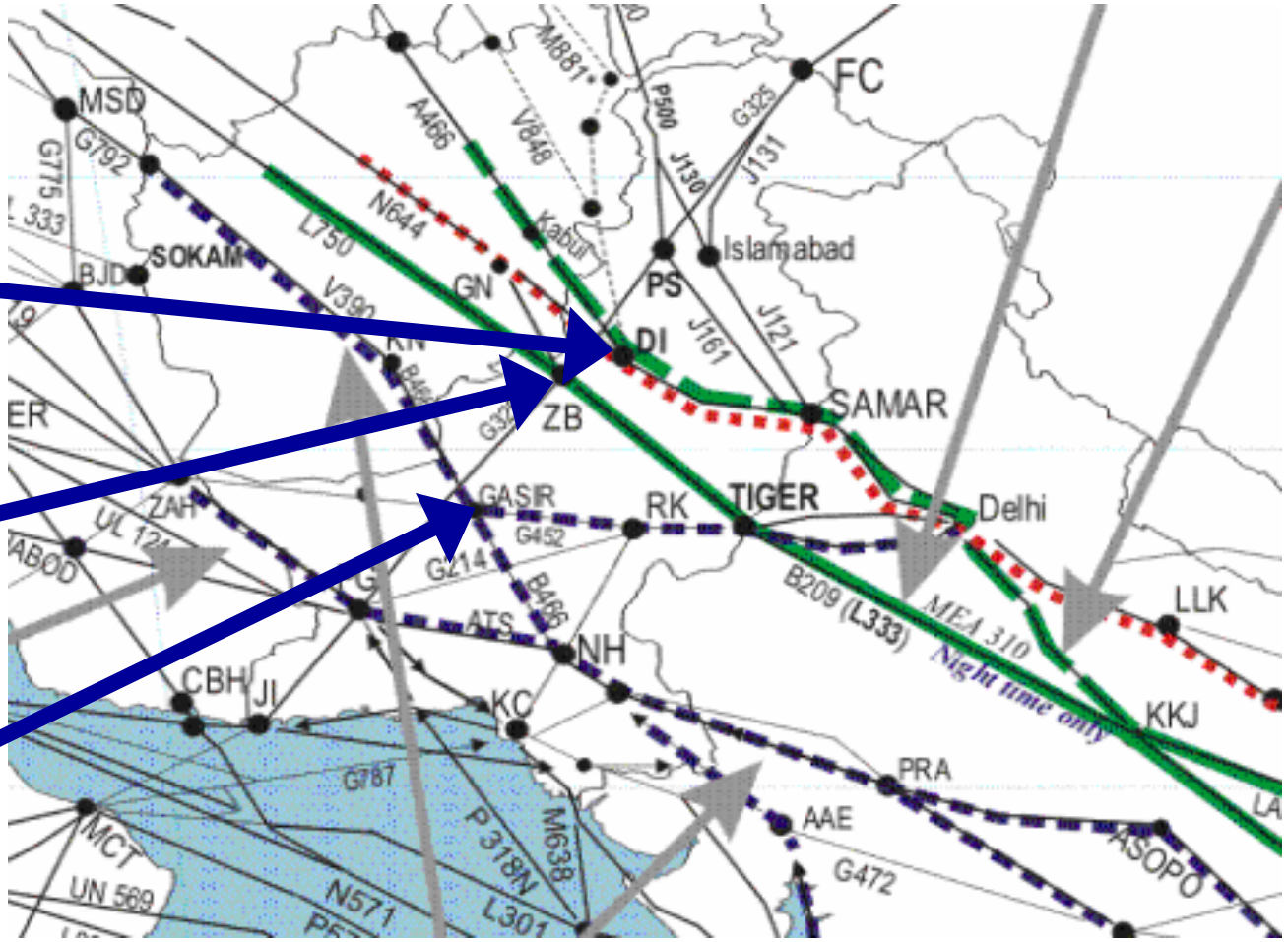
- Gateway reservation lists can be dynamically adjusted to account for changes in aircraft departure times and requests.
- Online Track Advisory (OTA) for the Asia to Europe flow would be a self-policing service.
- Aircraft operators assume responsibility for meeting assigned gateway times at designated fixes and altitudes.

Gateway Configuration Example

N644 Gateway DI

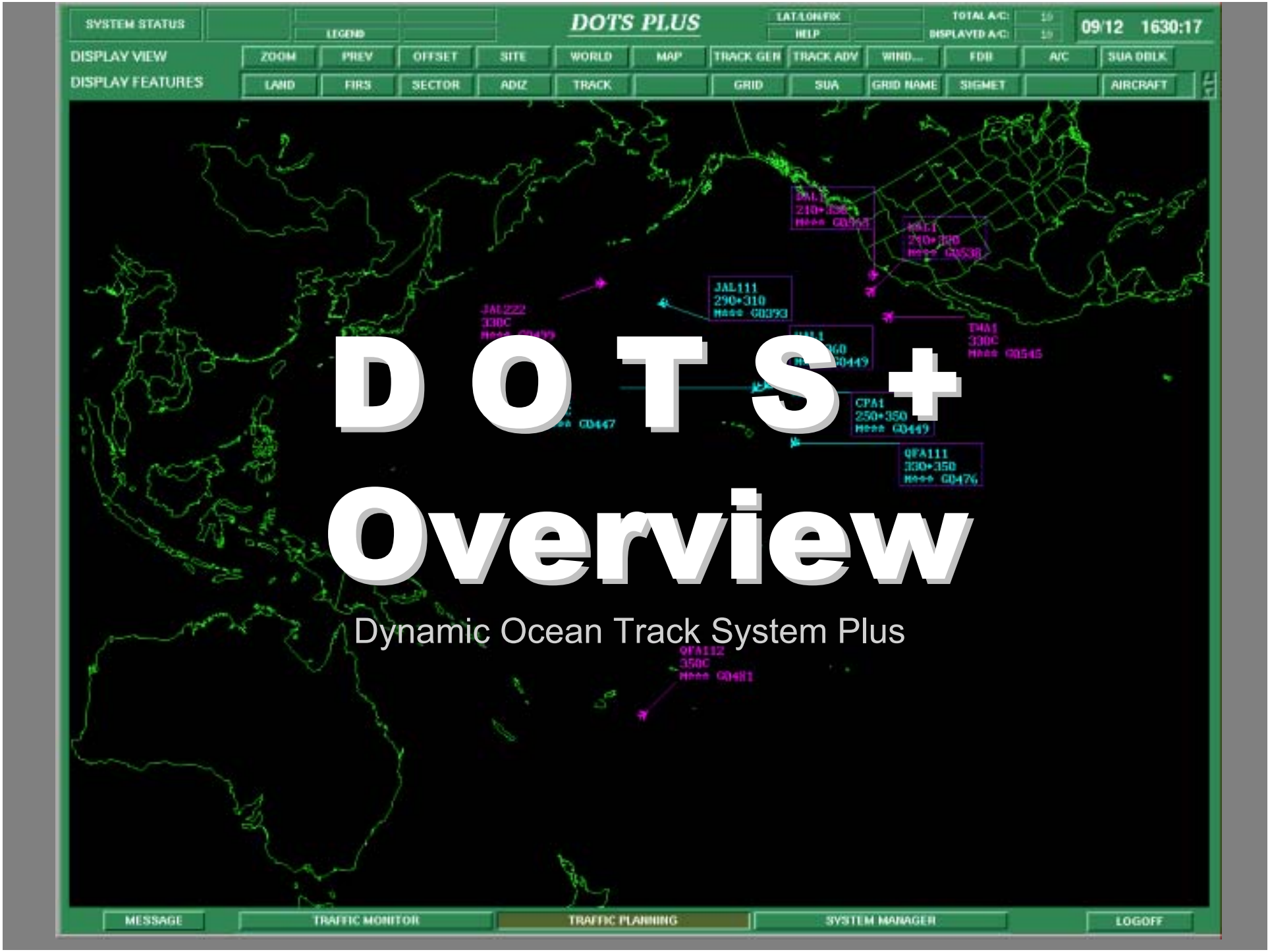
L750 Gateway ZB

V390 Gateway GASIR



Gateway Configuration Example

- Gateway fixes are configurable (e.g. V390 gateway changes from GASIR to KN)
- Tracks can be restricted by altitude (e.g. L750 only available at FL310, FL330)
- Flow rates can be optimized per altitude (e.g. L750 flow at FL310 and FL330 is 15 min in trail, for an average of 8 flights per hour)
- Each track can be assigned a prioritization based on departure airport. (e.g. DEL/BOM flights have priority on V390. SIN/KUL flights may be assigned V390, space permitting)
- Crossing traffic, not part of the flow into the Kabul FIR, would be handled procedurally by setting aside key RVSM altitudes.



D O T S+ Overview

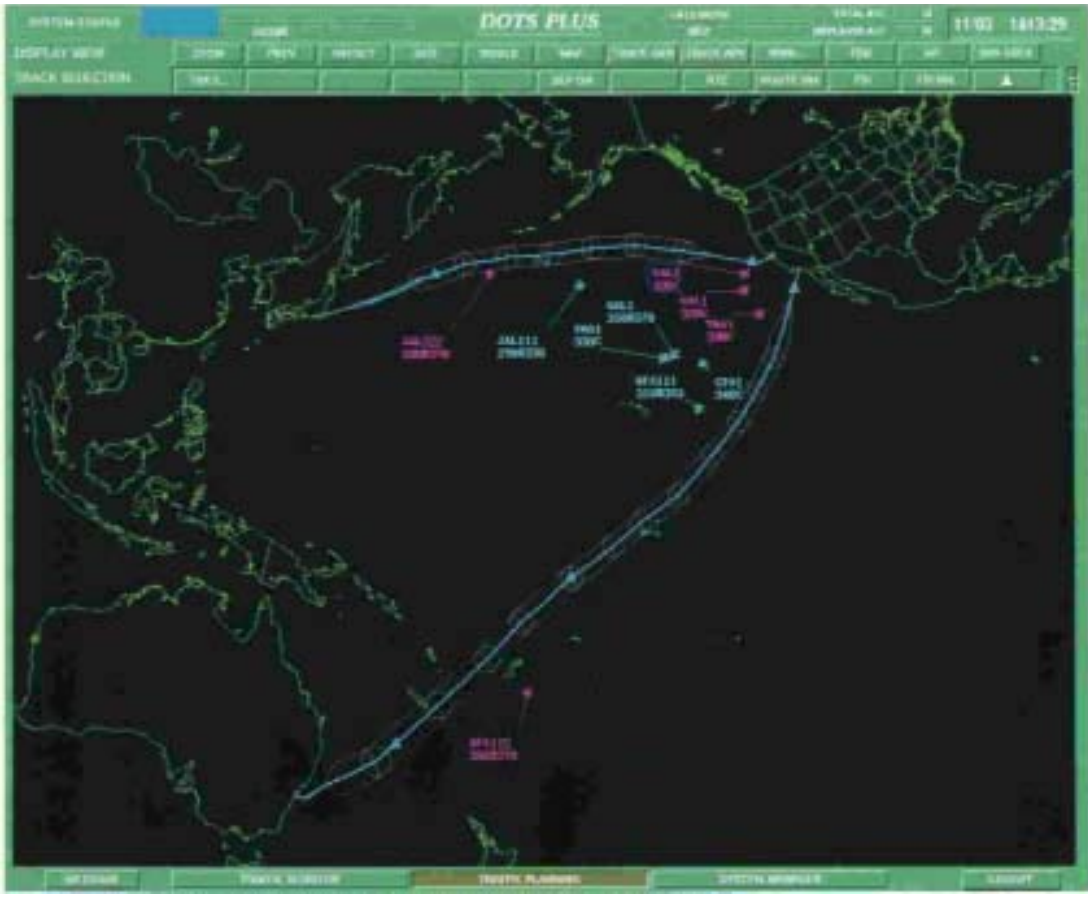
Dynamic Ocean Track System Plus

DOTS Plus Capabilities

The Dynamic Ocean Track System is a proven traffic planning and flow management system with over 10 years of successful operation in the Pacific.

The DOTS+ System Provides:

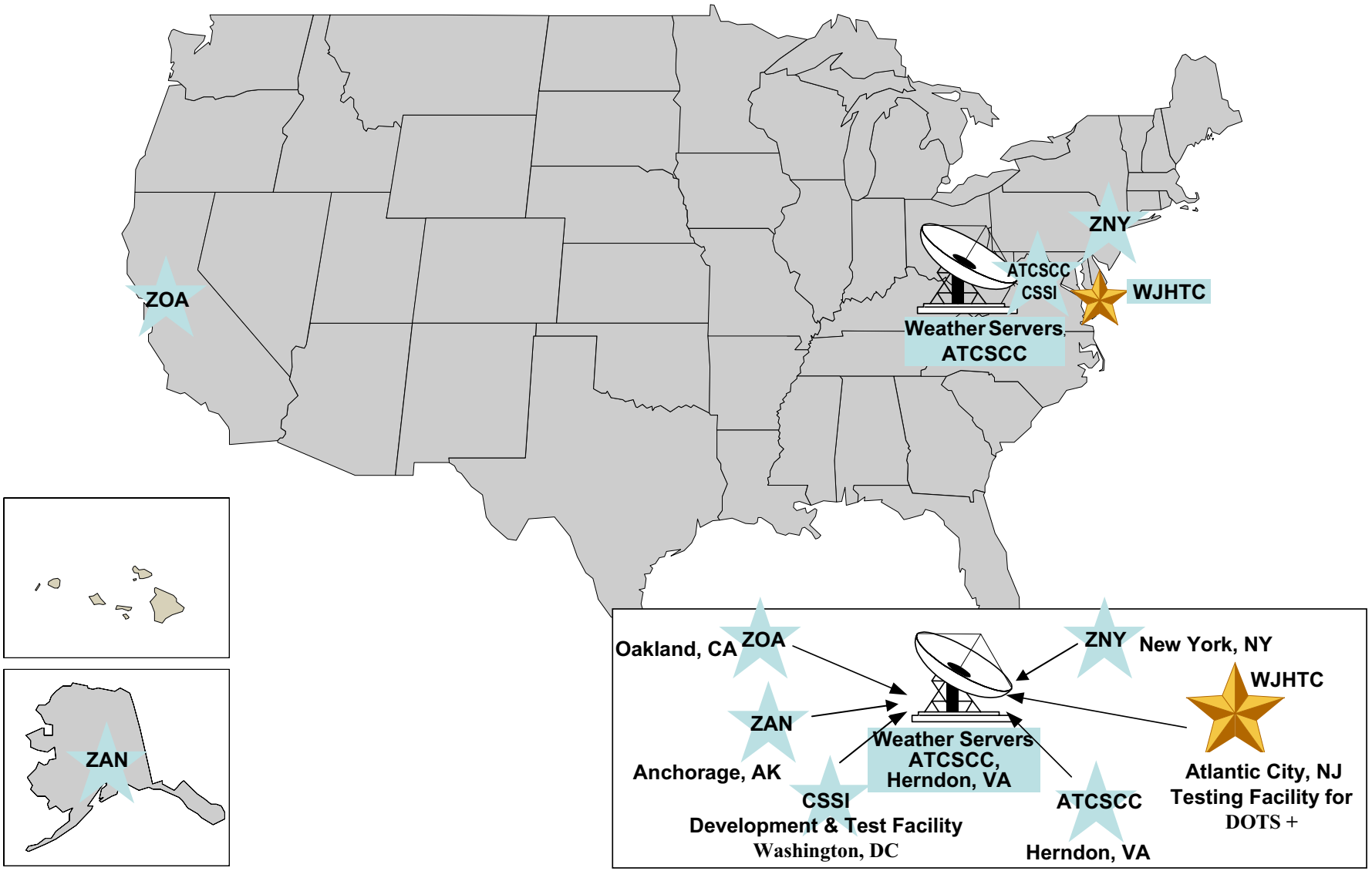
- *Generation of Optimized Flexible Track Systems*
- *Oceanic Traffic Planning Display*
- *Integrated Track Advisory/Oceanic Traffic Flow Metering*
- *Track Definition Publication*



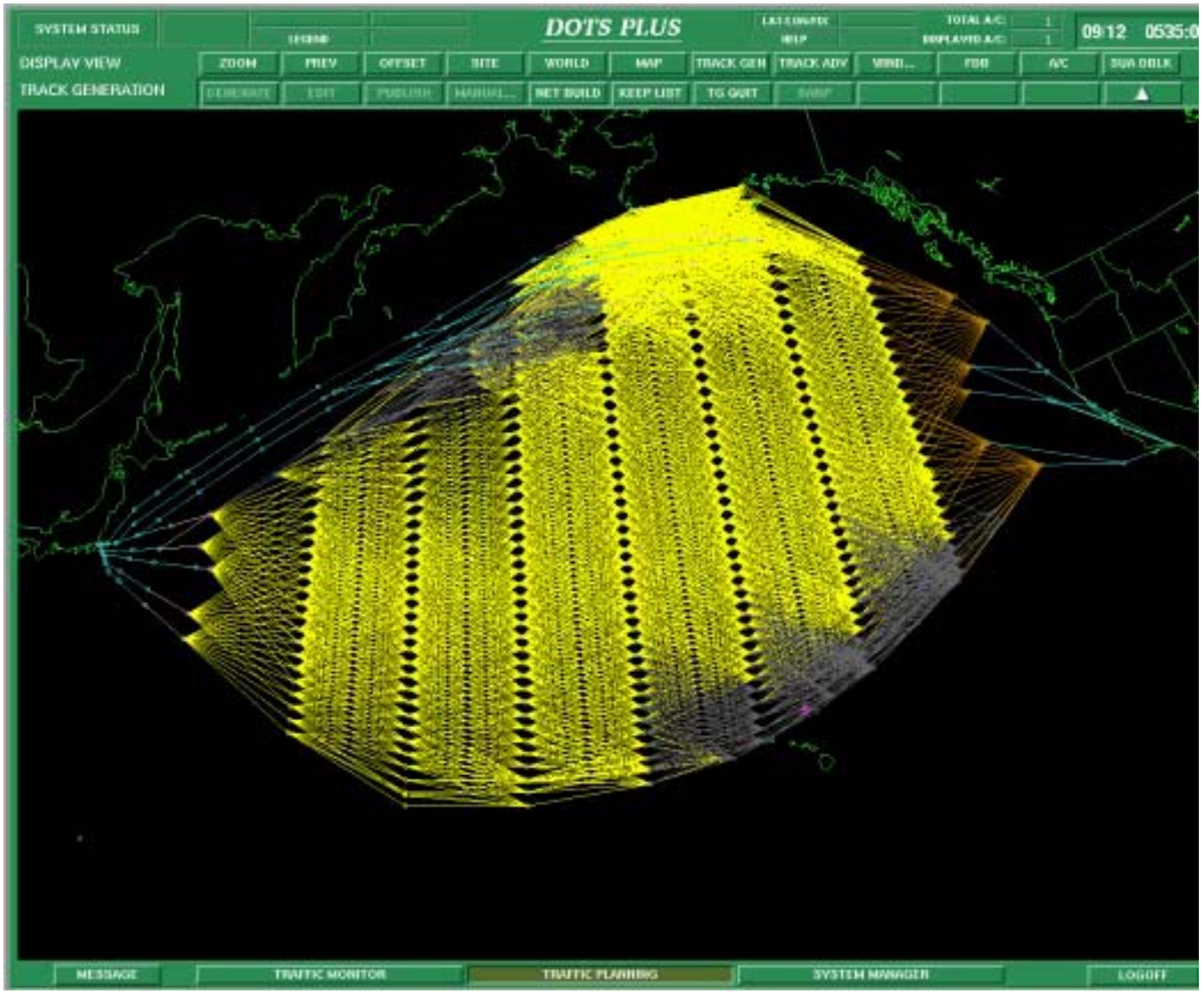
Recent and Near-Term DOTS+ Enhancements

- Performance Model Generation Tool (PGMT)
- B777 performance model
- 2-Box DOTS – Reduction in hardware requirements
- 30nm lateral track spacing
- Online Track Advisory (OTA) – Integrated Web-based interface for Track-Advisory/Oceanic traffic flow metering

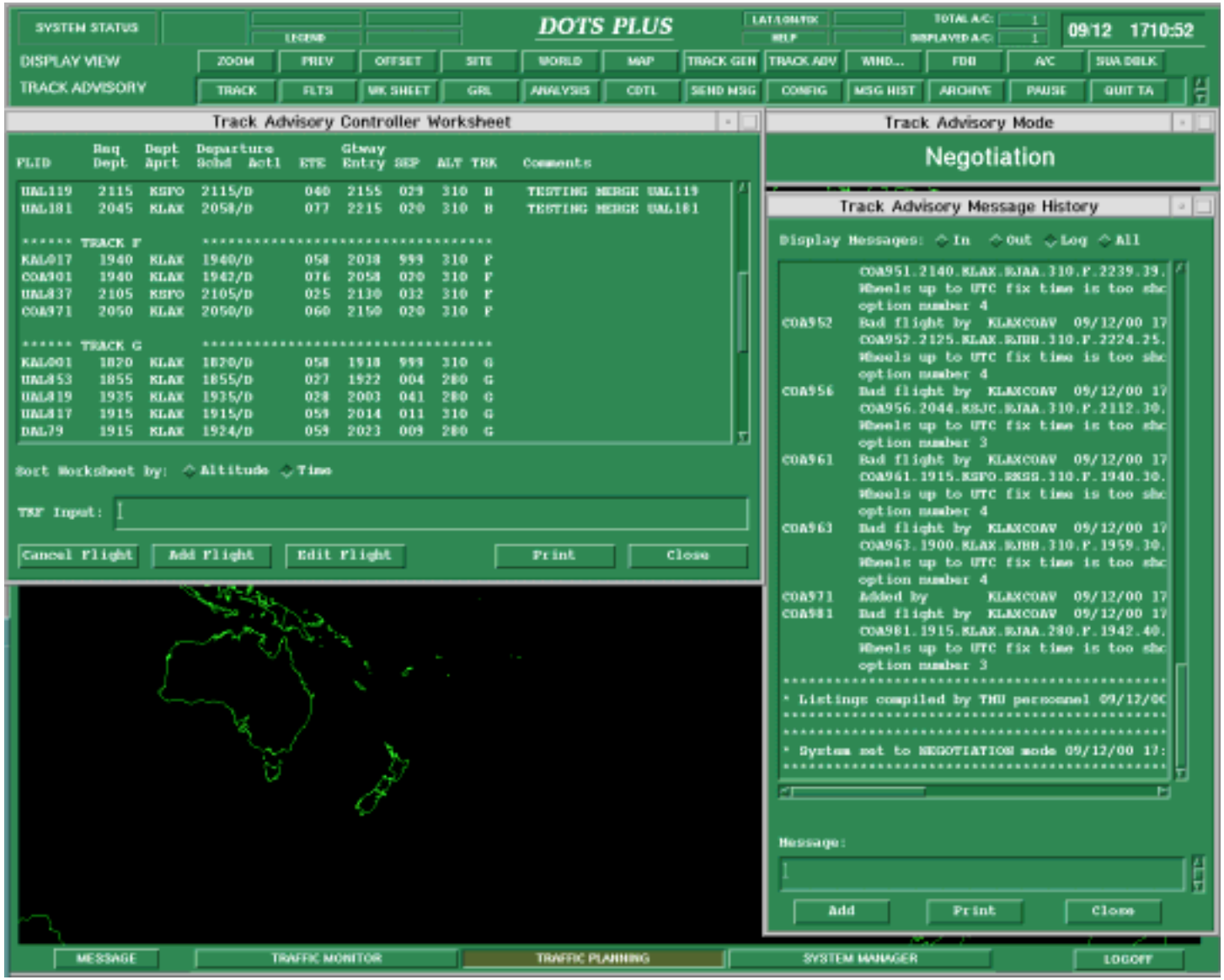
DOTS Plus Implementation



Flexible Track Optimization



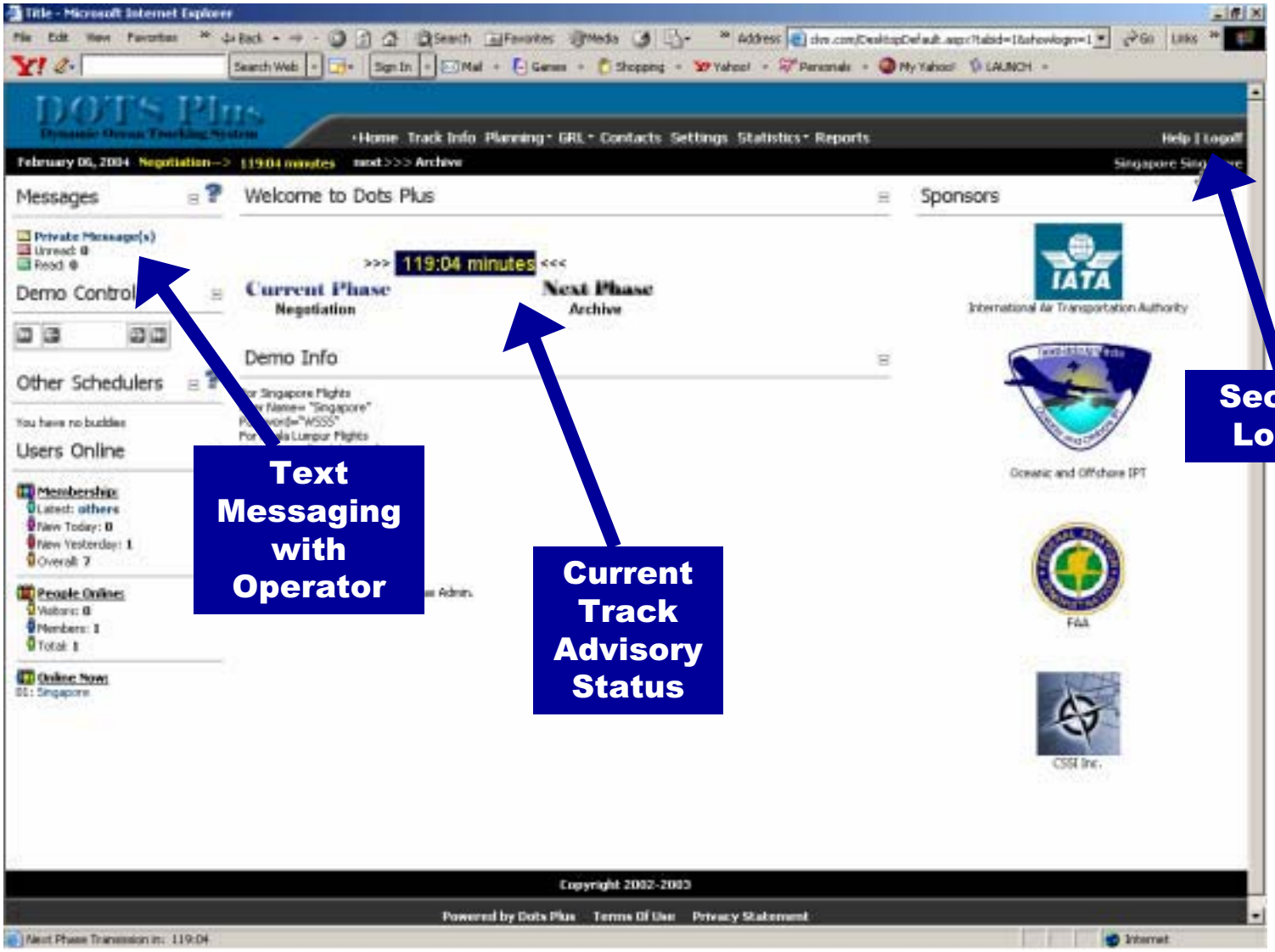
Track Advisory



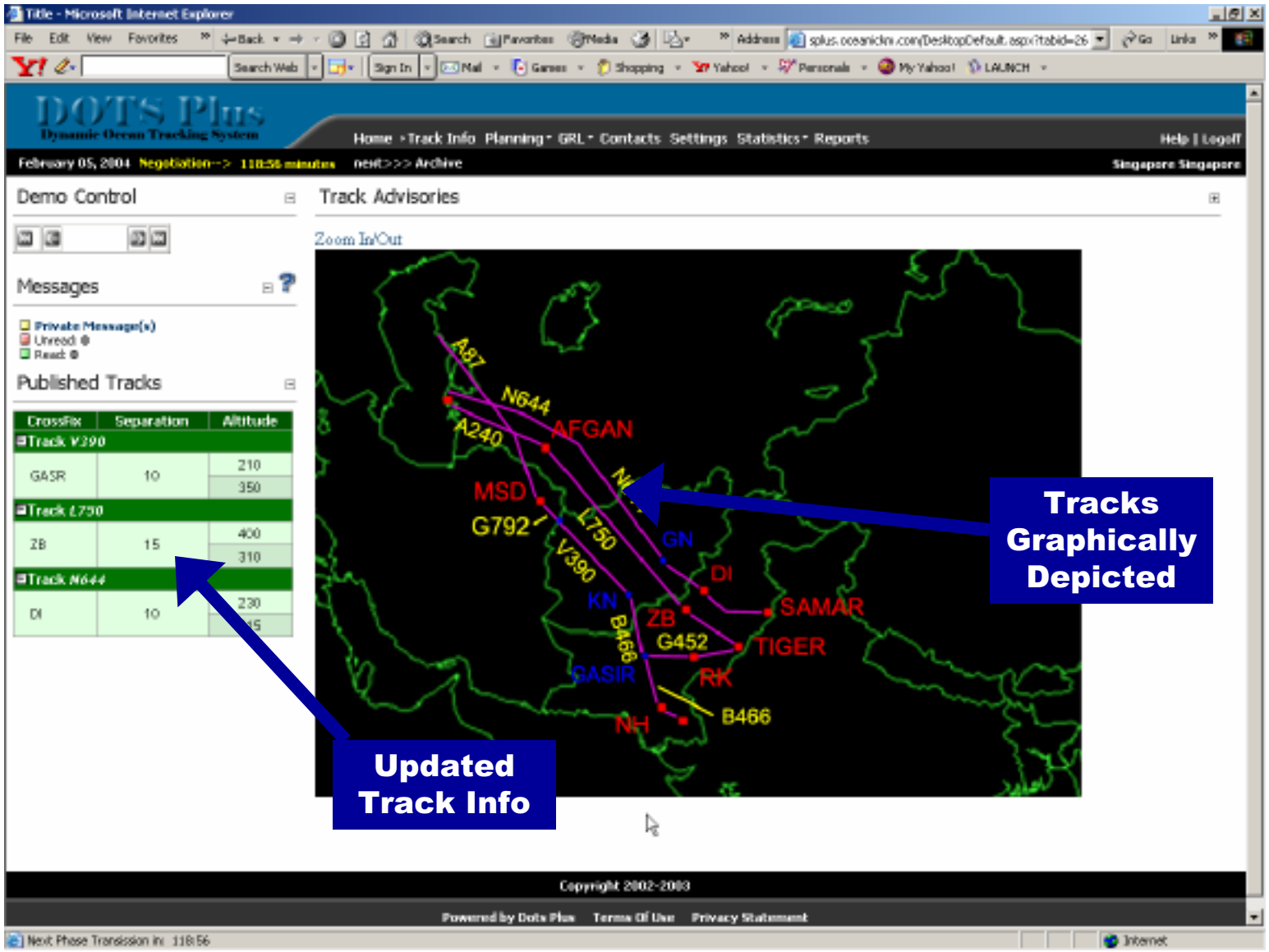
Proposed DOTS+ Online Track Advisory Web-based Interface

- Web accessible and password protected.
- The DOTS+ Track Advisory secure web server would be available from any location with internet access.
- User accessible web interface is in lieu of the AFTN/NADIN II exchange used for Oakland track advisory.
- A web interface is a more flexible and user friendly approach to Track Advisory.

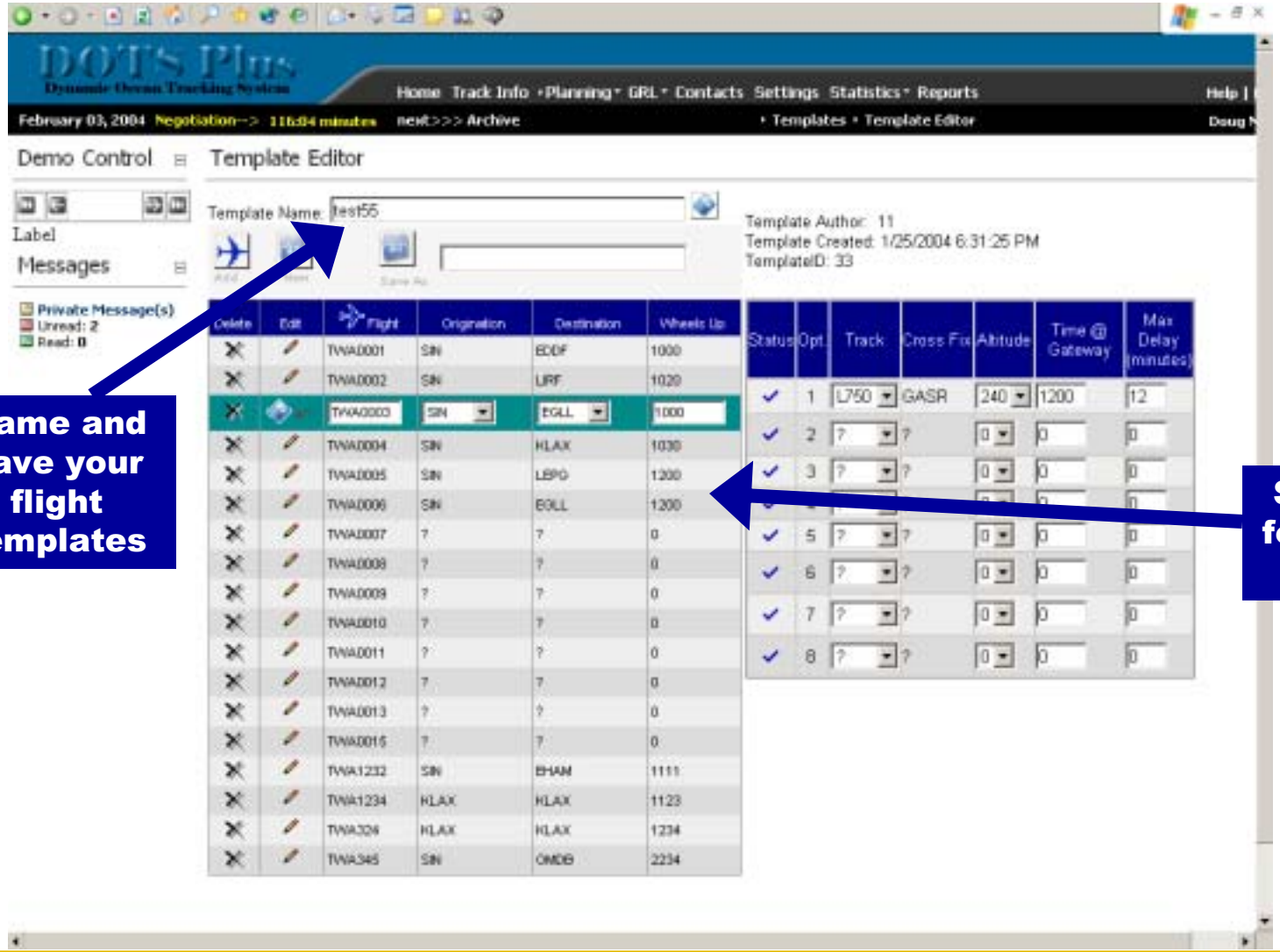
Step 1: Logon, Status and Messages



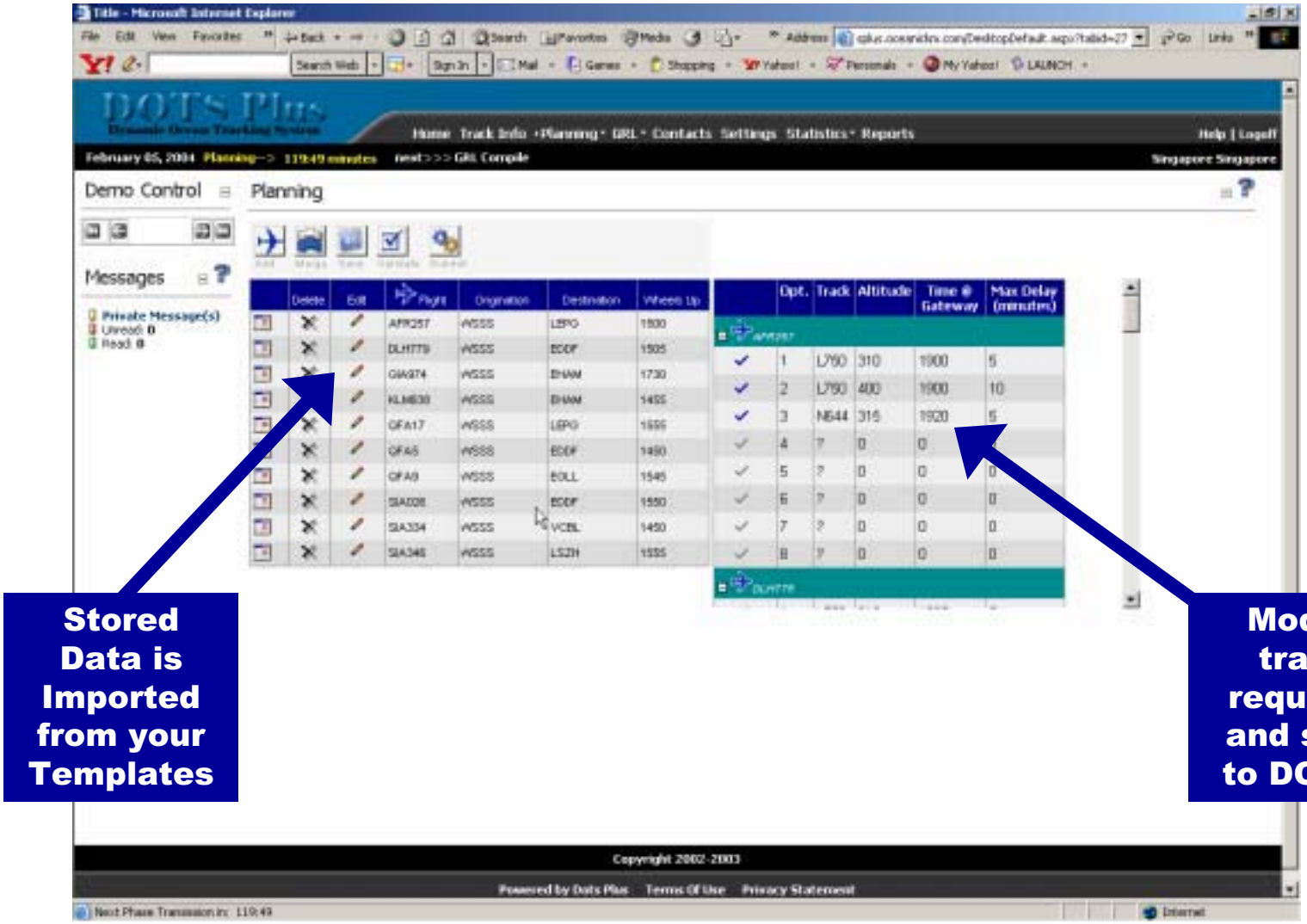
Step 2: Daily Updated Track View



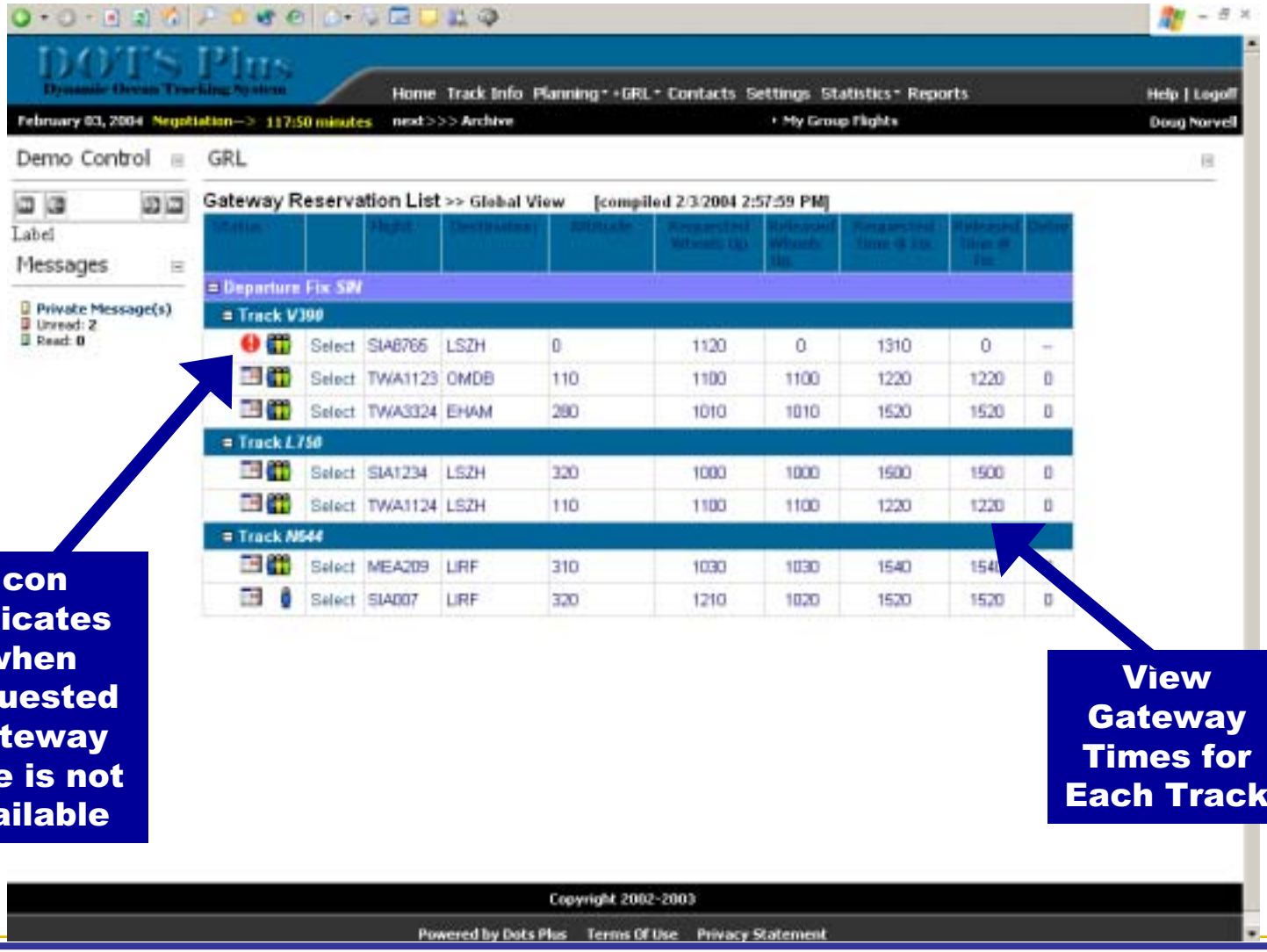
Step 3: Create Templates for Recurring Flights



Step 4: Update Track Requests and Send Flight/Track Requests to DOTS+



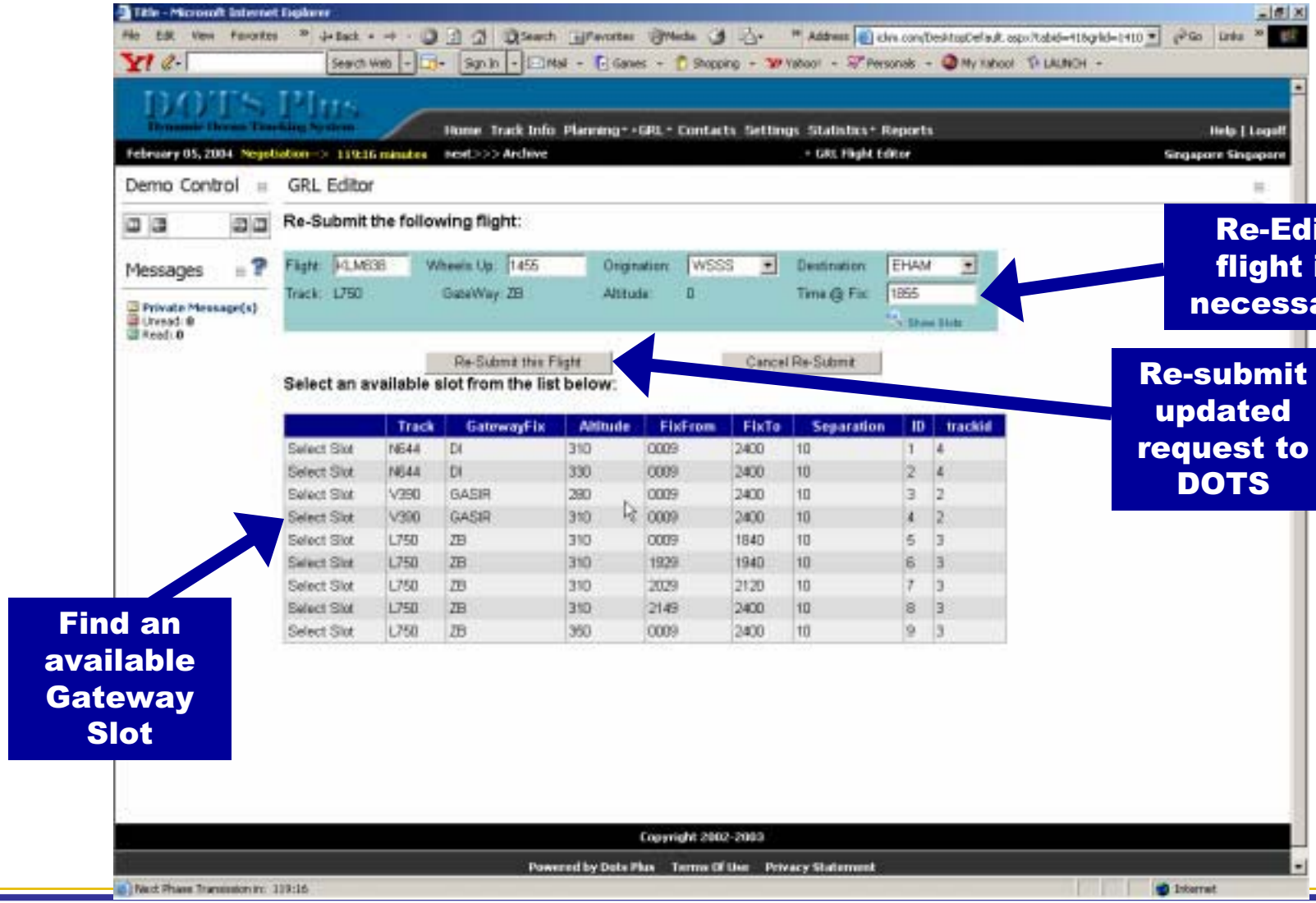
Step 5: View DOTS Generated Gateway Reservation List



Icon indicates when requested Gateway time is not available

View Gateway Times for Each Track

Step 6: Change and Re-submit Requests if Necessary



Paper Bay of Bengal Exercise

- The FAA and IATA ran a Track Advisory simulation for the Bay of Bengal in May, 2004.
- Nine air carriers participated by submitting Gateway Reservation Requests for a specified date.
- 39 Bay of Bengal flights were included in the simulation.
- DOTS+ generated Gateway Reservation Lists for N644, A466, L750, V390 and G462.
- To account for incomplete participation in the exercise, FL280 was reserved to simulate flight departing airports in Pakistan and India.

Paper Exercise Results with 15 Minute Flow Rate

- NUMBER OF FLIGHTS PUT INTO PROGRAM: 39
- NUMBER OF FLTS SCHEDULED ON-TIME: 23
- NUMBER OF FLTS SCHEDULED WITH DELAY: 14
- MINIMUM DELAY: 1
- MAXIMUM DELAY: 14
- AVERAGE DELAY TIME FOR DELAYED FLTS 7.5

Two flts were not placed due to maximum submitted delay times exceeded.

- Of the 37 flights placed, 36 were placed over their primary requested gateway and 31 were slotted at their primary requested altitude.

Paper Exercise Results with 10 Minute Flow Rate

- NUMBER OF FLIGHTS PUT INTO PROGRAM: 39
- NUMBER OF FLTS SCHEDULED ON-TIME: 29
- NUMBER OF FLTS SCHEDULED WITH DELAY: 10
- MINIMUM DELAY: 1
- MAXIMUM DELAY: 9
- AVERAGE DELAY TIME FOR DELAYED FLTS 6.6

All flights were placed

- Of the 39 flights placed, 39 were placed over their primary requested gateway and 35 were slotted at their primary requested altitude.

Business Options

(All options are based on cost-reimbursement arrangement)

Option A: The FAA supplies DOTS+ Online Track Advisory as a complete end-to-end service. The system and services reside in the US and is operated by the FAA.

		ROM Cost Estimate in USD
Hardware – Includes non-redundant web server, operating system licenses, hardware firewall, dedicated DOTS+ server and related peripherals with setup/test	FAA acquired. Resides in US	$90,500
Software Development – Includes development of the web interface, the online database manager and the web server to DOTS interface	FAA development (~1160 labor hours)	$108,200
Track Advisory Services – Daily operation of the track advisory function	Performed by FAA	$9,750/month
System Maintenance – Routine maintenance of the DOTS and OTA system.	Performed by FAA	Included in services cost
Software Maintenance – Configuration changes, upgrades and fixes to the DOTS OTA software	Performed by FAA	Included in services cost
Maintenance Training – Training materials and instruction for maintaining the DOTS+ OTA	Not Required	N/A
Operations Training – Training materials and instruction for performing Track Advisory Services	Not Required	N/A
Technical Support – 24/7 support desk and help line for operators and users.	Minimal	Included in services cost

Business Options (cont)

(All options are based on cost-reimbursement arrangement)

Option B: The FAA specified DOTS+ hardware is acquired by a BOB state or 3rd party. The system resides in a BOB state, or 3rd party location and is operated and maintained by a BOB state or 3rd party.

		ROM Cost Estimate in USD (travel costs not included)
Hardware – Includes non-redundant web server, operating system licenses, hardware firewall, dedicated DOTS+ server and related peripherals with setup/test	BOB state or 3rd party. Resides in Asia or 3rd party location.	Local cost TBD. FAA setup/test cost $12,000
Software Development – Includes development of the web interface, the online database manager and the web server to DOTS interface	FAA development (~1160 labor hours)	$108,000
Onsite System Testing – FAA conducted site test of the DOTS+ OTA system.	Performed by FAA	$9,500
Track Advisory Services – Daily operation of the track advisory function	Performed by BOB state or 3rd party	Local cost TBD
System Maintenance – Routine maintenance of the DOTS and OTA system.	Performed by BOB state or 3rd party	Local cost TBD

Business Options (cont)

(All options are based on cost-reimbursement arrangement)

Option B (cont): The FAA specified DOTS+ hardware is acquired by a BOB state or 3rd party. The system resides in a BOB state, or 3rd party location and is operated and maintained by a BOB state or 3rd party.

		ROM Cost Estimate in USD (travel costs not included)
Software Maintenance – Configuration changes, upgrades and fixes to the DOTS OTA software. This is an open-ended activity.	Performed by FAA	As needed - time and materials based
Maintenance Training – Training materials and onsite instruction for maintaining the DOTS+ OTA	Performed by FAA (based on 100 labor hrs document development and 80 labor hrs training)	$16,000
Operations Training – Training materials and onsite instruction for performing Track Advisory Services	Performed by FAA (based on 100 labor hrs document development and 80 labor hrs training)	$16,000
Technical Support – 24/7 support desk and help line for operators and users. This is an open ended activity.	Performed by FAA (8 month estimate based on 190 labor hours)	$15,000

www.ato.faa.gov

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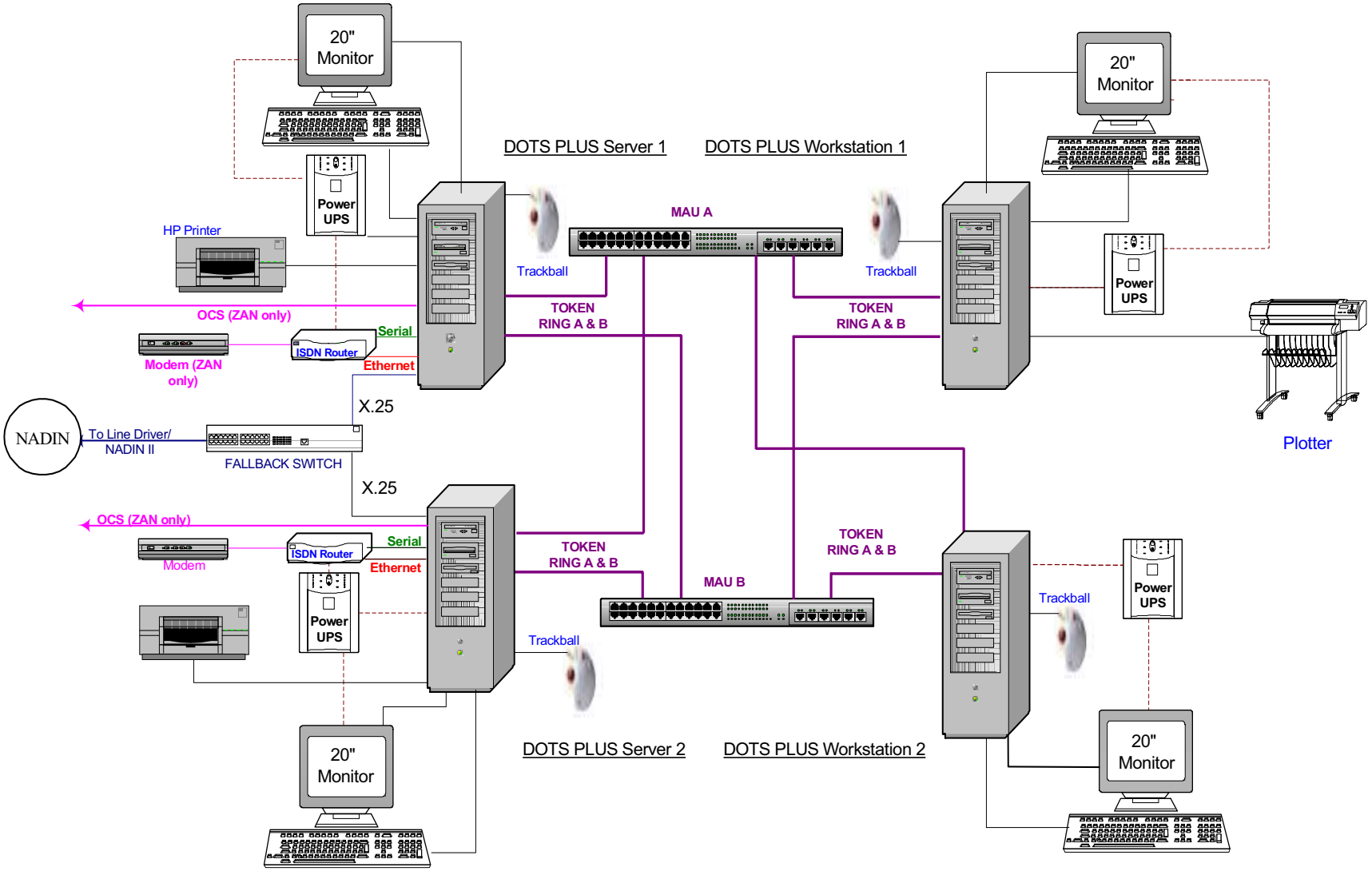
Back-up Information

Current Configuration

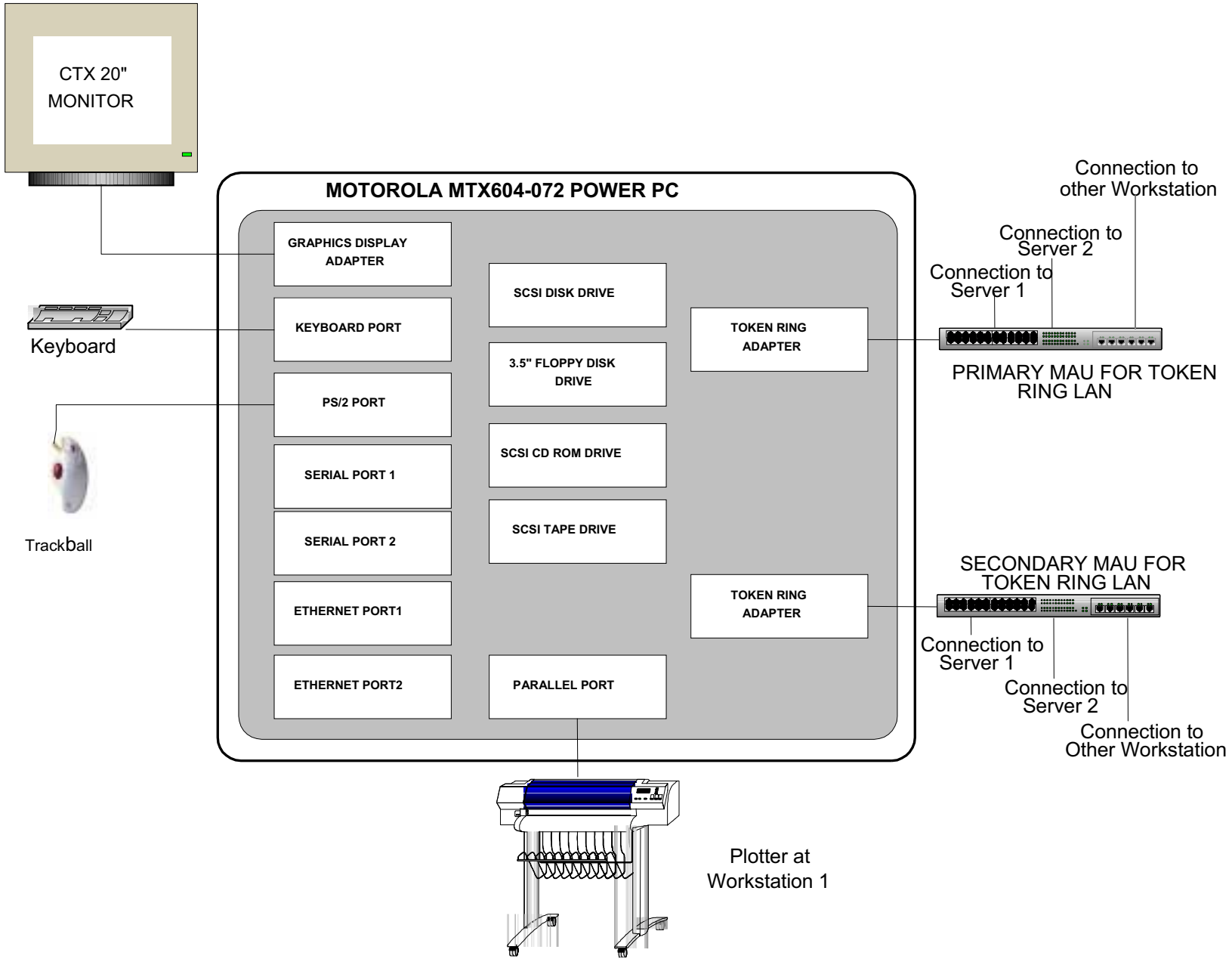
- The DOTS Plus system consists of four primary components:
  - DOTS Plus Servers
  - Workstations
  - Token Ring LANs
  - Weather Servers

- DOTS Plus operates in a UNIX environment under the IBM Advanced Interactive Executive (AIX) operating system version 4.3.2

Current Configuration



Workstation Configuration



Air Traffic Flow Management for Westbound Aircraft Transiting the Kabul FIR

Presented by Thailand

Purpose of the Working Paper

- To explain a proposed AEROTHAI ATFM system to accommodate air traffic transiting the Kabul FIR during the busy nighttime period

- To take into consideration the route structure from all departure aerodromes to Kabul entry point so as to allow a safe, economical and smooth flow for all aircraft

Traffic in Bay of Bengal area

Traffic Forecast – next 15 years

- It looks like we may have got our traffic forecasts wrong!!
- On present indications, rather than a doubling of traffic in 13 years, we may be looking at 6-9 years.
- The question is? Are we ready under our present system.
- Suggest the answer is no.

Preparation for ATFM

- Several ICAO meetings dealing with the ATFM issue have already taken place
- At the Special Coordination Meeting (SCM) in early February 2005, Terms of Reference for a Task Force were developed
- Phased implementation of ATFM was agreed to
  - Phase 1 looked at westbound routing through the Kabul FIR during the busy nighttime period
- SCM agreed to support Thailand to develop and operate an ATFM system for Phase 1

Mini-Working Group Meeting – Singapore 14-15 March 2005

- Identified steps to assist implementation of Phase 1
  - **Complete an analysis of traffic data**
  - **Identify enroute bottlenecks**
  - **Develop an AFTM tool to optimize usage of all ATS routes and available levels thru Kabul FIR**
  - **Trials and demonstrations of the ATFM mechanism**
  - **Develop an Action Task List**
- AEROTHAI has continued moving forward in developing an ATFM computer model
- Target date for completion – AIRAC Date 29 Sep. 2005

Statistical Data and Ideas

- On average, 46 aircraft transit the Kabul FIR westbound each night between 1900-2359 UTC
  - theoretically, 4 routes, 11 levels (not including FL390), 10 minutes separation allows 66 aircraft in 1 hour
- One week data collection revealed
  - routes are not shared equally which causes bunching over the five hour period either enroute or entering Kabul FIR
  - Thailand has taken these issues into consideration in developing their model

Breakup of Statistics-Kabul FIR

Traffic Statistics through Kabul FIR

Date	G792/V390	L750	N644	A466	Total
3-4-05	4	14	19	2	39
4-4-05	10	9	15	9	43
5-4-05	1	16	17	3	37
6-4-05		23	24	7	54
7-4-05		26	19	8	53
8-4-05		16	25	9	50
9-4-05	2	13	17	12	44
Total	17	117	136	50	320

Liaison with other States

- AEROTHAI recently had discussions with India on these matters which proved encouraging and cooperative in coming to grips with numerous issues regarding ATFM and bottlenecks in airspace over India and leading into Pakistan
  - Further talks are expected to continue

AEROTHAI Concept of Operations for ATFM

Enroute Bottlenecks

- Have a serious effect on ATFM procedures
  - Occur in more than one locations for traffic departing east of the bay of Bengal

Proposed ATFMU Equipage

- Data transfer to/from ATFMU/Airlines/States
- Communications requirements
- Proposed ADS type monitor to observe track details
- All ATFMU equipment has similar reliability to other operational installations such as ACC

AEROTHAI Concept of Operations for ATFM

Technical and Operational staffing requirements

- ATFMU will be staffed by qualified operational and technical staff trained in the necessary procedures to operate, make decisions and maintain the necessary equipment to coordinate with States and airlines involved

- They will be on duty in sufficient time to input data well in advance of the Kabul entry time, taking into account the length of time from departure to the Kabul entry point

AEROTHAI Concept of Operations for ATFM

Operational Procedures

- Aircraft to submit their flight plan and preferred route and level plus 2 alternatives
- Aircraft crossing the bay of Bengal to advise their initial level
- Computer will calculate if traffic bunching is likely to occur and advise the State concerned for them to find solution
- Aircraft may plan on any of the four routes through Kabul FIR however
  - As each departing airport will be allocated preferred routes through Kabul FIR, this will have precedence over an aircraft from another airport if traffic dictates

Preferred routings over Kabul FIR

Preferred Routing over Kabul FIR and Bay of Bengal

Departure Point	Preferred Route(s) Kabul FIR	Over Bay of Bengal
Bangkok and overhead	N644 and A466	L507 and P646
Singapore and Kuala Lumpur	L750, G792/V390 A466	L759 P628 M770
China and Hong Kong	N644 and A466	via Yangon FIR Nth. sector
Delhi, Mumbai and Chennai	L750 and A466	
Islamabad	N644 and A466	
Others departure points		

Thailand's position on ATFM

- ATFM system should be practical and robust
- ATFM system must be flexible to adapt to changing circumstances
  - Weather conditions within the Bay of Bengal
  - Restrictions and requirements within Afghanistan
- Overall management of any ATFM system should be vested in a State or States within the area of the ATFM operation

Action by the Meeting

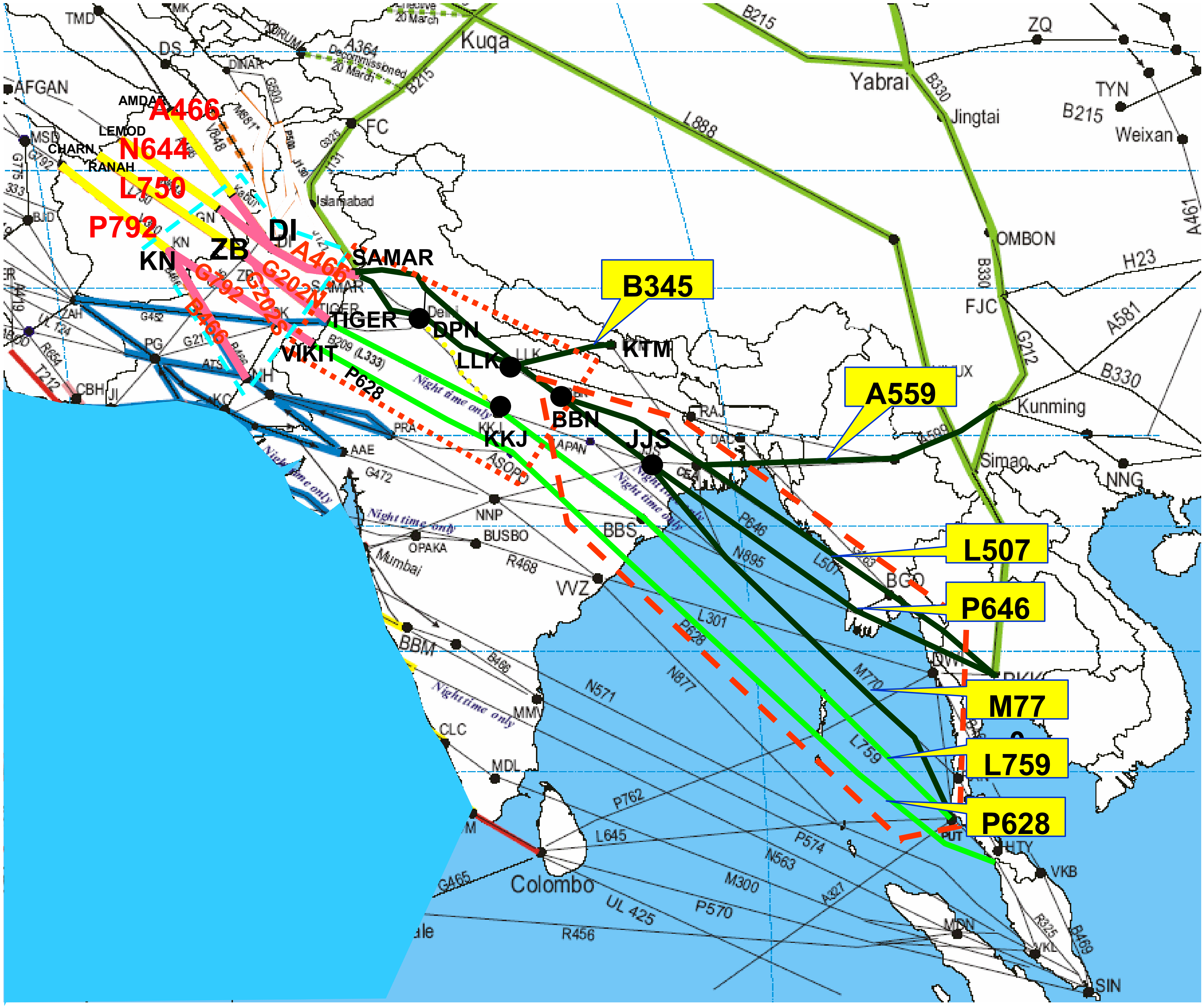
The Meeting is invited to:

a) In agreeing with an ATFM model, consider the overall flight plan from departure point to the Kabul FIR entry point to ensure a smooth and expeditious flow of air traffic

b) Implement a mechanism to overcome bottlenecks along the route structure

c) As air traffic increases, give consideration to introduce proportionate sharing of all routes through the Kabul FIR

d) Support the AEROTHAI Draft ATFM Concept of Operations Document attached to this working paper



A466
N644
L750
P792
DI
ZB
KN
A466
G202N
G792
G202S
B466
SAMAR
TIGER
VIKIT
DPN
LLK
KTM
BBN
KKJ
JJS
P628
B345
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Islamabad
Yabrai
Jingtai
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Weixan
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OMBON
FJC
Kunming
Simao
NNG
B215
L888
B330
A581
H23
G212
A461
Delhi
Night time only
AAE
NNP
BUSBO
OPAKA
Mumbai
R468
VVZ
BBS
BBM
MMV
CLC
MDL
Colombo
L645
P762
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M770
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SIN
R325
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CONCEPT OF OPERATION

AIR TRAFFIC FLOW MANAGEMENT

for

WESTBOUND AIRCRAFT TRANSITING

the

KABUL FIR

Presented by AEROTHAI

Draft Version 1.0

1. PURPOSE

- The purpose of this Document is to set out a Concept of Operation for the provision of an Air Traffic Flow Management System to cater for the westerly nighttime rush period of aircraft proceeding to European destinations who plan to transit the Kabul FIR.

2. BACKGROUND

- Over the past 3 years since the introduction of EMARSSH and RVSM in this area, there has seen many occasions where an uncoordinated flow of air traffic, planning to transit the Kabul FIR, has resulted in bottlenecks along routes flown and, on occasions, resulting in aircraft being diverted via I.R. Iran due to insufficient separation over Afghanistan. This has caused unscheduled technical stops enroute to the original destination, resulting in severe financial penalties to the international airlines, coupled with significant inconvenience to passengers.

- Several ICAO meetings have been devoted to this subject in an effort to overcome the matter. Finally it was agreed that an Air Traffic Flow Management (ATFM) procedure should be introduced. Not only are there problems today, but with the rapid increase of air traffic forecast to take place in this area in the not too distant future, it was deemed necessary to have in place an ATFM system to accommodate these forecasts.

3. PRESENT TRAFFIC STATISTICS

- A survey was conducted for one week from 3 – 9 April 2005 for aircraft planning to transit the Kabul FIR westbound during the period 1900-2359 UTC. The following Chart using statistics from Lahore FIR gives a breakup of aircraft using the four available routes through the Kabul FIR during this period:

Traffic Statistics through Kabul FIR

Date	G792/V390	L750	N644	A466	Total
3-4-05	4	14	19	2	39
4-4-05	10	9	15	9	43
5-4-05	1	16	17	3	37
6-4-05		23	24	7	54
7-4-05		26	19	8	53
8-4-05		16	25	9	50
9-4-05	2	13	17	12	44
Total	**17**	**117**	**136**	**50**	**320**

- These statistics highlighted some relevant points of interest in the present day operations over Afghanistan:

  - The present requirements require that both A466 and N644 need to be treated as one route from position SAMAR (near Delhi/Lahore FIR Boundary) to their respective Kabul entry points. This makes their combined total of 186 movements over the 7 day period, far in access of the other two routes of G792/V390 and L750 which are 17 and 117 respectively;

  - Although considerable work and effort has been undertaken by both India and Pakistan in opening a shorter route leading to the entry point ASLUM on G792/V390 from Rahim Yar Khan (RK) at the request of international airlines, the route is still under-utilized compared to other routes through Kabul FIR;

  - There is an average of 6 aircraft departing Delhi during the nighttime rush period, mostly proceeding over the Kabul FIR on N644/A466;

  - There are no statistics on aircraft leaving Pakistan airports transiting the Kabul FIR. Most, if not all aircraft departing Pakistan have Islamabad as their departure point. This city is very close to the Afghanistan border with Pakistan and perhaps they now plan to proceed via I.R. Iran;

  - Lufthansa now has a daily service out of Guangzhou in China which normally operates via N644;

  - Some aircraft plan via N644 from Kuala Lumpur and Singapore, increasing the burden on this heavily populated route;

- Some aircraft from Bangkok and Vietnam plan via L750;

- There are several aircraft which use the same routes over the Bay of Bengal and Indian sub-continent but do not proceed through Afghanistan. Nevertheless they do occupy flight levels used by aircraft proceeding through the Kabul FIR so they need to be taken into consideration in any computer modeling;

4. **EN-ROUTE BOTTLENECKS**

- With regard to aircraft planning via N644 and A466 through the Kabul FIR from airports to the east of the Bay of Bengal, there are potential enroute bottlenecks which need to be taken into consideration in order to effectively manage ATFM from departure to their entry points into Kabul FIR. It is recommended that close coordination between the ATFM unit and India/Pakistan would assist a smoother flow of aircraft through these areas of congestion;

- As an example, aircraft departing or overflying Bangkok have the opportunity of tracking by either L507 or P646. These laterally separated routes come together at Varanasi, approximately 330NM east of Delhi. Aircraft then proceed via R460 to Jalalabad – Delhi A466 – SAMAR or via R460 to Jalalabad – M890 – SAMAR causing a further potential bottleneck at SAMAR;

- Another example occurs when aircraft departing from Kuala Lumpur or Singapore choose to transit Kabul FIR via A466. These aircraft normally plan via M770 over the Bay of Bengal and join P646 at either LEGOS or Jamshedpur east of Varanasi. This is a further impediment to the Varanasi bottle neck issue;

- A similar scenario occurs for flights planning to transit the Kabul FIR on N644/A466 tracking via SAMAR to Dera Ismail Khan (DI) where A466 splits from N644. This large number of aircraft, coupled with aircraft out of Delhi which normally flight plan one of these routes, have caused delays and/or diversions in the past over Indian and Pakistan airspace.

- AEROTHAI is taking all of these issues mentioned above in consideration in the development of their ATFM system.

5. PROPOSED ATFMU EQUIPMENT REQUIREMENTS

- A study will be made to ensure that a Web-Based system is capable of carrying out all of the required functions in the area under consideration as it requires all participants to have the reliability to transfer, receive and monitor the mandatory data. A further study will also be made on the use of AFTN to alternatively achieve this requirement;

- Compatible communications between the ATFMU, airlines and ACCs concerned needs to be arranged.

- It is proposed that an ADS type monitor will be incorporated within the ATFMU to observe aircraft tracking details, especially over the Bay of Bengal. This information may be relayed to ACCs concerned to assist them in tactical solutions if required, especially where bottlenecks may occur;

- All equipment will be operated using operational power supplies and communications.

6. TECHNICAL AND STAFFING REQUIREMENTS OF THE AEROTHAI ATFM UNIT (ATFMU)

- The ATFMU will be staffed by qualified operational and technical staff trained in the necessary procedures to operate, make decisions and maintain the necessary equipment to coordinate with States and airlines involved;

- ATFMU staff will be required to be on duty in sufficient time to input data well in advance of the Kabul entry time, taking into account the length of time from departure to the entry point into the Kabul FIR;

7. OPERATIONAL PROCEDURES

- Aircraft are required to submit their preferred route and level to transit the Kabul FIR, plus two alternatives to the ATFMU. It is also proposed that they submit their intermediate level and routing if proceeding across the Bay of Bengal. This information should be submitted in sufficient time to allow the ATFMU to analyze and select the optimum solution;

- To assist Indian ACCs, where most route bottlenecks occur, it is proposed that the ATFMU on receiving flight plan information from aircraft, will calculate if traffic bunching is likely to occur and liaise

with the appropriate ACC in finding a solution. This may require a new Kabul FIR entry time and a subsequent amended departure time or propose an alternative route;

- Aircraft may plan to transit the Kabul FIR on any one of the four available routes. Notwithstanding this procedure, each departing airport will be allocated preferred routing(s) through the Kabul FIR. If aircraft select other than their departure airport preferred route(s), it may require a change to routing if traffic dictates The preferred Kabul FIR routing(s) for each airport are listed below.

Preferred Routing over Kabul FIR and Bay of Bengal

Departure Point	Preferred Route(s) Kabul FIR	Over Bay of Bengal
Bangkok and overhead	N644 and A466	L507 and P646
Singapore and Kuala Lumpur	L750, G792/V390 A466	L759 P628 M770
China and Hong Kong	N644 and A466	via Yangon FIR Nth. sector
Delhi, Mumbai and Chennai	L750 and A466	
Islamabad	N644 and A466	
Others departure points		

8. **CONTINGENCY PLANNING**

- Contingency measures will be devised in coordination with States to cater for ATS route outages due to tropical cyclones over the Bay of Bengal.

- Contingency arrangements will be formulated in coordination with States due to closures of ATS routes or levels within the Kabul FIR caused by military requirements.

9. SUMMARY

- This Concept of Operation is intended to be broad by nature until discussions have taken place with States and Users concerned.

- It is considered that satisfactory entry into the Kabul FIR involves other enroute issues which will dictate this entry time. For this reason, we consider that a smooth flow of aircraft across the Bay of Bengal and through India and Pakistan plays a crucial role in achieving the end target.

Air Traffic Flow Management Task Force

Protocols of ATFM for ATFM/TF (version 2.0)

- Identify Phase One for ATFM – Bay of Bengal and South Asia

    - Critical hours:
        - Over Kabul FIR (and work back to DEP time)

    - Routes, Gates & Flight Levels:

▪	DI A466	SANAM (*now SITAX?*)	FL280* to FL390
▪	DI N644	PAVLO	FL280* to FL390
▪	G202N/L750	ROSIE	FL280* to FL390
▪	G792/KN/V390**	ASLUM	FL310 to FL390

        * *Note: FL 280 available only between 2000-2400 UTC.*
        ** *Note: G792 between ASLUM and KANDAHAR available only between 1901-2359 UTC.*

        - Take note of crossing routes within Indian and Pakistan airspace. Discuss with India and Pakistan as to whether they can solve this problem using other means or whether the ATFM/TF has to take this into consideration when allocating Gate Times into Kabul FIR.

- Principles of ATFM:

    - Define the area of operation *(i.e. listing of FIRS prior to Kabul FIR)*
    - Method and time of operation
    - Determine need for prioritisation of Kabul entry points depending on Departure location
    - Maximise the usage of the four routes and levels available through the Kabul FIR
    - Development of ATFM Handbook *(consider format of FANS1/A Operations Manual as suggested model for ATFM Handbook, review Eurocontrol Flow Management Handbook)*

    - ATFMU defined procedures – agreed by ATFM T/F
        - Roles & Responsibilities
        - Coordination with States and Airlines
        - Hours of coverage
        - Manning
        - Communication requirements with States and Airlines
        - Mechanism to obtain DEP reports for aircraft proceeding through Kabul FIR
        - Process for reservation and allocation of Gates, Slot Times and Flight Levels
        - Slot Time validity period and procedures for renegotiation/reallocation and procedure to permit “swapping” of allocated Slot Times
        - Updating Slot Times due to unforseen circumstances

- ACCs defined procedures
  - Departure ACCs
  - Priority for departing aircraft which have to meet Slot Times through Kabul FIR
  - Enroute ACCs
  - Review requirement for continuation of No PDC Procedures
  - Interface between
    - India & Pakistan
      - Use of radar spacing for aircraft at same level diverging at DI for A466/N644
    - Pakistan & Afghanistan
      - Confirm arrangements for use of FL280 regarding prior coordination

- Airline Operators – defined procedures
  - Responsibilities
  - Communications with the ATFMU (e.g. booking slots etc)
  - Coordination with ATFMU and ACCs
  - Ascertain preferred flight levels and routing for aircraft entering the Kabul FIR for aircraft departing India and Pakistan Airports

- Contingency arrangements
  - Kabul FIR restrictions
  - Weather deviations
  - Other contingency issues including ATFM system back-up

- Multi-Lateral Agreements and/or Regional AIP SUP
  - Arrangements for itinerant and ad-hoc flights through the Kabul FIR during allocated period of ATFM operations

- Priorities for ATFM TF:

  - Define Operational Requirements

  - Select ATFM system tool
    - Confirm preferred location of ATFM System Server and Management position(s) within the area of operation

  - Establish Working Groups as follows:
    - WG for Funding Arrangements
    - WG for Development of ATFM Handbook
    - Identify other WGs as required

TASK LIST FOR THE IMPLEMENTATION OF AN ATFM SYSTEM IN THE BAY OF BENGAL (VERSION 1.0)

ID	Task Name	Start Date	Finish Date	Completion Date	Resource Names/Remarks
1.0	**Operational Issues**				
1.1	Identify Operational Needs				
1.2	Co-ordinate and update Operational Concept				
1.3	Define airspace affected				
1.4	Define data collection plan				
1.5	Examine the operational factors and workload associated with implementation				
1.6	Determine required ATC tools				
1.7	Develop, coordinate and submit necessary international and regional documentation				
2.0	**Establishment of an ATFMU**				
2.1	Develop and publish ATFM Policies & Procedures				
2.2	Develop, coordinate and submit necessary ATFM documentation (Handbook)				
2.3	Determine operating hours, manning and equipment requirements				
2.4	Coordination and communications requirements with ACCs and Airlines				
3.0	**Financial considerations**				
3.1	Determine need for Cost Benefit Analysis				
3.2	Determine funding arrangements for operation of ATFM service				
4.0	**Data collection for ATFM analysis**				
4.1	Benchmarking requirements and justification				

ID	Task Name	Start Date	Finish Date	Completion Date	Resource Names/Remarks
5.0	**Determination of Systems and Performance requirements**				
5.1	Establishment of coordination links between ATFMU and ACCs				
5.2	Determine and develop interface requirements between airlines and ATFMU				
5.3	Assess workload and procedures				
6.0	**Complete coordination with adjoining States and Industry organisations**				
6.1	Publish necessary AIP Supplement/NOTAM				
6.2	Communicate with States, ATS Providers, Communications Service Providers and international airspace users				
6.3	Confirm common understanding of published requirements				
7.0	**Develop Airline Procedures**				
7.1	Review contingency procedures for applicability				
8.0	**Develop ATC Procedures**				
8.1	Assess ANSP's workload and procedures				
8.2	Determine need for simulations				
8.3	Harmonise ANSP's requirements				
9.0	**Training**				
9.1	Conduct training for Air Traffic Controllers				
9.2	Information dissemination to Airline Operators				
10.0	**Perform system verification**				
10.1	Complete trials and evaluation of ATFM tool and coordination procedures with ATFMU				
10.2	Perform end to end system integration and standardization.				

ID	Task Name	Start Date	Finish Date	Completion Date	Resource Names/Remarks
11.0	**Final Implementation Decision**				
11.1	Review all factors affecting implementation decision				
11.2	Declare full operational capability within defined area				
11.3	Develop Post- Implementation follow-up Plan for expansion of ATFM				
12.0	**Monitor System Performance**				
12.1	Perform follow-on monitoring				

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LIST OF WORKING AND INFORMATION PAPERS

WORKING PAPERS

WP/No.	Agenda Item	Subject	Presented by
1	1	Provisional Agenda	Secretariat
2	6	Extract from the RVSM/TF/25 Report in relation to level assignment	Secretariat
3	6	Air Traffic Flow Management Task Force - Review and Planning	Secretariat
4	5	Draft Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Datalink Systems in the Asia/Pacific Region	Secretariat
5	2	ICAO OPLINK Panel Draft CPDLC Guidance Material	Secretariat
6	2	FANS 1/A Operations Manual (FOM)	Secretariat
7	7	Language Proficiency	Secretariat
8	7	The Proposed Establishment of a “Whole of Indian Ocean ATS Coordination Group”	Secretariat
9	7	Update FIT-BOB Work Plan	Secretariat
10	7	Update FIT-SEA Work Plan	Secretariat
11	4	Operation and Funding of the CRA for the Bay of Bengal ADS/CPDLC Operational Trial	Secretariat
12	3	ADS/CPDLC Equipage and Participation of States in operational trials of ADS/CPDLC	Secretariat
13	6	Summary of Discussions – Informal ATFM Working Group Meeting, Singapore 14 & 15 March 2005	Australia
14	4	Financing a Centralized Reporting Agency for the Bay of Bengal ADS/CPDLC Operational Trial	Secretariat
15	6	Proposal to develop and implement an Air Traffic Flow Management (ATFM) System in the Bay Of Bengal and westwards for aircraft transiting the Kabul FIR	Thailand
16	4	Offer of Central Reporting Agency for FIT-SEA by CRA Japan	Japan
17	3	Sri Lanka – Status of ADS/CPDLC Equipage and Participation in the BOB Operational Trials ADS/CPDLC	Sri Lanka

INFORMATION PAPERS

IP/No.	Agenda Item	Subject	Presented by
1	1	List of Working and Information Papers	Secretariat
2	7	Implementation of 30/30 Separation Standards in Oceanic Airspace	Australia
3	7	The Australian Organised Track Structure (AUSOTS)	Australia

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