INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE



# REPORT OF THE TWENTY-FIRST MEETING OF THE BAY OF BENGAL

# ATS COORDINATION GROUP (BBACG/21)

Bangkok, Thailand, 07 to 10 March 2011

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

Approved by the Meeting
and Published by the ICAO Asia and Pacific Regional Office

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**PART I – HISTORY OF THE MEETING**

1.             **Introduction**

1.1             The Twenty-first Meeting of the Bay of Bengal ATS Coordination Group (BBACG/21) was held at the ICAO Asia and Pacific Regional Office from 07 to 10 March 2011.

1.2             The BBACG/21 meeting report is available from the website of the ICAO Asia/Pacific Regional Office at http://www.bangkok.icao.int/

2.             **Attendance**

2.1             The meeting was attended by 31 participants from Bangladesh, India, Indonesia, Malaysia, Pakistan, Singapore, Sri Lanka, Thailand and IATA.  The list of participants is at **Appendix A**.

3.             **Officers and Secretariat**

3.1             Mr. Len Wicks, Regional Officer, Air Traffic Management from the ICAO Asia and Pacific Regional Office, acted as the Secretary for the BBACG/21 meeting, assisted by Mr. John Richardson, ATM Expert, ICAO Asia and Pacific Office.

4.             **Opening of the Meeting**

4.1             Mr. Len Wicks, on behalf of Mr. Mokhtar A. Awan, Regional Director, ICAO Asia and Pacific Regional Office welcomed all participants to Bangkok.

5.             **Documentation and Working Language**

5.1             The working language of the BBACG meeting and the language for all documentation were in English.  Thirteen (13) Working Papers (WP) and four (4) Information Papers (IP) were presented to BBACG/21 meeting.  Malaysia as originator of WP08 requested the paper to be withdrawn.  The list of papers is shown at **Appendix B**.

**REPORT OF THE BBACG/21 MEETING**

**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:    Election of Chairman

Agenda Item 3:    Review outcomes of related meetings

Agenda Item 4:    Review current operations across the Bay of Bengal and identify problem areas

Agenda Item 5:    Implementation of the new CNS/ATM systems in the Region

Agenda Item 6:    ATS route developments

Agenda Item 7:    Development of State Contingency plans

Agenda Item 8:    Civil/Military Coordination

Agenda Item 9:    Review and update BBACG Task List

Agenda Item 10:   Any other business

Agenda Item 11:   Date and venue for the next meeting

**Agenda Item 2:     Election of Chairman**

**Request for nominations for BBACG Chairman**

2.1             As no nominations were received for the position of Chairman, Mr. Wicks acted as Moderator of the meeting.

**Agenda Item 3:     Review outcomes of related meetings**

**Outcomes from APANPIRG/21**

3.1             The twenty-first meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/21) was held at Bangkok from 6-10 September 2010.

3.2             WP02 was presented by the Secretariat, which described the APANPIRG/21 Conclusions and Decisions that were germane to the BBACG.  India noted that with regard to Conclusion 21/1, their extensive modernization programme would be fully compliant with ICAO SARPs.  Regarding Conclusion 21/39, IATA advised that they were comfortable with exclusive airspace for ADS-B equipped aircraft, but an appropriate approval process and priority for ADS-B aircraft within non-exclusive airspace were natural steps towards exclusive status.

**Outcome of the Fifth Meeting of the Bay of Bengal Reduced Horizontal Separation Implementation Task Force (BOB-RHS/TF/5)**

3.3        Five Meetings of the BOB-RHS Task Force have been held during the period from November 2009 until February 2011.  The meeting agreed with the revised BOB-RHS/TF Terms of Reference (TORs) as shown in **Appendix C** to this report and approved the 30 June 2011 Phase One implementation date for 50NM longitudinal separation on selected routes in the Bay of Bengal. Arabian Sea and parts of Pakistan and Afghanistan airspace. It was also agreed that, where necessary to do so, conventional ATS routes would be changed to RNAV routes where this procedure was applied.

3.4        India discussed the matter of crossing tracks in Bay of Bengal/Arabian Sea and Indian continental airspace.  In Bay of Bengal/Arabian Sea most traffic operates on parallel routes, and any crossing traffic is managed tactically.  The meeting was reminded that 50NM longitudinal separation can apply to tracks that cross at 44 degrees or less, and 50NM lateral separation can be applied on tracks that cross at 45 degrees or more, using either pre-determined waypoints or ATM systems that can determine the required 50NM spacing.

**Agenda Item 4:        Review current operations across the Bay of Bengal and identify problem areas**

**Status of State ATM Operations**

4.1        Meeting participants were requested to advise of any significant ATM developments and problem areas.  Bangladesh noted the need for coordination with India to enhance the safety and efficiency of current procedures.  Bangladesh advised that they planned to upgrade the radar service in Dhaka.  Bangladesh and India met during the BBACG/21 Meeting to immediately improve the coordination processes between Kolkata and Dhaka ATC Centres.  The States involved reported progress and advised that, in view of the increased traffic density across the Dhaka/Kolkata FIR boundary, they would be meeting again in the near future to update their Letter of Agreement (LOA).  The Secretariat commended the positive manner in which this coordination was conducted.

4.2        India had many on-going development projects. India particularly noted the 24 hour availability of CPDLC (Controller Pilot Datalink Communications), new automated ATM systems in Delhi and Mumbai, new radar systems, and the preliminary testing operations being conducted for the Indian GNSS (Global Navigation Satellite System) called GAGAN (GPS-Aided Geo Augmented Satellite Navigation System).  It was expected that the test of GAGAN would be completed by mid-2011. Moreover, AIDC (ATS Inter-facility Datalink Communications) would continue to be tested between Delhi and Karachi ACCs, and later between Mumbai and Muscat ACCs.

4.3        India also presented two Information Papers (IP03 and IP04), regarding the restructuring of ATS routes in the Kolkata FIR, and other ATM development activity being undertaken in India.  The meeting acknowledged the work being undertaken in order to improve safety and efficiency, given the rapid increase in Indian aviation activity.

4.4        Indonesia had a side-bar discussion with Malaysia, which resulted in good progress towards solutions to the issue of major traffic routes crossing RNAV route P627.

4.5        Malaysia advised that all area radar and non- area radar controllers in Kuala Lumpur ACC were now trained and ready for ADS-C and CPDLC (Automatic Dependent Surveillance – Contract). Training was on-going and Malaysia is expected to be ready for Phase 1 of reduced horizontal separations. The meeting noted that the ADS-C/CPDLC installation in Kuala Lumpur was reported as being not yet operationally stable however this matter was being worked on to meet the target date for implementation for the reduction of these reduced horizontal separation standards.

4.6        Sri Lanka had fully operational ADS-C and CPDLC, and was in the process of integrating these systems by the end of 2011.  It was also noted that flex tracks were being implemented in cooperation with the Maldives.

4.7        Sri Lanka advised that they had experienced some difficulties with the quality of inter-unit voice communication with Trivandram and Chennai using the VOIP (Voice Over Internet Protocol) system. India confirmed that they are not using the VOIP system for communication with Colombo ACC.  The system was being tested on both sides to rectify the problem.  Furthermore, Sri Lanka questioned the need for eastbound aircraft overflying Colombo from Africa to be descended from high level such as FL390 to sometimes FL290 before they entered Chennai airspace.  Sri Lanka and India met at a sidebar meeting to rectify these issues.  Regarding the matter of Southeast Asia bound aircraft being descended, the sidebar meeting agreed that there were a number of steps that should be undertaken to minimise the problem:

        a)    Data on aircraft using the Major Northwest/Southeast Traffic Flow and crossing routes must be collected and analysed, as well as data on aircraft NAV/COM capability, and how often the problem of early descents occurred;

        b)    India should consider an agreed upper airspace Operational Concept, which can provide a mandate to allow designation of certain requirements such as use of ADS-B and ADS-C as appropriate, RNP, and CPDLC for those portions outside VHF (Very High Frequency) coverage; and

        c)    India should consider the installation of an ADS-B system at Port Blair, to provide surveillance services which may allow tactical solutions on the crossing tracks, and an appropriate safety net.

4.8        Thailand advised of the completed installation of the Hat Yai radar site in 2010 and planned installation of five new radar sites before the end of 2013.  An ADS-B system was also planned to be installed during the period 2013-14.  At the same time, a new ATC Centre was expected to be completed.   A surveillance data sharing initiative was commenced with Malaysia during the 13th Malaysia-Thailand ACC Coordination Meeting.

**Combined Communications and Surveillance Coverage Diagram**

4.9        Thailand presented WP13, which presented combined SSR radar and VHF communications coverage in the Bay of Bengal and Arabian Sea areas on Google Earth provided in Attachments A, B and C, based on data gathered from States in Attachments D and E.  The meeting noted the need for the important coverage diagrams to include all forms of ATS surveillance, and for States to provide data to AEROTHAI in order to achieve this.

**BOBCAT Operational Updates and Enhancements**

4.10        Thailand presented WP14, regarding the enhanced data capability being developed for BOBCAT updates on BOBCAT Operations, the proposal to enhance capability of BOBCAT software and Collaborative Decision Making (CDM) development in Thailand.  The presentation (WP13 Attachment BOBCAT Operational Updates and Future Enhancements) is available on the APAC website under BBACG/21.  These enhanced BOBCAT capabilities included slot swapping, slot compression and the ability to allow airline CDM.  IATA emphasized that the data indicating poor departure punctuality was a matter of pilot discipline.

4.11        The meeting supported phased implementation of BOBCAT software capability enhancement in the following order of priority:

> a) Stage 1: High Priority
> > (i) Flight Plan and ATS Message Processing;
> > (ii) Flexible Taxi Time
> b) Stage 2: Medium Priority
> > (i) Slot Swapping;
> > (ii) Automatic Slot Compression
> c) Stage 3: Low Priority
> > (i) Slot Allocation Page changes and gate delay calculation;
> > (ii) Integration of data collection and analysis

4.13        Since Slot Swapping and Automatic Slot Compression were to be implemented in Stage 2, detailed parameters may not need to be finalized at this time, pending consideration by ANSPs and airlines involved.


**Agenda Item 5:      Implementation of the new CNS/ATM systems in the Region**

**Flight Plan 2012 Implementation**

5.1        The Secretariat presented WP05, which reminded States of critical milestones for the implementation of Amendment 1, Doc 4444 (PANS ATM) – Flight Plan 2012.  IATA advised that their airlines would only be filing in the NEW format from 15 November 2012, and that this amendment was a more fundamental and important change than those made during the period leading up to Y2K.

5.2        The Secretariat took the opportunity to remind States that those that had not done so already needed to update the FITS (*ICAO Flight Plan Implementation Tracking System*) web site with current information about their Flight Plan 2012 Point of Contact and transition plan.  Finally, the Secretariat urged that each State present should attend the forthcoming Flight Plan Seminar and Task Force, to be held at Bangkok from 30 May until 3 June 2011.


**Agenda Item 6:      ATS route developments**

**Indian Ocean Routes**

6.1        IATA presented WP09, WP10 and WP11 regarding connector routes in the Mumbai FIR as a first stage towards User Preferred Rotes (UPR), the application of UPR in the Indian Ocean, and uni-directional routes for crossing tracks between SE Asia and the Middle East and Africa.  The meeting discussed and agreed to the general concept of UPR.  It was agreed that there was a need for IATA in the first instance to work with the States involved, to develop the data required to support the concept of operations, and identify the ATM infrastructure that would enable flexible route structures.

6.2        India commented that they had received information about the Mumbai 'connector routes' which were presently being studied.  India mentioned that they were continuing to discuss the implementation of connector routes to support the AUSOTS extension trial scheduled to commence in March 2011.  India advised that recent data indicated that about 55% of aircraft operating in this airspace were not using ADS-C or CPDLC.  India also mentioned that there were a number of State aircraft operating in this airspace that were not necessarily in contact with ATC. The meeting agreed that the best course of action was for IATA to informally work with the States involved (and if necessary with the Regional Office) and to report to the next meeting.

6.3         It was noted that the scope of the BBACG did not extend to the total area of interest of the IATA WPs, but the meeting scope may change in the future to allow the AR-1 routes to be dealt with effectively by BBACG.

### Bay of Bengal Routes

6.4         Thailand presented IP02, which provided information on the coordination effort undertaken by India, Myanmar and Thailand to improve their ATM.  The Secretariat commended the States involved and noted that this was an example of effective coordination, which did not depend on ICAO or ICAO meetings.

### ATS Route Catalogue

6.5         The purpose of WP12 presented by IATA, was to review the ATS Route Catalogue.  The Secretariat undertook to send the requested route information to China and to request an update on any progress regarding the routes they were considering.  A number of other route requests were requested to be deleted from the Route Catalogue due to these long standing requests being overtaken by recent associated route changes.

6.6         The ICAO Asia Pacific Region ATS Route Catalogue was developed in 2004 (http://www.bangkok.icao.int/edocs/index.html) as a supplement to the Basic Air Navigation Plan (BANP, Doc 9673) and to assist with the amendment/ tracking process.  It was intended to be reviewed annually by appropriate ATS coordination group meetings.

6.7         Unfortunately due to resource issues in 2010, the Regional Office was unable to host a BBACG meeting. As such, they were not able to review the Route Catalogue, and according to the amendment record, this was last reviewed by BBACG/18 (January 2007).  The current edition is version 7, effective 27 May 2010.  Comments and updates were made to the following proposals which pertain to operations in the sub-region:

- ↗ Himalaya 1: CEA – NGK – INDEK - IATA will review the proposal with Nepal and coordinate a revision.

- ↗ Himalaya 2: KTM – BBD – GGT – KKU – IIM – KMG- The portion between Kathmandu and Imphal has been implemented.  China is looking into the implementation of the portion in Chinese airspace.

- ↗ IND 1: BBS – BPL- This will provide a 25NM reduction in track mileage.

- ↗ IND 5: BUTOP – JHANG- Extension of available hours has been requested to 2359 UTC.

- ↗ IND 6: BBS – SERKA- This proposal is no longer required.

- ↗ IND 7: PRA – SERKA – KAMAR- Amendment should be made from KAMAR to SOKAM.

- ↗ SEA 13: HTY – RAN- Thailand acknowledged IATA's proposal to remove the route from the route catalogue as it is already implemented as W17.

- ↗ THAI 1: KRT – DWI- Thailand will consider the proposal within the context of a holistic route review within the Bangkok FIR, with an expected time frame of 2012-2013.  However, coordination will be needed with Myanmar, as the route terminates at DWI.

    ↗    IDO 1: SJ – MABIX- Singapore and Indonesia are already providing the direct routing as traffic permits under their radar coverage.  Indonesia, Malaysia and Singapore will review the proposal over the next 12 months.

    ↗    IDO 5: VPG – GIVAL- The proposal can be deleted with the establishment of Y337 westbound.

    ↗    COL 1: KAT – TNV- IATA will review the requirement for this proposal.

    ↗    KAB 1: HANGU – GN- IATA intended to review the proposal as to whether it is still applicable.

**Agenda Item 7:    Development of State Contingency plans**

**Present Status of State Contingency Plans**

7.1    WP04 was presented by the Secretariat. This paper covered the important aspects of ATS Contingency Planning required by Annex 11.  The meeting was informed of the need to ensure that each State had a current Contingency Plan that covered issues like Pandemics, and which was compatible with neighboring States.  States advised that they had received the ICAO Draft Contingency Plan, based on the Indonesian model to assist them in preparations of their State Contingency Plans.

7.2    States were asked to describe their contingency planning efforts and it was noticeable that many were actively working together, such as the Special Coordination Meeting held involving the Philippines, Thailand, Indonesia, Singapore and IATA to harmonise State Contingency Plans.  States were urged to send their plans to the Regional Office when completed.

**Agenda Item 8:    Civil/Military Coordination**

8.1    There was no direct discussion under this item; nevertheless the subject had been raised by the meeting when discussing several important issues during the course of the meeting.

**Agenda Item 9:    Review and update BBACG Task List**

9.1    The BBACG Task List (WP07) was discussed and amended as required.  A copy of the revised Task List is at **Appendix D** to the report.

**Agenda Item 10:    Any other business**

**Seamless ATM**

10.1    The Secretariat presented WP06, which described the new emphasis on Seamless ATM, and how the APANPIRG Contributory Bodies Review Task Force may affect the BBACG.  The paper promoted discussion on the need for BBACG to increase its scope to include Major Traffic Flows AR-1 and AR-4, while recognizing that the definition of these traffic flows was outdated and did not include important routes such as from the Middle East to Australia and SE Asia.  In this regard, India suggested the inclusion of a new traffic flow (AR-XX) to represent the traffic from the Middle East to both Australia and SE Asia.

10.2    IATA supported the Seamless ATM Concept and agreed with the need to amend the scope of the BBACG to cover the traffic flows discussed.

10.3        The Secretariat agreed with IATA that the APAC Regions should receive the benefits of Seamless ATM as early as possible, based on more fundamental changes such as improved ATM Coordination Groups than relying on technological programmes.  The meeting also discussed the importance of a BBACG meeting being conducted before the end of 2011, in order to maintain the excellent progress in ATM coordination that had been instigated at BBACG/21.

10.4        Recommendations for the ATM/AIS/SAR SG were agreed by the BBACG/21 meeting as follows. The BBACG/21 recommended that the ATM/AIS/SAR SG:

>   a.    reviews and amends the description of the APAC Major Traffic Flows, to take into account recent route developments, such as the flows from the Middle East to Australia/SE Asia;

>   b.    reviews the BBACG TOR, to increase its scope to cover a geographical area that includes Major Traffic Flows AR-1 and AR-4;

>   c.    reviews the name of the BBACG so that it reflects any change in the TOR (suggested names are South Asia – SAACG, or Indian Ocean IOACG, or South Asia Indian Ocean ATM Coordination Group - SAIOACG); and

>   d.    notes that the BBACG expects to meet again before the end of 2011, and may meet more regularly than once a year if tasks require attention.

10.5        The meeting was advised that the Seamless ATM Symposium and AD-HOC meeting would take place on in Tokyo, Japan from 12 to 15 April 2011.  Due to the nature of the subject, States were strongly urged to attend and contribute to this important event

### 6th Global ATFM Conference

10.6        Thailand made a presentation on the recent Global ATFM (Air Traffic Flow Management) Conference held in Phuket, Thailand from 28 February until 2 March 2011.  A copy of the presentation is available on the APAC web site under BBACG/21 'General Information'.  This conference emphasized the relationship between ATFM and Seamless ATM principles and the application of ATFM on a sub-regional basis.  It highlighted the importance of airport and airspace capacity assessment, as well as traffic demand data sharing among key stakeholders concerned with major traffic flows.

### Jane's ATC Award – Enabling Technology

10.7        During the BBACG/21 Meeting it was announced by Thailand that the prestigious Jane's ATC Award 2011 – Enabling Technology had been awarded to the BOBCAT system on 7 March 2011. The meeting congratulated everyone that had been associated with the development and implementation of BOBCAT and in particular AEROTHAI.  IATA also reminded the meeting of the positive work done by Mr John Richardson in supporting the BOBCAT project.

### Agenda Item 11:    Date and Venue for the next meeting

11.1        The next meeting and venue were not decided at BBACG/21.

### Closing of the meeting

12.1          In closing the BBACG meeting, Mr. Wicks, Moderator of the meeting, summarized the substantive outcomes that had been achieved.

12.2          Mr. Wicks thanked all participants and their administrations for their excellent support and contributions.


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| 10. |  | **ICAO** |  |  |
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## LIST OF WORKING AND INFORMATION PAPERS

**WORKING PAPERS**

| NUMBER | AGENDA | WORKING PAPERS | PRESENTED BY |
|---|---|---|---|
| WP/1 | 1 | Provisional Agenda for BBACG/21 | Secretariat |
| WP/2 | 3 | Outcomes of APANPIRG/21 | Secretariat |
| WP/3 | 3 | Outcomes of BOB-RHS/TF | Secretariat |
| WP/4 | 7 | Present Status of State Contingency Plans | Secretariat |
| WP/5 | 5 | Flight Plan 2012 Implementation | Secretariat |
| WP/6 | 10 | Seamless ATM Implications for BBACG | Secretariat |
| WP/7 | 9 | Review BBACG Task List | Secretariat |
| WP/8 | | *Intentionally left blank* | |
| WP/9 | 6 | Connector Routes in Mumbai FIR supporting AUSOTS Tracks | IATA |
| WP/10 | 6 | User Preferred Routes | IATA |
| WP/11 | 6 | Uni-directional Crossing Routes | IATA |
| WP/12 | 10 | ICAO Asia Pacific Region ATS Route Catalogue | IATA |
| WP/13 | 4 | Combined Regional SSR Radar and VHF Communications Coverage | Thailand |
| WP/14 | 4 | BOBCAT Operational Updates and Future Enhancements | Thailand |

**INFORMATION PAPERS**

| NUMBER | AGENDA | INFORMATION PAPERS | PRESENTED BY |
|---|---|---|---|
| IP/1 | - | List of Working and Information Papers | Secretariat |
| IP/2 | 3 | Draft Report of the First India-Myanmar-Thailand and Air Traffic Management Coordination Meeting (IMT-ATM/CM/1) | India Myanmar Thailand |
| IP/3 | 6 | Restructuring of ATS Routes in North Eastern Airspace of Kolkata FIR | India |
| IP/4 | 5 | Developmental Activities undertaken in Indian FIRs | India |

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# Draft Terms of Reference

### Bay of Bengal Reduced Horizontal Separation Implementation Task Force
### (BOB-RHS/TF)

1) The objective of the ICAO BOB-RHS Task Force is:

In collaboration with affected stakeholders and ensuring inter-regional harmonization, develop and implement strategic, benefits-driven plans to improve en-route airspace efficiency by means of the implementation of reduced horizontal separation (lateral and longitudinal) based on the ICAO RNAV 10 (RNP 10) and RNP 4 PBN navigation specifications along the Major Traffic Flow AR4 (Southeast Asia to Europe, South of the Himalayas and the Middle East).

2) To meet this objective the Task Force shall:

a) Review the existing Bay of Bengal and the Oceanic area of the Mumbai FIR route structures and examine suitability's for implementation of reduced horizontal separation.

b) Identify areas/routes where the implementation of reduced horizontal separation would bring immediate operational efficiency

c) Determine the reduced horizontal separation required, taking into account traffic volumes and disposition, approval status of the aircraft operating on the relevant routes, user expectations and the communication and surveillance capabilities of ATS providers involved.

d) Examine the possibility of a step-by-step or phased implementation of reduced horizontal separation and detail the phases required and the areas/routes concerned.

e) Develop and action the necessary strategic plans with appropriate timelines to implement reduced horizontal separations based on the APANPIRG Regional PBN Implementation Plan and ICAO Standards and Recommended Practices, whilst taking into account the need for inter-regional harmonization and user requirements.

f) Ensure the conduct of Annex 11 compliant pre-implementation safety assessments and make arrangements for States to conduct ongoing post-implementation safety monitoring in accordance with ICAO provisions.

g) Consider setting up appropriate teams/groups which might but not necessarily, include the entire Task Force, to address and implement specific agreed measures within specific airspaces.

h) Cooperate with other Task Forces and groups which are involved with similar work in adjacent airspaces in order to achieve harmonized inter-regional solutions.

i) Explore possibilities for further enhancements to operational efficiency of routes through reconfiguration and/or enhanced surveillance.

3) Scope of work:

The Task Force shall adopt a phased implementation programme, as follows:

**Phase One:**     Implement 50NM longitudinal separation using CPDC or CPDLC communications in the Bay of Bengal and the Oceanic area of the Mumbai FIR as well as some portions of the Kabul FIR, on the following ATS routes:

   a) N571 across the Bay of Bay of Bengal and the Oceanic area of the Mumbai FIR into Muscat FIR;
   b) L510 across the Bay of Bengal into India airspace joining P628;
   c) P628 across the Bay of Bengal through India, G792 through Karachi FIR and Kabul FIR into Tehran FIR:
   d) UL333 from SERKA (Karachi FIR) through Kabul FIR to SOKAM (BDY Kabul/Tehran FIRs;
   e) B466 from SERKA (Karachi FIR) to PAROD (Kabul FIR)
   f)  P762 from DAWEI (DWI) to KAT (Colombo)

**Phase Two:**     a)  Implement 50 NM longitudinal separation on all other RNAV routes across the Bay of Bengal, Arabian Sea and some portions of the Indian Ocean (for aircraft from Southeast and Southern Asia to South Africa);
b)  Implement 50NM longitudinal separation on L509 from SAMAR through Lahore and Kabul FIRs
c)  Implement 50NM longitudinal separation on N644, L750 through Lahore and Kabul FIRs

**Phase Three:**   *To be determined*

The Task Force reports via the ICAO Bay of Bengal ATS Coordination Group (BBACG) to the ATM/AIS/SAR Sub Group of APANPIRG.

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# BBACG — TASK LIST

*(last updated BBACG/20, 29 January 2009)*

| ACTION ITEM | DESCRIPTION | TIME FRAME | RESPONSIBLE PARTY | STATUS | REMARKS |
|---|---|---|---|---|---|
| 18/2 | Chennai/Colombo FIR boundary harmonization | 2012 | India, Sri Lanka<br><br>Regional Office | Open | India informed BBACG that this matter now under consideration by the Govt of India. Timeframe to be updated at the BBACG/22 |
| 18/4 | Contingency Planning | 2012 | All States in the region,<br><br>Regional Office | Open | States in co-ordination with its neighbouring States, develop a contingency plan or plans for their airspace, taking into account Conclusion 17/11 Adoption of Model National ATM Contingency Plan. States to update contingency plan status at BBACG/22 |
| 18/5 | Establish requirements for setting up an EMA to provide horizontal safety management services for the Bay of Bengal area | August 2011 | BOB States, Regional Office | Open | SEASMA providing EMA support for BOBASMA.<br><br>BOBASMA to complete endorsement process through RASMAG. |
| 18/7 | Specify RVSM airspace as Class A | Update BBACG/22 | States<br><br>Regional Office | Open | India expected to upgrade airspace to class A. |
| 18/8 | Lowering MEA on G792 from FL310 to FL300 to be in alignment with P628 in India | Update BBACG/22 | India, Pakistan, ICAO APAC Regional Office, | Open | This matter is in coordination between Pakistan and India. Update at BBACG/22 |

| ACTION ITEM | DESCRIPTION | TIME FRAME | RESPONSIBLE PARTY | STATUS | REMARKS |
|---|---|---|---|---|---|
| 18/9 | Search and Rescue Agreements between States | Update BBACG/22 | Regional Office<br><br>All States | Open | a) States, in conjunction with their neighbouring State (s), will develop Search and Rescue Agreements, for the purpose of providing a more efficient response to a search and rescue action and increase the possibility of a successful search and rescue mission; States conduct joint training and exercises, as appropriate, to maximize proficiency;<br><br>b) a State, together with a neighbouring State, establish common SAR procedures, where practicable; and<br><br>c) Pakistan scheduled to meet with I.R. of Iran and Afghanistan on harmonization of SAR Plans<br><br>SAR agreements are reviewed at APANPIRG. |

| ACTION ITEM | DESCRIPTION | TIME FRAME | RESPONSIBLE PARTY | STATUS | REMARKS |
|---|---|---|---|---|---|
| 18/10 | Operate A466 and N644 as separate routes | Update BBACG/22 | Pakistan<br><br>Regional Office<br><br>Regional Office to coordinate with all parties concerned. | Open | SAMAR-LAJAK route to be established 10 March 2011 for a five hour period per day during BOBCAT operations |
| 18/12 | Develop a westbound Air Traffic Flow Management Plan (ATFMP) | Completed | All concerned States, IFATCA, IFALPA, IATA Regional Office | Closed | ATFM operational trial commenced 24 July 2006 under auspices of ATFM/TF. ATFM procedures implemented July 2007 to mange night time 4 hour busy period through Kabul FIR.<br><br>BOBCAT operational on 7 July 2007 |
| 19/2 | Australia, Indonesia and Sri Lanka use the opportunity provided by the reduction of longitudinal separation to 10 minutes MNT in the Colombo FIR to review route requirements with the objective of implementing RNP10 routes as widely as possible | Completed | Australia, Indonesia, Sri Lanka | Closed | Operational in 2009 |
| 19/3 | IATA consider conducting a one week survey of communications performance in Yangon FIR | Completed | IATA,<br><br>Regional Office | Closed | IATA members to be made aware that data from the survey will be made available agencies working in Myanmar to enhance comms.<br><br>IATA completed the survey end of 2009. Communications have considerably improved. IATA expect to cancel IFBP by end of 2011. |

| ACTION ITEM | DESCRIPTION | TIME FRAME | RESPONSIBLE PARTY | STATUS | REMARKS |
|---|---|---|---|---|---|
| 19/4 | Flex Track Connector Routes between Melbourne and Colombo FIRs | Completed | Australia, Sri Lanka, IATA | Closed | Assist ASIOACG/2 members to make these implementations<br><br><br>Completed |
| 19/5 | Establishment of Indian Ocean UPR (Southern Africa to Southeast Asia)<br><br>1. Australia - Compile Contact List<br><br>2. Australia - Develop Operational Concept which identifies Operators; City Pairs; & Aircraft types for interim application (March 2008)<br><br>3. Singapore Airlines to provide Flight Plan Data JNB – CPT - SIN | 2012 | Australia, IATA, affected States | Open | Assist ASIOACG members with this work.<br><br>Primary coordination point is Mr. Phil Mayo of Airservices Australia, email:<br>(Phil.Mayo@AirservicesAustralia.com)<br>ASIOACG/4 Report contains record of positive progress so far. 2 routes implemented from Sumatra to Johannesburg.<br>Data has been provided to ASIOACG. |
| 20/1 | Ensure BOBCAT flight plans and movement messages (DEP, CHG, CNL, etc) of flights subject to ATFM procedures (BOBCAT) are addressed by AFTN to Bangkok ATFMU | Update BBACG/22 | States, IATA | Open | Improvement noted in BBACG/21 |
| 20/2 | States involved with ATFM procedures (BOBCAT) provide BOBCAT related traffic movement data for seven consecutive days every month, in accordance with data requests authorised by ATFM/TF and administered by Bangkok ATFMU | Closed | Affected States, India, Bangkok ATFMU | Closed | Airports Authority of India and Bangkok ATFMU to investigate why data transmitted by AAI is not received by ATFMU. India to ensure all Indian airports involved (see paragraph 3.11 of BBACG/20 report) provide data. Non-provision of data is a matter for bilateral discussion. |

| ACTION ITEM | DESCRIPTION | TIME FRAME | RESPONSIBLE PARTY | STATUS | REMARKS |
|---|---|---|---|---|---|
| 20/3 | Poor on time performance of BOBCAT aircraft subject to ATFM procedures has direct impact on efficiency of ATFM procedures. All parties to undertake investigation as to reason for poor on-time performance including:<br><br>a) Incorrect flight planned EET,<br><br>b) Non compliance with BOBCAT AWUT – early and late departures<br><br>c) Non compliance with BOBCAT Kabul entry time – early and late at Kabul entry fix. | Update BBACG/22 | Affected States,<br><br>IATA | Open | Poor on time performance is actively being monitored by BOBCAT and rectified where possible by IATA/States |
| 20/4 | India to consider approving use of existing ATS route west of Chennai as connector route for N571/N877 for bypass traffic on L510 to enable efficient and BOBCAT metered traffic feed to UL333 in Kabul FIR | Update BBACG/22 | India, Regional Office | Open | |
| 20/5 | Progress bulk ANP amendment proposal for re-designation of BBACG conventional routes to RNAV routes (BBACG/20 Appendix M refers). Target date for implementation is June 2011. | Update BBACG/22 | Affected States, Regional Office | Open | Affected routes in Phase 1 of the 50NM longitudinal separation |
| 20/6 | Thailand to coordinate with Myanmar re extension of trial of L759/M770 bypass procedures until end of May 2009 | Completed | Thailand, Myanmar | Closed | Trial completed in December 2009 |
| 20/7 | India to review invitation from BBACG/20 to establish En-route Monitoring Agency (EMA) capability in order to provide horizontal (lateral and longitudinal ) safety monitoring and assessment services to support PBN implementation (RNP 10, RNP 4) in Bay of Bengal and Arabian Sea | BOB-RHS/TF/1 | India, Regional Office | Closed | Duplicate with 18/5 |

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