International Civil Aviation Organization

Fifteenth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group (ATM/AIS/SAR/SG/15)

Bangkok, Thailand, 25 – 29 July 2005

Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATM/AIS/SAR in the Asia/Pacific Region

ADOPTION OF THE ASIA/PACIFIC ATS ROUTE CATALOGUE

(Presented by the Secretariat)

SUMMARY

This paper presents the *Asia/Pacific ATS Route Catalogue* for adoption by the meeting.

1. INTRODUCTION

1.1 Significant changes to the ATS route structures in the Asia/Pacific Region in particular in the South China Sea area and under the EMARSSH (Revised ATS Route Structure, Asia to Middle East/Europe, South of the Himalayas) project for routes from Asia to the Middle East and Europe have taken place since 2001. Other route changes had been made by many States in the region, and unfortunately much of this information had not yet been recorded by the ICAO Asia and Pacific Office, and the *Air Navigation Plan – Asia and Pacific Regions* (Doc 9673), Volume I, Basic ANP (BANP) had not been amended, including the EMARSSH routes.

1.2 In view of the magnitude of the task to keep the BANP up to date, the 14th Meeting of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14, August 2003) was of the opinion that a Task Force should be formed to thoroughly review and update the BANP, prepare a master database of the routes that had been implemented, update the five-letter name-codes and co-ordinates that had been assigned to the significant points on the ATS routes, and undertake a study of future route requirements, thus establishing the ATS Route Network Review Task Force (ARNR/TF).

2. DISCUSSION

2.1 The First Meeting of the ARNR/TF (ARNR/TF/1, September 2004) noted that IATA used a format to present its route requirements and agreed that this would be an ideal way to compile and collate the list of routes proposed by States and users. It would also be useful to include a section containing the routes listed in the BANP. Further, in view of the comments made by IATA in respect to the BANP routes not implemented, another section was agreed to be included to show these routes.

2.2 Accordingly, the ARNR/TF/1 agreed to establish the *Asia/Pacific Route Catalogue* with five chapters as follows:

Chapter 1: Routes in BANP − Implemented

Chapter 2: Routes in BANP − Not Implemented

Chapter 3: Routes Implemented − Not in the BANP/or not in accordance with the BANP

Chapter 4: Future Requirements − States

Chapter 5: Future Requirements − Users

2.3 The ARNR/TF/2 (February 2005) considered that the fact that a route was not implemented or partially implemented should not be considered as a deficiency, as the reasons for this were not safety-related. There were also cases that routes could not be implemented for a variety of reasons beyond the capability of the ATS provider to overcome. The ARNR/TF/2 noted that all routes contained on the APANPIRG List of Deficiencies could be moved to the Route Catalogue and full details would be provided on the status of the routes, action being taken, and regular updates would be provided as appropriate. By doing so, the Route Catalogue fully captured all these circumstances and there was no longer a need to retain them on the List of Deficiencies. Accordingly, it was recommended that APANPIRG/16 delete them from the List of Deficiencies.

2.4 It was noted that the BANP was an official and formal document which took time to amend. Therefore, recent amendments to the BANP would not be published in a timely manner. With the objective of supplementing the BANP and making more timely information available, the Route Catalogue was developed as a living document to be maintained by the Regional Office and updated at least annually and to be posted on the ICAO APAC website: www.icao.int/apac.

2.5 The ARNR/TF/2 adopted the Route Catalogue Version 0.1 as updated.

2.6 The ARNR/TF/3 recalled that ARNR/TF/2 had agreed to finalize the Route Catalogue at ARNR/TF/3. As a result of the discussions at ARNR/TF/2, the Secretariat included a foreword to the Route Catalogue on the purpose and the history of the document, and relationship with the BANP.

2.7 In considering the role of the Route Catalogue, it was intended that this should be an informal supplementary document to the BANP containing consolidated material from the BANP and related documents, to serve as an aid to States and users for route planning purposes. As such, the Route Catalogue did not replace the BANP or provide material to be used in an operational context. It was noted that the Route Catalogue was primarily a one stop information document on what routes were contained in the BANP, status on implementation and amendment, and future route requirements of States and users intended for planning purposes.

2.8 The ARNR/TF/3 noted that in considering updating and amendment of the Route Catalogue, as the document was meant to be an aid to users, it should be a living document and the amendment process should be kept at an informal level. All the material in Chapters 1, 2 and 3 in respect to the BANP was developed and amended in accordance with established procedures. In this regard, the ARNR/TF/3 agreed that the Route Catalogue simply recorded the current status of the routes in the BANP and did not require any formal approval to be included in the Route Catalogue; therefore it could be left to the Regional Office to update.

2.9 However, in regard to material in Chapters 4 and 5, this would require some additional prior approval process and not simply submitted to the Regional Office on an ad hoc basis by the originator(s). For the material to be placed in the Chapters 4 and 5 of the Route Catalogue, it

was suggested that a State, a recognized international organization and/or the related State/ICAO ATS coordination group should be the approving body. States would submit their route proposals in accordance with established ICAO procedures. In the case of route proposals by IATA member airlines, these would be submitted to IATA for processing in accordance with their established practices. For airlines not IATA members, proposals should be submitted to the States concerned who would then consider the amendment proposal.

2.10 The ARNR/TF/3 reviewed the draft Catalogue *Foreword* including the flow charts on *Amendments to the Catalogue.* The ARNR/TF/3 finalized the layout and content structure to be included in the Route Catalogue.

2.11 The ARNR/TF/3 agreed that the Route Catalogue Version 0.2 (attached at the Appendix to this paper) should be updated by ATM/AIS/SAR/SG/15 and submitted to APANPIRG/16 as the First Edition 2005 for adoption as a supplement to the BANP.

2.12 As the Route Catalogue was a product of the work of the ARNR/TF established by APANPIRG, its status would need to be decided by APANPIRG, and the means by which it was amended be delegated by APANPIRG to the Regional Office or by some other agreed procedure determined by APANPIRG.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note that the *Asia/Pacific ATS Route Catalogue* was prepared by the ARNR/TF as a living document to supplement the BANP, and to be presented to APANPIRG/16 for approval;

b) endorse the ARNR/TF/3 recommendation that the Route Catalogue be used as a living document to supplement the BANP, and to be kept up to date and managed by the Asia/Pacific Office; and

c) in regard to a) and b), review and amend the *Asia/Pacific ATS Route Catalogue* as appropriate, and consider recommending to APANPIRG/16 that the Route Catalogue First Edition 2005 be adopted.

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DRAFT

ASIA AND PACIFIC REGION ATS ROUTE CATALOGUE

INTERNATIONAL CIVIL AVIATION ORGANIZATION

VER. 0.3

29 July 2005

Table of Contents

Foreword

The ICAO *Asia and Pacific Air Navigation Plan* (Doc 9673), Volume I, Basic ANP (BANP) contains ATS route requirements which were developed by the Third Asia and Pacific Regional Air Navigation Meeting (Bangkok, May 1993). The requirements have been revised (including additions and deletions) from time to time to reflect current operational needs. There is also an ongoing need to revise and update these requirements and amend the BANP.

The Fourteenth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14, August 2004) under Conclusion 14/5 established the ATS Route Network Review Task Force (ARNR/TF) to review the Asia and Pacific ATS route network as contained in the BANP, determine present and future route requirements, and revise the BANP as appropriate. To facilitate the amendment process and keep track of route implementation and future requirements, and with the objective of providing more up to date information on route developments, the ARNR/TF prepared the *Asia and Pacific ATS Route Catalogue* as a supplement to the BANP.

APANPIRG/16 (August 2005, Bangkok), recognizing the value of a consolidated reference document for the regional ATS routes and future route requirements of States and airspace users, adopted the Catalogue under Conclusion 16/xx. This document is intended to be a living document supplementing the BANP and to be maintained by ICAO Asia and Pacific Office.

The Catalogue consists of the following five chapters:

Chapter 1: Routes in BANP − Implemented

Chapter 2: Routes in BANP − Not Implemented

Chapter 3: Routes Implemented − Not in the BANP/or Not in Accordance with the BANP

Chapter 4: Future Requirements − States

Chapter 5: Future Requirements – Users

Chapter 1 lists ATS routes which have been implemented in accordance with the BANP. This chapter will be regularly updated as amendments to the BANP are approved and implemented.

Chapter 2 lists ATS routes which are contained in the BANP but have not been implemented in accordance with BANP requirements. This Chapter is intended for use as reference material to facilitate the resolution of any outstanding matters in order to fully implement or revise the routes.

Chapter 3 lists ATS routes which are not contained in the BANP but have been implemented by States. This Chapter contains information in relation to routes that have been subject to a BANP amendment proposal and implemented prior to the proposal being approved by ICAO. Routes are also included that have been implemented by States and not subject to an amendment proposal. The purpose of this Chapter is to temporarily record route information, and States would be expected to take appropriate action to ensure alignment of implemented routes with the BANP.

Chapters 4 and 5 list ATS routes proposed by States and International Organizations respectively. These routes have not been included in the BANP or implemented. The material in these Chapters is intended to be used as a basis for developing BANP amendment proposals, and to provide information on route planning developments which would form the basis for future proposals.

The material in Chapter 4 is organized in two parts: Part A contains those routes that have been agreed among States concerned and to be processed as amendment proposals to the BANP. Part B provides information on States' route requests that would be subject to further coordination and agreement.

The material in Chapter 5 is organized in two parts: Part A contains those routes that have been agreed by States concerned and to be processed as amendment proposals to then BANP. Part B provides information on users' route requests that are subject to further coordination and agreement.

Note:— As the Asia and Pacific ATS Route Catalogue is intended for use as a supplement to the BANP, it does not replace the BANP nor should it be used as an operational document. Its primary purpose is to assist States and airspace users by providing more up to date information, to develop and maintain the ATS routes in the Asia and Pacific Region.

Amendments to the BANP and Catalogue

A Contracting State or qualifying International Organization identifying a need for a new route requirement to be included in the BANP or to change an exisiting route contained in the BANP, may submit an amendment proposal to the Secretary General for approval by the President of the Council in accordance with established procedures summarized below.

Appropriately presented and documented proposals to amend the BANP are submitted to the ICAO Secretary General through the Regional Office and circulated to States and International Organizations for comment. Once all parties concerned agree to the proposal, the Secretary General will submit the proposal to the President of the Council for approval. The Regional Office will inform States and international organizations concerned of the approval and the BANP will be amended accordingly.

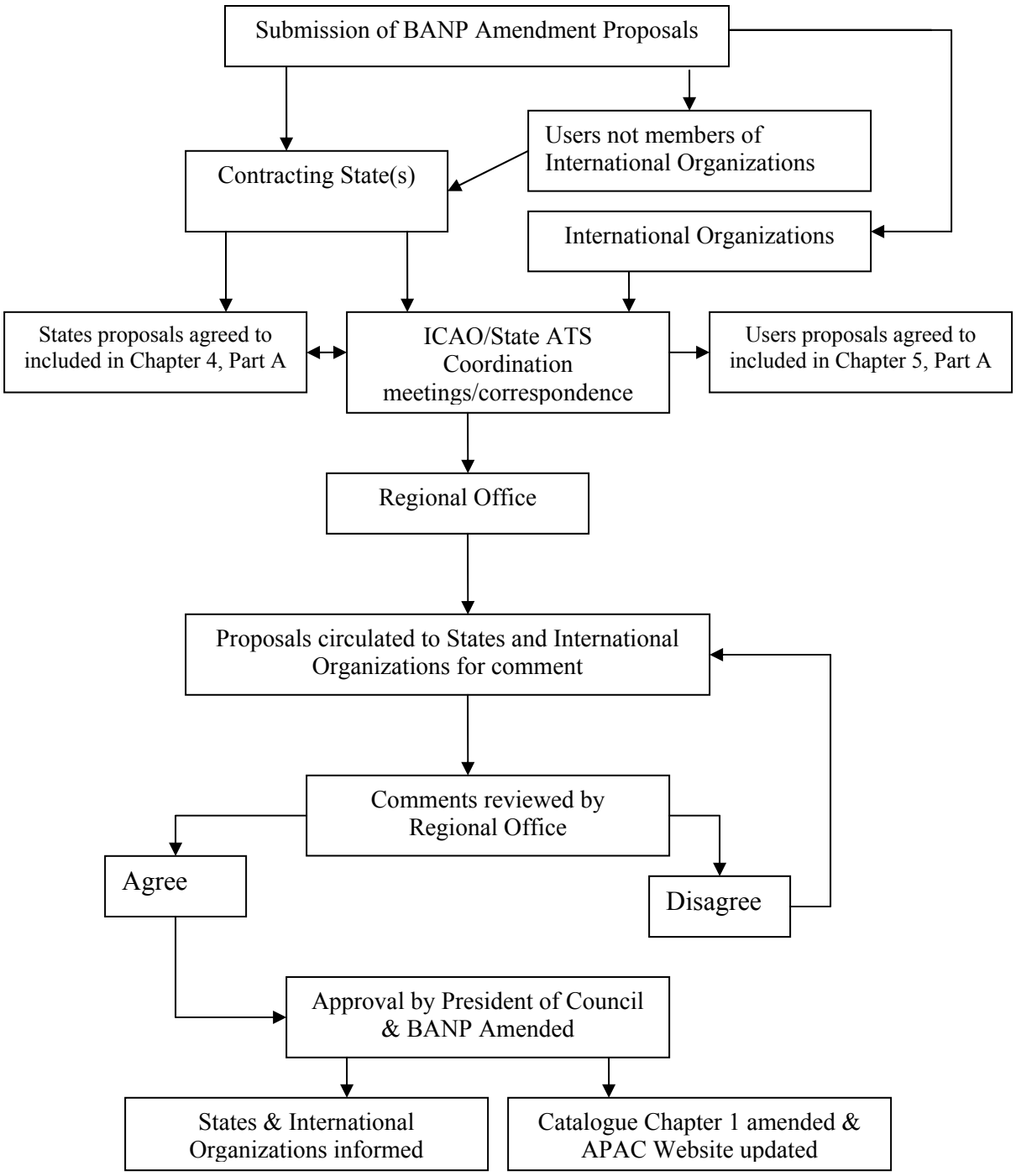
The Regional Office, which is responsible for maintaining the Catalogue, will up date the document from time to time as amendment proposals are progressed and appproved, and include new route requirements of States and Users.

Chapter 1 will be amended by the Regional Office subsequent to approval of an amendment to the BANP by the President of the Council. The amendment will be indicated by a vertical line in the margin of the Catalogue, and the revision number and date shown on the cover page of the document, which is posted on the ICAO APAC website (http://www.icao.int/apac).

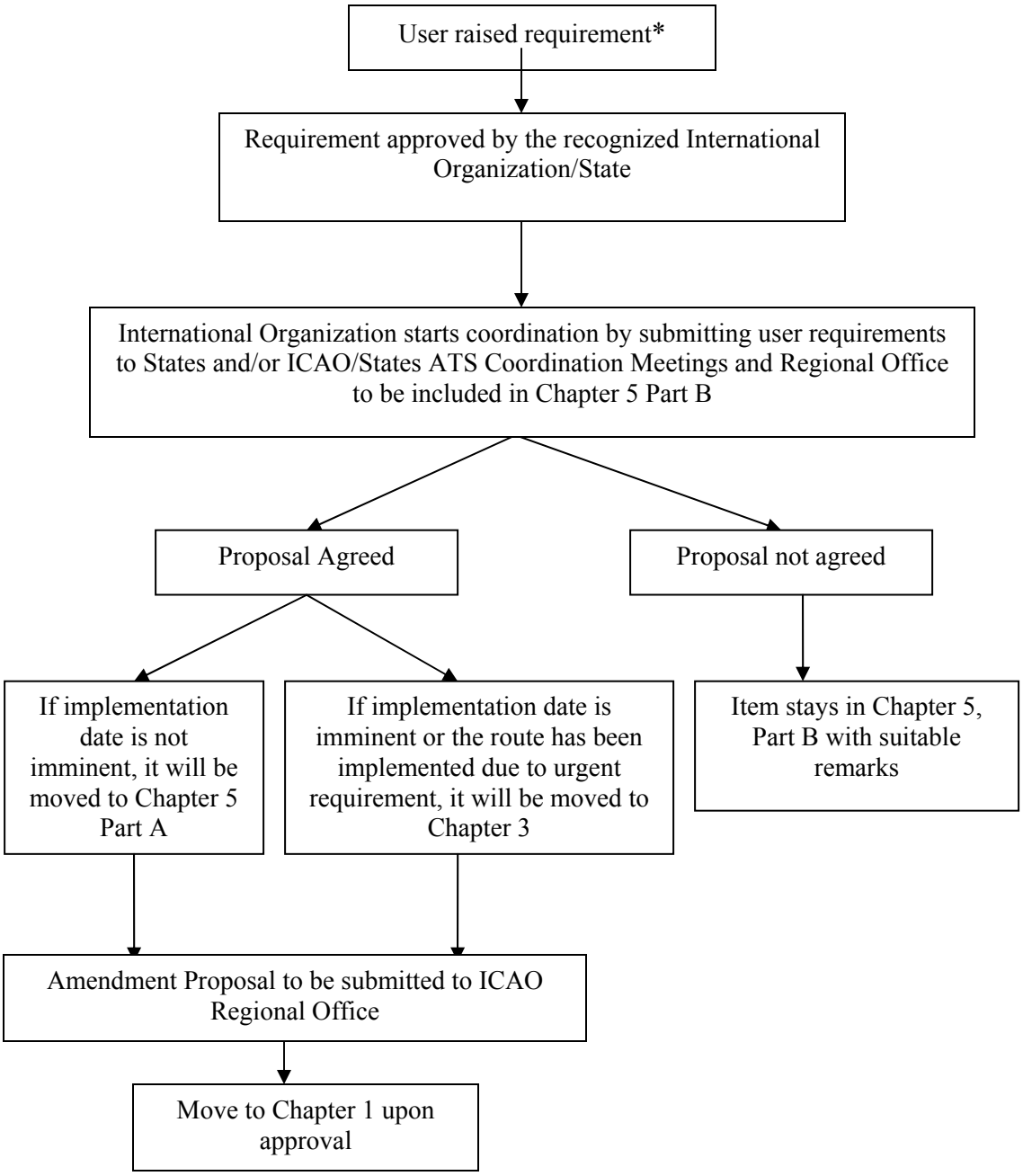
Chapters 4 and 5, Part A are amended based on route requirements submitted by States and International Organizations that have been agreed by the parties concerned to be included in the BANP and are subject to amendment proposals. On approval by ICAO, the proposals to be incorporated in the BANP would be transferred to Chapter 1. Other route requests submitted by States and Users that have not been agreed to and are subject to further coordination between the parties concerned, are contained in Part B to the respective Chapters. These routes are normally coordinated between States or through ICAO/State ATS coordination meetings and/or by correspondence. Users who are not a member of a qualfying International Organization submit their route requests to the appropriate State (s) and these would be recorded in Chapter 4.

The flow charts below describe the processes for amending the BANP and Catalogue.

BANP AMENDMENT PROCESS



FLOW CHART FOR CHAPTER 5



*Note: — * Users who are not a memberof a qualifying International Organization submit route requests to the approriate State (s) (see BANP Flow Chart).*

Amendment Record

Version/Amendment Number	Date	Amended by	Comments
0.1	14 February 2005		ARNR/TF/2 developed the draft version.
0.2	5 May 2005	ARNR/TF/3	Finalized the format following contribution from the members.
0.3	29 July 2005	ATM/AIS/SAR Sub-Group	

Chapter 1: Routes in BANP − Implemented

APAC 99/1, 99/4, 00/1, 04/3 and 04/7, which have been approved but not incorporated in the First Edition of the BANP, are incorporated in this chapter.

The segments which have not been implemented are shown by **bold** significant points.

A1 **(DUBAI/SHARJAH)**
JIWANI
KARACHI
PRATAPGARH
CALCUTTA
BAGO
BANGKOK
UBON
DANANG
CAVOI 1713.5N 11000.0E
DAGON 1900.0N 11148.3E
HONG KONG
ELATO 2220.0N 11730.0E
MAKUNG
TAIBEI
KAGOSHIMA
MIYAKE JIMA

(Partially implemented. See Chapter 2.)

A201 LASHIO
AGARTALA
RAJSHAHI
MONDA 2521.00N 08626.25E
PATNA
LUCKNOW

A202 BANGKOK
DONGHOI
HONG KONG
KAGOSHIMA
NIIGATA
CHITOSE

(Partially Implemented See Chapter 2.)

(A203 in Chapter 2)

A204 TESIO 4454.4N 14146.9E
REBUN
AKSUN 4545.1N 14054.3E
(SELTI) (4713.3N 14013.3E)

A209 ELATI 0200.0S 08957.7E
PORT HEDLAND

A211 TARAKAN
TAWAU

A212 PUPIS
PAGO PAGO
NIUE

A214 PEKANBARU
BUSUX 0355.0S 06000.0E
(PRASLIN)

A215 PORT MORESBY
MERAUKE
HASANUDDIN
KEVOK 0425.0S 11500.0E

A216 COOKTOWN
AKMIP 1200.0S 14448.6E
KIKORI
GUNNY 0500.00N 14400.00E
RICHH 1711.49N 14249.12E

A217 DOPID
JAMESHEDPUR

A218 **HARBIN**
(EKIMCHAN)
(MYS SHMIDTA)
BARROW

(Partially Implemented – See Chapter 2)

A219 KARACHI
NAWABSHAM
KALAT 2902.0N 06635.0E
SERKA 2951.0N 06615.0E
KANDAHAR
(TERMEZ)

A220 CLUKK 3605.0N 12450.0E
TAHITI

A221 GUAM
ROTA IS
TINIAN IS
SAIPAN

A222 GUAM
POHNPEI
KOSRAE
KWAJALEIN

(A223 in Chapter 2)

A224 JOHOR BAHRU
MERSING

A326 SHIGEZHUANG
OKTON 3911.2N 11653.5E
TIANJIN
MAKNO 3827.6N 12110.0E
SANKO 3814.2N 12228.4E
DONVO 3734.0N 12320.0E
AKARA 3130.0N 12330.0E

A327 PHUKET
KADAP 0200.0S 08409.6E
KALBI 0852.3S 07500.0E
(PLAISANCE)

A330 MEDAN
MADURAI
KAGLU 1231.2N 07200.0E

A331 ZIGIE 2419.0N 15717.5W
SEDAR 4530.4N 12643.0W

A332 APACK 2402.8N 15619.3W
AMITY 2626.0N 15229.0W
HEMLO 4318.2N 12640.8W

A334 HAT YAI
KOTA BHARU

A335 HOHHOT
TUMURTAI
ULAN BATOR
(IRKUTSK)

(Partially Implemented – See Chapter 2)

A337 ADKAK 3354.0N 14210.0E
TEGOD 2100.0N 14512.0E
JUNIE 1132.5N 14706.3E
KISME 0500.0N 14805.4E

A338 CHRISTCHURCH
APORO 5000.0S 17120.0E
BYRD

A339 PERTH
CURTIN
ELBIS 0905.9S 12743.7E
SHREE 0539.0N 13109.2E
KEITH 2100.0N 13456.8E
SABGU 2529.9N 13459.3E
MAKDA 2716.0N 13551.2E
TAXON 3000.0N 13714.5E
MIYAKE JIMA

A340 RAYONG
BISOR 1221.0N 10247.0E
PHNOM PENH

A341 KOTA KINABALU
SANDAKAN
ZAMBOANGA

A342 COLD BAY
OLCOT 5125.8N 16533.3E

A344 ROZAX 0245.6S 11140.0E
SUMBAWA

A345 PYONGYANG
GOLOT 4012.5N 12430.5E
FENGCHENG
KAIYUAN
HAILAR
KAGAK 4916N 11806E
MANLI 4935N 11727E
TELOK 4938N 11722E
(CHITA)

A346 HAMILTON IS
AUCKLAND

A348 MELBOURNE
EAST SALE
NISEP 4146.6S 15601.5E

A349 BANGKOK
PATHEIN
CALCUTTA

A364 SHACHE
KASHI
KURUM 4006.0N 07407.0E

A450 DENPASSAR
HASSANUDDIN
KOROR
YAP IS
GUAM
WAKE
KATHS 2104.6N 16123.4W

A451 (ADEN)
ANGAL 1614N 06000E
MUMBAI

A452 GOLEM 1157.6N 06722.2E
ELKEL 0149.0N 06911.0E
(DIEGO GARCIA)

A453 (KANDAHAR)
(ZAHEDAN)
(BANDER ABBAS)

A456 AMRITSAR
LAHORE
MOLTA 3012.0N 07236.2E
BINDO

A457 HAT YAI
TAMOS 0632.2N 10024.0E
ALOR SETAR
PENANG
KUALA LUMPUR
JOHOR BAHRU

A460 KUQA
REVKI 4232.5N 8013.2E
(KIRBALTABAY)

A461 DAWANGZHUANG
WEIXIAN
ZHOUKOU
HEKOU
LONGKOU
LILING
YINGDE
SHILONG
BEKOL 2232.6N 11408.0E
CHEUNGCHAU
NOMAN 2000.0N 11640.3E
MUMOT 1930.4N 11714.5E
AVMUP 1843.3N 11808.3E
SAN FERNANDO
CABANATUAN
MANILA
SAN JOSE
ZAMBOANGA
AMBON
DARWIN
ALICE SPRINGS
LEIGH CREEK

A462 CALCUTTA
DHAKA

A463 MADURAI
BIKOK 0817.0N 07836.0E
COLOMBO
COCOS IS
PERTH

A464 CHIANG MAI
BANGKOK
HAT YAI
IPOH
BATU ARANG
KUALA LUMPUR
SINGAPORE
TINDAL
TAROOM
LORD HOWE IS
AUCKLAND

A465 CALCUTTA
METIM 2055.0N 08750.0E
VISHAKAPATNAM
MADRAS
COLOMBO

A466 (KABUL)
SANAM 3305.0N 07003.0E
DERA ISMAIL KHAN
JHANG 3116.0N 07218.0E
SAMAR 3120.8N 07434.0E
ASARI 3048.3N 07509.6E
DELHI

A467 BIRATNAGAR
KATIHAR
CALCUTTA

(A469 in Chapter 2)

A470 HONG KONG
MAGOG 2217.3N 11549.4E
SHANTOU
XINGLIN
FUZHOU
YUNHE
TONGLU
HANGZHOU
LISHUI
BANTA
PIXIAN

A473 JALALABAD
NEPALGUNJ
KATHMANDU

(To be implemented as L626 in June 2005 – See Chapter 2)

A474 DELHI
BOMBAY
MURUS 0600.0S 06319.7E
(PLAISANCE)

A575 PYONGYANG
GOLOT 4012.5N 12430.5E
FENGCHENG
DONGYANGJIAO
DAHUSHAN
CHAOYANG
ANDIN 4106.0N 11843.5E
GUBEIKOU
FENGNING
EREN
INTIK 4341.5N 11155.0E
SAINSHAND
ULAN BATOR
(KYZYL)

A576 MEDAN
SINGAPORE
DENPASAR
CURTIN
ALICE SPRINGS
PARKES
SYDNEY

A577 SHIKANG
KADET 2100.0N 11934.0E

A578 TONIK 3200.0N 14600.0E
PHONPEI
NAURU
TARAWA
NADI
AUCKLAND

A579 SYDNEY
NADI
CARRP 1904.4N 15935.0W

A580 AUCKLAND
NAUSORI
APIA

A581 BAGO
CHIANG MAI
CHIANG RAI
PONUK 2018.8N 10023.0E
SAGAG 2111.5N 10137.4E
BIDRU
KUNMING
MAGUOHE
QIANXI
HUAYUAN
LINLI
WUHAN

A582 JOMALIG
CHINEN

	KAGOSHIMA	
	IKISHIMA	
	PUSAN	
	SEOUL	
A583	HONG KONG	
	SABNO	1859.1N 11550.7E
	MAVRA	1814.4N 11615.1E
	AKOTA	1706.6N 11651.6E
	IBOBI	1354.4N 11832.6E
	REKEL	1324.1N 11848.3E
	LEGED	1301.9N 11859.6E
	TOKON	1142.0N 11940.3E
	ZAMBOANGA	
A584	TONGA	
	NIUE	
	APIA	
	FUNAFUTI	
	NAURU	
	KOSRAE	

(Partially Implemented − See Chapter 2)

A585	PALEMBANG	
	JAKARTA	
	PORT HEDLAND	
	CEDUNA	
	ADELAIDE	
A586	INTOS	3722.00N 13120.00E
	PUSAN	
	CHEJU	
	ERABU	
	NAHA	
A587	SUMBAWA	
	ALICE SPRINGS	
A588	DALIAN	
	WAFANGDIAN	
	DAGUSHAN	
	DONGYANGJIAO	
	WANGBINGOU	
	KAIYUAN	
	CHANGCHUN	
	HARBIN	
A590	MANILA	
	JOMALIG	
	MINAMI DAITO	
	MIYAKEJIMA	
	KAGIS	3549.0N 14234.0E
	PABBA	3700.0N 14400.0E
	PASRO	1417.1N 16040.5E
	(AMOTT)	6054.0N 15121.6W
A591	QINDAO	
	XUEJIADAO	
	LATUX	3532.0N 12044.0E
	MUDAL	3651.0N 12322.0E
	AGAVO	3710.0N 12400.0E
A592	PUPIS	1000.0S 17105.5W
	APIA	
	VAVA'U	
	TONGA	
A593	TANGHEKOU	
	XILIUHETUN	
	SHIGEZHUANG	
	POTOU	
	PIXIAN	
	WUXI	
	SHANGHAI	
	NANHUI	
	FUKUE	
A594	MALE	0028.7S 07800.0E
	SUNAN	0200.0S 07927.1E
	DADAR	
	PERTH	
A595	FUKUOKA	
	IKISHIMA	
	CHEJU	
A596	HUAIROU	
	HUAILAI	
	TIANZHEN	
	LIANGCHENG	
	BAOTOU	
	DENGKOU	
	YABRAI	
A597	GOBOH	
	KUSHIMOTO	
	MONPI	2100.0N 14036.0E
	GUAM	
	NOUMEA	
	AUCKLAND	
A598	BRISBANE	
	HONIARA	
	NAURU	
	MAJURO	
A599	CHITTAGONG	
	LINSO	2322.5N 09855.0E

GENGMA
KUNMING
LUXI
BOSE
LAIBIN
GAOYAO
PINGZHOU
ZHULIAO
WONGYUAN
NANXIONG
GANZHOU
NANFENG
SHANGRAO
TONGLU
NANXUN
SHANGHAI

B200 ENKIP 3547.0S 17730.0E
FICKY 3133.6N 12123.5W

(B201 in Chapter 2)

B202 UBON
PAKSE
PLEIKU

B203 KATHMANDU
BAGDOGRA
GUWAHATI
SILCHAR
IMPHAL
LASHIO

B206 FUKANG
ALETAI
GOPTO 4905.5N 08728.0E
(AKTASH)

B209 JAMSHEDPUR
KHAJURAHO
TIGER 2828.8N 07214.9E

B210 BHUBANESWAR
TASOP 2513.3N 07048.9E
NAWABSHAH

(B212 in Chapter 2)

B213 LHASA
CHENGDU

B215 DAWANGZHUANG
TAIYUAN
YINCHUAN
YABRAI
JIUQUAN
HAMI
FUKANG
URUMQI
KUQA
SHACHE
HONGQILAPU
PURPA 3656.5N 07524.5E
GILGIT
ISLAMABAD

B218 KUNMING
SIMAO 2243.1N 16058.2E
SAGAG 2111.5N 10137.4E
VIENTIANE

B219 PENANG
KOTA BHARU

B220 BRISBANE
PORT MORESBY

B221 NINAS 3100.0N 12215.0E
PINOT 3125.2N 12214.2E
SAGUT 3500.0N 12040.3E
XUEJIADAO

B222 VINIK 0838.6N 11613.8E
KOTA KINABALU

B223 HAILAR
QIAIHAR
HARBIN

B326 HONIARA
CHOKO 2022.6N 16053.0W

B327 KATCH 5400.0N 13600.0W
KODIAK
CAPE NEWENHAM
NULUK 5822.9N 17706.1W
BAMOK 5625.5N 17249.3W
(NIKOLSKOE)

B328 EREN
TAMURTAI
TIANZHEN
NANCHENGZI
WEIXIAN

B329 PHNOM PENH
PAKSE

B330 HONG KONG
TAMOT
PINGZHOU
GAOYAO

DOUJIANG
QUIANXI
FUJIACHANG
JINGTAI
YABRAI
MORIT 4202.0N 10249.0E
NIDOR 5029.4N 09125.8E
(LIKAR)

B331 CHEUNG CHAU
KAPLI 2110.0N 11730.0E
HENGCHUN

B332 SANKO 3814.2N 12228.4E
TOMUK 3843.0N 12400.0E
PYONGYANG
SINSONGCHON
SONDO 3947.0N 12713.6E
KANSU 3838.0N 13228.5E

B333 AUCKLAND
PORT MORESBY

B334 BEIJIN
TANGHEKOU
FENGNING
TONGLIAO

B335 KUALA LUMPUR
PEKANBARU
POSOD 0329.5S 09409.9E
PEDPI 1316.6S 07500.0E
(PLAISANCE)

B337 (TAKHTOYAMSK)
ANIMO 4508.3N 14337.8E
ASAHIKAWA

B338 MERSING
TEKONG
ANITO 0017.0S 10452.0E

B340 TRIVANDRUM
BIKOK 0817.0N 07836.0E
COLOMBO
LEARMONTH
MOUNT HOPE
ADELAIDE

B344 (PLAISANCE)
LELED 1116.5S 07500.0E
ELATI 0200.0S 08957.7E
KETIV 0042.0S 09200.0E
MEDAN

B345 KATHMANDU
BHARATPUR
BHAIRAHAWA
LUCKNOW

B348 HENGCHUN
POTIB 2100.0N 12045.5E
LAOAG
SAN FERNANDO
MANILA
TOKON 1142.0N 11940.3E
PUERTOPRINCESA
OSANU 0741.4N 11717.6E
KOTA KINABALU
BRUNEI
KAMIN 0235.1N 10855.7E
SABIP 0209.7N 10750.5E
TOMAN 0121.5N 10547.0E

B349 BALI
POTIP 2141.6S 12508.0E

B450 SYDNEY
LORD HOWE IS
NORFORK IS

B451 HARBIN
ASUKI 4318.0N 12946.0E
BISUN 4314.0N 13111.8E
(VLADIVOSTOK)
IGROD 4139.0N 13647.0E
KADBO 3914.0N 13745.0E

B452 TONIK 3200.0N 14600.0E
HONIARA
NADI

B453 MIDDLETON IS
KATCH 5400.0N 13600.0W
DAASH 4226.5N 12600.1W

B454 PAGO PAGO
RAROTONGA
TONYS 3019.9N 12249.2W

B455 VAVA'U
NISEX 1547.3S 17136.4W

B456 **MADANG**
WEWAK
VANIMO
JAYAPURA

(Partially Implemented − See Chapter 2)

B457 (IZKI)
BELGAUM

BELLARY

B459 BOMBAY
CLAVA 0134.0N 06000.0E
(PRASLIN)

B462 MACKAY
HAMILTON IS.
PORT MORESBY
KADAB 0458.0S 14100.0E
BIDOR 0400.0S 13130.0E
TACLOBAN
MANILA
CABANATUAN
LAOAG
MIYAKO JIMA
OKINAWA

B463 KOTA BHARU
DAWEI
BAGO
MANDALAY
LASHIO

B465 CALCUTTA
CHITTAGONG
MANDALAY
LUANG PRABANG
HANOI

B466 JOHOR BAHRU
BATU ARANG
MADRAS
BOMBAY

B467 KANGWON
INTOS 3722.0N 13120.0E
KANSU 3838.0N 13228.5E
NULAR 4059.2N 13411.0E
(TEKUK) 4241.0N 13527.4E

B469 SINGAPORE
JAKARTA
CARNARVON
GERALDTON
PERTH
CAIGUNA
WHYALLA
GRIFFITH
SYDNEY

B470 SINGAPORE
PANGKALPINANG
JAKARTA

B472 LIPA
ILO ILO
COTABATO
SELSO 0400.0N 12616.0E
TOREX 0724.0N 13335.0E
GOVE
NORMANTON

B473 LIPA
ROXAS
CAGAYAN-DE-ORO
DAVAO
SADAN 0400.0N 12805.0E
CAIRNS

B474 SYDNEY
SANTO
NANUMEA
CHOKO 2022.6N 16053.0W

B480 (RAZDOLITE)
LETBI 5011.9N 10330.6E
BULGAN
MORIT 4202.0N 10249.0E

B575 AUCKLAND
TONGA
PAGO PAGO

B576 TAIBEI
CHEJU
SEOUL

B577 NADI
WALLIS IS
APIA
PAGO PAGO
FICKY 3133.5N 12123.5W

B578 BRISBANE
NOUMEA
TAHITI

B579 DELHI
NAGPUR
VISHAKHAPATNAM
PORT BLAIR
PHUKET
LANGKAWI
PENANG

B580 SYDNEY

NOUMEA
CHOKO 2022.6N 16053.0W

B581 NADI
FICKY 3133.5N 12123.5W

B583 BRUNEI
DARWIN

B584 DENPASAR
ELANG 0056.0S 11449.5E
KOTA KINABALU

B586 NOUMEA
SEKMO
KAPKI
PORT MORESBY
GUAM
OMLET 2100.0N 14259.2E
TATEYAMA

B587 ST GEORGE
KOWANYAMA
OPABA 0851.5S 13804.0E
TIMIKA
BIAK
RENAN 0330.0N 13416.6E
ENDAX 1415.0N 13000.0E
ATVIP 2100.0N 12422.0E
HUALIEN

B589 PORT MORESBY
KAPKI
KIRIWINA
BUKA
MAJURO

B590 NOUMEA
PORT VILA
NAURU

B591 **SHANGHAI**
TAIBEI
HENCHUN

(Partially implemented − See Chapter 2)

B592 KOTA KINABALU
JAKART

B593 CALCUTTA
COMILLA
AGARTALA
GUWAHATI

B595 TAHITI
KONA

B596 RAROTONGA
DOVRR 1843.0N 15740.0W

B597 ERABU
TANEGASHIMA
SHIMIZU

B598 DARWIN
THURSDAY ISLAND
PORT MORESBY
KAPKI 1014.9S 14817.7E
HONIARA
PORT VILA
NADI
NAUSORI
TONGA
RAROTONGA

B599 NOUMEA
NADI
TAHITI

G200 CHRISTMAS IS.
COCOS IS
(PLAISANCE)

G202 (KANDAHAR)
ZHOB
RAHIM YAR KHAN

G203 MIHO
PUSAN

G204 ELNEX
SHENGXIAN
METAN
SHANGHAI

G205 HAMILTON IS.
GURNEY
JUNIE

G206 DILARAM
KABUL
SABAR
PURPA

G208 MUMBAI
KARACHI
PANJGUR

(ZAHEDAN)

G209 LAERMONTH
CHRISTMAS ISLAND
PALEMBANG

G212 (KHABAROVSK)
ARGUK 4753.5N 13439.4E
HAIQING
JIAMUSI
HARBIN
TONGLIAO
GUBEIKOU
QINBAIKOU
NANCHENGZI
TAIYUAN
YIJUN
SANYUAN
XIAOYANZHUANG
NINGSHAN
WUFENGXI
FUJIACHANG
WEINING
MAGUOHE
KUNMING

G213 BIAK
BEKUB 0350.0N 13845.0E
GUAM

G214 JIWANI
PANJGUR
RAHIM YAR KHAN
MOLTA 3012.0N 07236.2E

G215 DUTCH HARBOR
OLCOT 5125.8N 16533.3E

G219 VIRUT 0230.8N 10402.7E
TEKONG

G221 BAOLONG
HAIKOU
SAMAS
SIKOU

G222 SAPDA
BROOME
AYERS ROCK
PARKES

G223 TATEYAMA
TONIK 3200.0N 14600.0E
NAURU
NADI
NAUSORI
NIUE
AITUTAKI
TAHITI
(LIMA)

G224 NORFORK IS
NADI
PAGO PAGO
TAHITI
ISLA DE PASCUA
(SANTIAGO)

G325 COLOMBO
TIRUCHCHIRAPPALLI

G326 BALI
TENNANT CREEK
BRISBANE

G327 NANHUI
NINAS 3100.0N 12215.0E
AKARA 3130.0N 12330.0E

G329 BRISBANE
NORFORK IS

G330 SHANGHAI
POMOK
NANTONG
GURNI 3209.2N 12058.5E
PIMOL 3215.0N 11944.0E

G331 PHUKET
PADET
DAWEI

G332 TANGHEKOU
CHAOYANG

G334 KUALA LUMPUR
TIOMAM
BUNTO 0242.0N 10600.0E
DOTAS 0201.1N 10820.5E
SIBU

G335 KATHMANDU
JANAKPUR
PATNA

G336 DHANBAD
PATNA
SIMRA
KATHMANDU

G337 PERTH

	CHRISTMAS IS	
	PEKANBARU	
G339	PUSAN	
	FUKUOKA	
	KAGOSHIMA	
	TANEGASHIMA	
	PAKDO	
	GUAM	
G340	QINGBAIKOU	
	HUAILAI	
G341	CHANGCHUN	
	ASUKI	4318.0N 12946.0E
G342	CAIRNS	
	HONIARA	
G344	COMFE	3624.0N 14618.0E
	CUTEE	4624.9N 16218.6E
	CUDDA	5647.9N 16018.1W
G345	UNTAN	
	CHANGZHOU	
	LISHUI	
G346	KIMCHAEK	
	NULAR	4059.2N 13411.0E
	IGROD	4139.0N 13647.0E
G347	AUCKLAND	
	POPIR	2500.0S 17804.8W
	PADDI	1825.7N 15854.8W
G348	PARO	
	BAGDOGRA	
G424	(DAR ES SALAAM)	
	VUTAS	0912.0N 06000.0E
	ALATO	1340.7N 06344.0E
G450	(MOGADISHU)	
	BOMBAY	
	NAGPUR	
	CALCUTTA	
G452	(ZAHEDAN)	
	RAHIM YAR KHAN	
	TIGER	2828.8N 07214.9E
	DELHI	
G453	KUALA LUMPUR	
	KOTA BHARU	
G454	(PLAISANCE)	
	BOBOD	0600.0S 06941.1E
	PADLA	0446.1N 07800.0E
	COLOMBO	
G455	SHANGHAI	
	PINOT	3125.2N 12214.2E
	AKARA	3130.0N 12330.0E
G457	DOVRR	1843.0N 15740.0W
	ELLMS	0500.0S 16704.1W
	PAGO PAGO	
	FAROA	2500.0S 17502.3W
	DIVSO	3452.3S 17624.5E
G458	BANGKOK	
	SURAT THANI	
	PHUKET	
G459	CAIRNS	
	TIMIKA	
G460	KUCHING	
	SIBU	
	BINTULU	
	BRUNEI	

(G461 in Chapter 2)

G462	(IZKI)	
	TRIVANDRUM	
	COLOMBO	
	JAKARTA	
	INDRAMAYU	
	MADIN	0617.9S 11023.0E
	CUCUT	0617.7S 11106.0E
	SURABAYA	
	BALI	
	DARWIN	
G463	RAJSHAHI	
	DHAKA	
	CHITTAGONG	
	BAGO	
	BETNO	1505.8N 09812.7E
	BANGKOK	
G464	PONTIANAK	
	ROZAX	0245.0S 11140.0E
	BALI	
	KARRATHA	
	BALLIDU	
	PERTH	
G465	(PRASLIN)	
	MALE	
	COLOMBO	
	PORT BLAIR	

	DAWEI	
	BANGKOK	
G466	HO CHI MINH	
	PHUCAT	
	HENGCHUN	
G467	LUBANG	
	JOMALIG	
	GUAM	
G468	PENANG	
	MEDAN	
G469	PORT HEIDEN	
	ST PAUL IS	
	NYMPH	5324.5N 16814.4E
G470	XIANYANG	
	FENGHUO	
	CHANGWU	
	JINGNING	
	JINGTAI	
G471	SHILONG	
	LONGMEN	
	GANGZHOU	
G472	KARACHI	
	AHMEDABAD	
	NAGPUR	
	BHUBANESHWAR	
	PATHEIN	
	BAGO	
G474	BANGKOK	
	MENAM	1357.3N 10247.7E
	SOURN	1345.5N 10600.0E
	ANINA	1359.0N 10725.0E
	PHUCAT	
G575	TAHITI	
	RANGIROA	
	FICKY	3133.5N 12123.5W
G576	CHEER	5310.0N 14000.1W
	SPONJ	4992.0N 13005.1W
G578	GURAG	2100.0N 12725.0E
	DILIS	1431.0N 12600.0E
	TACLOBAN	
	MACTAN	
	ZAMBOANGA	
	DENPASAR	
	PORT HEDLAND	
	PARABURDOOD	
	PERTH	
G579	JAKARTA	
	PALEMBANG	
	SINGAPORE	
	JOHOR BAHRU	
G580	TOMAN	0121.5N 10547.0E
	NIMIX	0124.9N 10759.2E
	ATETI	0125.7N 10830.1E
	KUCHING	
	MIRI	
	BRUNEI	
	KOTA KINABALU	
G581	HONG KONG	
	ELATO	2220.0N 11730.0E
	HENGCHUN	
	MIYAKO JIMA	
	BISIS	2647.0N 12633.0E
	ERABU	
	MIYAKE JIMA	
G582	PUGER	0324.1N 10017.6E
	BATU ARANG	
	PEKAN	
G583	EMMONAK	
	BESAT	5945.0N 17925.1W
	(UST-BOLSHERETSK)	
	BISIV	4456.3N 14412.3E
	MONBETSU	
G584	KUALA LUMPUR	
	PEKAN	
	KUCHING	
G585	MIHO	
	POHANG	
	SEOUL	
G586	YINGDE	
	ERTANG	
G587	TAIBEI	
	PABSO	2538.0N 12252.0E
	BULAN	2704.0N 12400.0E
G588	MOOREN	
	KHOVD	
	TEBUS	4725.1N 09027.7E
	TESAN	4701.7N 08947.8E
	FUKANG	

(G589 in Chapter 2)

G590	SIMRA	
	VARANASI	
	KHAJURAHO	
	BHOPAL	
	INDORE	
	BODAR	2236.3N 07413.3E
G591	CAIRNS	
	NOUMEA	
	NORFORK IS	
	AUCKLAND	
G593	FUNAFUTI	
	NAUSORI	
	NIUE	
	RAROTONGA	
G594	TIAMU	
	TAHITI	
	RAROTONGA	
	AUCKLAND	
	SOLIT	2355.0S 07500.0E
	(PLAISANCE)	
G595	(TAHITI)	
	SYDNEY	
	MABAD	2648.4S 07500.0E
	(PLAISNACE)	
G597	DONVO	3734.0N 12320.0E
	AGAVO	3710.0N 12400.0E
	SEOUL	
	KANGNUNG	
	MIHO	
	OTSU	
	KOWA	
	OSHIMA	
	VENUS	3618.2N 14042.1E
G598	LUCKNOW	
	APIPU	2658.6N 08300.0E
	SIMARU	
G599	AUCKLAND	
	TAHITI	
R200	PINGZHOU	
	LIANSHENGWEI	
	BIGRO	
	ZHANJIANG	
R201	BANGKOK	
	UTAPAO	
R203	COLOMBO	
	PHUKET	
R204	KEITH	2100.0N 13456.5E
	KALIN	0000.0N 14200.0E
	LIDIT	0918.0S 14220.0E
	HORN IS	
	CAIRNS	
R205	ANARAK	
	BIRJAND	
R206	PORT HEDLAND	
	CHRISTMAS IS	
	JAKARTA	
R207	VIENTIANE	
	NAN	
	CHIANG MAI	
	MANDALAY	
R208	KUALA LUMPUR	
	KUALA TRENGGANU	
	KANTO	0649.9N 10348.3E
R209	TATOX	0857.0N 09702.0E
	LANGKAWI	
R210	PORT MORESBY	
	CAIRNS	
R211	KASMI	3601.3N 14040.3E
	DAIGO	
	NIIGATA	
	KADBO	3914.0N 13745.4E
	AVGOK	4336.0N 13815.0E
	VELTA	4529.0N 13710.0E
R212	(DIEGO GARCIA)	
	GUDUG	0704.6S 07500.0E
	PIBED	0520.2S 09044.0E
R215	CHIANG RAI	
	NAN	
	LUANG PRABANG	

(R216 in Chapter 2)

R217	NODAN	4025.0N 14500.0E
	SENDAI	
	NIIGATA	
R219	(SHARJAH)	
	MAROB	2225.6B 06309.3E
	BOMBAY	
R220	DAIGO	
	IWAKI	
	NANAC	3854.2N 14313.9E
	NIPPI	4942.6N 15920.8E

	NODLE	6117.0N 15200.0W
R221	MERSING	
	PULAU TIOMAN	
R222	AVGOK	4336.0N 13815.0E
	(YEDINKA)	
R325	KATHMANDU	
	JANAKPUR	
	DUMKA	2411.0N 08721.3E
	CALCUTTA	
	PHUKET	
	HAT YAI	
	IPOH	
	JOHOR BAHRU	
R326	NORFOLK IS	
	CHRISTCHURCH	
R327	GISBORNE	
	FAROA	
R328	KARACHI	
	MINAR	2350.0N 06800.0E
	SAPNA	2330.0N 06750.0E
	BILAT	2058.4N 06800.0E
	MUMBAI	
R329	KAGLU	1231.2N 07200.0E
	MALE	
	GAN	
	(DIEGO GARCIA)	
R330	SHEMYA	
	POWAL	5024.3N 16530.8E
R332	MAJURO	
	BONRIKI	
	AKUMO	0614.9S 17535.5E
	ROTUMA	
	NADI	

(R333 in Chapter 2)

R334	RAYONG	
	KOH KONG	
	PHNOM PENH	

(R335 in Chpater 2)

R336	ADAK	
	CARTO	4840.5N 16847.0E
R337	TACLOBAN	
	KOROR	
R338	NOME	
	NINNA	5455.7N 17158.8E
R339	HONG KONG	
	VIKAP	2131.3N 11332.0E
	SIKOU	2050.6N 11130.0E
	ZHANJIANG	
	NANNING	
	BOSE	
R340	AMBON	
	WALGETT	
R341	KODIAK	
	NINNA	5455.7N 17158.8E
R342	MANADO	
	BONDA	0200.0N 12451.2E
	PEDNO	0400.0N 12521.0E
	GENERAL SANTOS	
	DAVAO	
R343	NANXIANG	
	WUXI	
	LISHUI	
	HEFEI	
	WUHAN	
	LONGKOU	
	LAOLIANGCANG	
	DARONGJIANG	
	LAIBIN	
	NANNING	
R344	KATHMANDU	
	BIRATNAGAR	
	KATIHAR	
	RAJSHAHI	

(R345 in Chapter 2)

R346	TOWNSVILLE	
	PORT MORESBY	
R347	NIIGATA	
	SADO	
	EKVIK	3944.7N 13636.5E
	IGROD	4139.0N 13647.0E
	(VELTA)	4529.0N 13710.0E
R348	KADAP	0200.0S 08409.6E
	LATEP	0610.3S 07500.0E
	(DIEGO GARCIA)	
R349	LEMOK	1000.0N 10302.2E
	RASER	1000.0N 10506.0E
	HO CHI MINH	

R450	KIETA	
	HONIARA	
R451	ADAK	
	OGDEN	4929.2N 16102.3E
R452	SONDO	3947.0N 12713.6E
	HAMUN	3955.1N 12731.1E
	KIMCHAEK	
	UAMRI	4217.6N 13041.8E
	(TEKUK)	4241.0N 13527.4E
R453	NADI	
	APIA	
R455	PONTIANAK	
	KUCHING	
R456	(IZKI)	
	BOTAN	2006.6N 06021.8E
	MALE	
	MABIX	0315.0N 09454.0E
R457	TRIVANDRUM	
	MALE	

(R459 in Chapter 2)

R460	DELHI	
	LUCKNOW	
	VARANASI	
	GAYA	
	CALCUTTA	
R461	BOMBAY	
	BELGAUM	
	COIMBATORE	
	COLOMBO	
	MEDAN	
	KUALA LUMPUR	
R462	(SEEB)	
	DENDA	2442.5N 06054.8E
	JIWANI	
	KARACHI	
	DELHI	
R463	APACK	2402.6N 15619.2W
	ALCOA	3750.0N 12550.0W
R464	BITTA	2332.0N 15529.0W
	BEBOP	3700.0N 12500.0W
R465	CLUTS	2300.0N 15439.0W
	CLUKK	3605.0N 12450.0W

(R466 in Chapter 2)

R467	KUALA LUMPUR	
	GUNIP	0429.9N 09931.9E
R468	BOMBAY	
	VISHAKHAPATNAM	
	BANGKOK	
	BOKAK	1257.5N 10230.0E
	PHNOM PENH	
	SAPEN	1102.2N 10611.0E
	HO CHI MINH	
R469	PEKANBARU	
	SINGAPORE	
R470	VIENTIANE	
	UDON THANI	
	KHON KAEN	
R472	CALCUTTA	
	RAJSHAHI	
	GUWAHATI	
R473	LILING	
	NANXIONG	
	WONGYUANG	
	ZHULIAO	
	PINGZHOU	
	TAMOT	2221.5N 11352.0E
R474	GAOYAO	
	NANNING	
	LONGZHOU	
	HANOI	
	VIENTIANE	
	BANGKOK	
R576	DENNS	2222.0N 15353.0W
	DINTY	3329.0N 12235.0W
R577	EBBER	2143.0N 15309.0W
	ELKEY	3241.0N 12203.0W
R578	FITES	2049.0N 15300.0W
	FICKY	3133.5N 12123.5W

(R579 in Chapter 2)

R580	OATIS	3800.0N 14345.0E
	OMOTO	4859.7N 16000.7E
	AMOTT	6053.9N 15121.8W
R581	CALCUTTA	
	MONDA	2521.0N 08626.4E
	SIMARA	
R582	NORFOLK IS	
	RAROTONGA	

R583 TAIBEI
BISIS 2647.1N 12633.1E
OKINAWA
MINAMIDAITO
SABGU
BUNGO

R584 OKINAWA
KEITH 2100.0N 13456.5E
GUAM
TRUK
POHNPEI
KWAJALEIN
MAJURO
JOHNSTON IS
CHOKO 2022.9N 16053.2W

R585 CITTA 2818.9N 14507.2W
GATES 3412.7N 12303.9W

R587 BRISBANE
PORT VILA

R588 PHUKET
RELIP
KAKET
PHNOM PENH
PLEIKU

R590 AMBON
COTABATO

R591 CAPE NEWENHAM
AKISU 4734.3N 16119.3E
ABETS 3605.0N 14425.0E

R592 BALI
ONSLOW
PERTH

(R593 in Chapter 2)

R595 ANPU
MIYAKO JIMA
KEITH 2100.0N 13456.5E
GUAM

R596 HENGCHUN
TIDEL 1912.2N 13000.0E
GUAM

R597 CABANATUAN
SARSI 1642.0N 12316.9E
SKATE 1716.7N 12423.0E

R598 CALCUTTA
RAJSHAHI
SAIDPUR
COOCH BEHAR
BOGOP
PARO

R599 KIETA
GIZO
HONIARA
PORT VILA
WHANGAREI
AUCKLAND

RNAV ROUTES

UL425 (KUTVI)
ASPUX 1744.00N 06000.00E
DONSA 1434.14N 06511.32E
VANVO 1043.00N 07200.00E

L500 (SANTIAGO)
AUCKLAND

L501 (RIO GALLEGOS)
AUCKLAND

L502 ISLA DE PASCUA
(LOS ANGELES)

L503 BRISBANE
IGEVO 3636.5S 16300.0E
CHRISTCHURCH

L508 CHRISTCHURCH
MELBOURNE

L513 PERTH
HOBART
AUCKLAND

L521 SYDNEY
AUCKLAND

L625 LUSMO 0333.7N 10655.7E
AKMON 0812.8N 11013.4E
ALDAS 1056.9N 11212.3E
ANOKI 1222.0N 11315.0E
ARESI 1358.4N 11427.0E
AKOTA 1706.6N 11651.6E
AVMUP 1843.3N 11808.3E
POTIB 2100.0N 12045.5E

L628 LUBANG

	IBOBI	1354.4N	11832.6E
	GUKUM	1356.8N	11637.2E
	ARESI	1358.4N	11427.0E
	MESOX	1358.4N	11427.0E
	DAMEL	1358.7N	11130.6E
	VEPAM	1358.0N	11000.0E
	PHUCAT		
L629	PEKAN		
	DOLOX	0448.7N	10522.9E
L635	PEKAN		
	MABLI	0417.3N	10612.9E
L637	BITOD	0715.3N	10612.9E
	TANSONNHET		
L642	CHEUNG CHAU		
	EPDOS	1900.0N	11333.3E
	ENBOK	1833.4N	11329.5E
	EGEMU	1700.0N	11217.0E
	VEPAM	1358.0N	11000.0E
	PHANTHIET		
	CONSON IS		
	ESPOB	0700.0N	10533.4E
	ENREP	0452.4N	10414.8E
	MERSING		
L643	TANSONNHET		
	CONSON		
UM501	BHUBANESHWAR		
	PHUKET		
UM551	DONSA	1435.3N	06511.6E
	ANGAL	1614.1N	06000.1E
	(AVAVO)	1646.3N	05526.1E
M625	MELBOURNE		
	WELLINGTON		
M636	SYDNEY		
	WELLINGTON		
M639	IGEVO	3636.5S	16300.0E
	WELLINGTON		
M643	HOBART		
	CHRISTCHURCH		
M750	KILOG	2152.5N	11441.6E
	ENVAR	2159.5N	11730.0E
	MOLKA	2639.5N	12400.0E
	MOMPA	3050.5N	12955.1E
	MANEP	3242.9N	13340.0E
	KUSHIMOTO		
M751	MERSING		
	PEKAN		
	KOTA BHARU		
	REGOS	1200.0N	10035.1E
	BANGKOK		
M753	ENREP	0452.4N	10414.8E
	BITOD	0715.3N	10407.3E
	PHUQUOC		
	PHNOM PENH		
M754	BRUNEI		
	VINIK	0838.6N	11613.8E
	TENON	0915.3N	11616.5E
	LULBU	1104.7N	11624.4E
	NOBEN	1234.4N	11631.1E
	GUKUM	1356.8N	11637.2E
	AKOTA	1706.6N	11651.6E
M758	PEKAN		
	LUSMO	0333.7N	10655.7E
	TERIX	0415.4N	10934.7E
	OLKIT	0450.1N	11149.1E
	KOTA KINABALU		
M759	OLKIT	0450.1N	11149.1E
	BRUNEI		
M761	PEKAN		
	BOBOB	0222.1N	10706.1E
	SABIP	0209.7N	10750.5E
	AGOBA	0158.7N	10830.0E
	KUCHING		
M765	KOTA BHARU		
	IGARI	0656.2N	10335.2E
	BITOD	0715.3N	10407.3E
	CONSON		
	DAGAG	0927.8N	10826.5E
	MAPNO	1013.1N	11020.1E
M767	JOMALIG		
	TOKON	1142.0N	11940.3E
	TENON	0915.3N	11616.5E
	TEGID	0857.2N	11551.6E

	TODAM	0631.7N	11235.4E
M768	BRUNEI		
	DOGOG	0525.3N	11407.5E
	ASISU	0559.9N	11319.6E
	TODAM	0631.7N	11235.4E
	LAGOT	0716.6N	11132.5E
	AKMON	0812.8N	11013.4E
	MAXON	0849.5N	10921.3E
	DAGAG	0927.8N	10826.5E
	TANSONNHAT		
M771	MERSING		
	DOLOX	0448.7N	10522.9E
	DUDIS	0700.0N	10648.7E
	DAGAG	0927.8N	10826.5E
	DOXAR	1220.0N	11022.7E
	DAMEL	1358.7N	11130.6E
	TERIX	0415.4N	10934.7E
	BOBOB	0222.1N	10706.1E
	TOMAN	0121.5N	10547.0E
N750	SYDNEY		
	CHRISTCHURCH		
N759	MELBOURNE		
	AUCKLAND		
M774	AUCKLAND		
	SYDNEY		
N875	PONTIANAK		
	ARUPA	0031.7N	10848.7E
	NIMIX	0124.9N	10759.2E
	BOBOB	0222.1N	10706.1E
	ENREP	0452.4N	10414.8E
N884	MERSING		
	LUSMO	0333.7N	10655.7E
	LAGOT	0716.6N	11131.5E
	LAXOR	0950.3N	11447.9E
	LULBU	1104.7N	11624.4E
	LEGED	1301.9N	11859.6E
	LUBANG		
N891	PAPA UNIFORM		
	ENREP	0452.4N	10414.8E
	IGARI	0656.2N	10335.2E
	SAMOG	0800.0N	13014.6E
	RAYONG		
	BANGKOK		
N892	HENGCHUN		
	KABAM	2100.0N	11925.7E
	MUMOT	1930.4N	11714.5E
	MAVRA	1814.4N	11615.1E
	MIGUG	1516.4N	11400.0E
	MESOX	1358.8N	11302.7E
	MUGAN	1222.0N	11152.3E
	MAPNO	1013.1N	11020.1E
	MOXON	0849.5N	10921.3E
	MELAS	0704.9N	10808.4E
	MABLI	0417.3N	10612.9E
	MERSING		

Chapter 2: Route in BANP − Not Implemented

The segments which have not been implemented are shown by **bold** significant points, and indicated with coordinates and the FIR names.

ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
A1 (partially implemented)	**(DUBAI/SHARJAH)** **JIWANI (JI)** **KARACHI (KC)** **PRATAPGARH (PRA)** **CALCUTTA (CEA)** **BAGO (BGO)** BANGKOK UBON DANANG CAVOI DAGON HONG KONG ELATO MAKUNG TAIBEI KAGOSHIMA MIYAKE JIMA	 2503.8N 06147.7E 2454.6N 06710.6E 2401.8N 07445.0E 2238.7N 08827.0E 1719.2N 09631.0E	 Karachi Karachi Mumbai Kolkata Yangon	
A202* (partially implemented)	BANGKOK DONGHOI **HONG KONG (CH)** **KAGOSHIMA (HKC)** **NIIGATA (GTC)** **CHITOSE (CHE)**	 2213.2N 11401.8E 3141.8N 13035.0E 3757.5N 13906.9E 4242.0N 14141.2E	 Hong Kong Tokyo Tokyo Tokyo	
A203*	**HONG KONG (CH)** **TAIBEI (APU)**	2213.2N 11401.8E 2510.6N 12131.3E	Hong Kong Taipei	
A218*	**HARBIN (HRB)** **(EKIMCHAN) (QA)** (MYS SHMIDTA) BARROW	4537.4N 12615.6E	Shenyang	
A223*	**RUSAR** **FUKUOKA (DGC)**	2951.7N 12750.4E 3340.6N 13023.4E	Naha Tokyo	
A335*	HOHHOT **TUMURTAI (TMR)** **ULAN BATOR (UDA)** (IRKUTSK)	 4150.7N 11309.0E 4752.1N 10644.0E	 Beijing Ulan Batar	

ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
A469* (Implemented as L643, pending BANP Amendment)	**HO CHI MINH (TSN)** **CONSON IS (CS)**	1049.0N 10638.7E 0843.8N 10637.9E	Ho Chi Minh Ho Chi Minh	
A473* (To be implemented in June 2005 as L626)	**JALALABAD (JAL)** **NEPALGUNJ (NGJ)** **KATHMANDU (KTM)**	2741.7N 07939.3E 2806.1N 08139.1E 2740.5N 08521.0E	Delhi Kathmandu Kathmandu	
A584* (Proposed Amendment to be submitted to delete the segment not implemented)	TONGA NIUE APIA FUNAFUTI **NAURU (NI)** **KOSRAE (UKS)**	0032.6S 16655.3E 0521.1N 16257.4E	Nauru Oakland Oceanic	
B201* (Proposed Amendment to be submitted to delete from the BANP)	**NIUE (NU)** **AUCKLAND (AA)**	1904.4N 16955.0E 3700.3N 17448.8E	Fuji New Zealand	
B212* (Co-ordination on-going. Target implementation June 2006)	**KANGNUNG** **NIGATA (GTC)**	3757.5N 13906.9E	Incheon Tokyo	
B456* (Partially Implemented from WEWAK DCT to JAYAPURA proposed amendment to be submitted for the entire route)	**MADANG (MAG)** **WEWAK (WK)** **VANIMO (VNO)** **JAYAPURA (JPA)**	0512.7S 14546.6E 0335.0S 14340.6E 0240.7S 14118.2E 0235.3S 14031.9E	Port Moresby Port Moresby Port Moresby Biak	
B591* (Consider for future implementation)	**SHANGHAI (SHA)** **TAIBEI (APU)** HENGCHUN	3112.0N 12119.9E 2510.6N 12131.3E	Shanghai Taipei	

ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
G461* (Amendment Proposal to be submitted)	**JAKARTA (DKI)** **CIREBON (CA)** SEMARAN BLORA SURABAYA	0557.7N 10702.1E 0641.9N 10833.6E	Jakarta Jakarta	
G473* (Implementation on-going)	BAGO MAKAS **PHITSANULOKE (PSL)** **DANANG (DAN)** **LUBANG (LBG)**	 1646.2N 10017.5E 1603.2N 10811.9E 1351.2N 12006.4E	 Thailand Ho Chi Minh Manila	
G589* (Implemented as B467. Amendment Proposal to delete G589 to be submitted)	**AVGOK** **KANGNUNG**	4336.1N 13814.8E	Vladivostock Inchoeon	
R216*	**URUMQI** **(ALMA ATA)**	4354.4N 08728.5E (4322.5N 07705.2E)	Urumqi Kazakhstan	
R333*	**DOTMI** **AKERO** (Now NOMAN)	2243.1N 11610.1E 2002.7N 11642.5E	Guangzhou Hong Kong/Manila	
R335*	**MAGOG** **MAKUNG (MKG)**	2217.3N 11549.4E 2335.7N 11938.2E	Hong Kong Taipei	
R345* (New Route will be implemented. Amendment Proposal to delete R345 to be submitted)	**VIENTIEN (VTN)** **TAKHAEK** **PAKSE (PAK)** **STREUNG TRENG (ST)** **RUPED**	1800.6N 10232.4E ? 1511.8N 10544.3E 1331.5N 10600.9E 1111.0N 10548.2E	Vientiane ? Vientiane Phnom Penh Phnom Penh	
R459* (To be implemented as L504. Target implementation date 12 May 2005)	**MANADO (MWB)** **BALIKPAPAN (BPN)** **ELANG** **PONTIANAK (PNK)** **MINOS** **TANJUNG PINANG (TI)**	0119.4N 12457.3E 0114.7N 11656.4E 0055.6N 11450.1E 0004.7N 10922.5E 0000.0 10901.7E 0055.2N 10431.6E	Ujung Pandang Bali Bali Jakarta Singapore	

ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
R466* (Implemented as R446. Subject to BANP amendment)	**(YUZHNO-SAKHALINSK)** **ANIMO**	4511.9N 14340.8E	Yuzhno-sakhalinsk Yuzhno-sakhalinsk/Tokyo	
R579* (To be implemented 12 May 2005 with proposed route extension)	**PADANG (PDG)** **PEKANBARU (PKU)** **MALACCA (MC)**	0052.3N 10021.2E 0025.5N 10126.5E	Jakarta Jakarta Kuala Lumpur	
R593* (Amendment Proposal submitted)	**BOMBAY (BBB)** **(HAIMA)**	1905.1N 07252.5E	Mumbai Oman	

* Those routes were listed in the APANPIRG List of Deficiencies.

DETAILED DESCRIPTION OF ROUTES IN BANP – NOT IMPLEMENTED

ATS ROUTE NAME: **A1** Requested by :

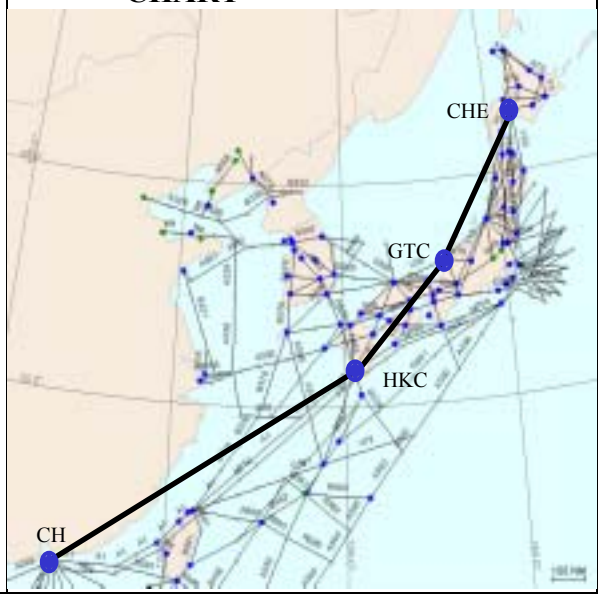
ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **(DUBAI/SHARJAH) .. JIWANI (JI) .. KARACHI (KC) .. PRATAPGARH (PRA) .. CALCUTTA (CEA) .. BAGO (BGO) .. BANGKOK (BKK).. UBON .. DANANG .. CAVOI 1713.5N 11000.0E .. DAGON 1900.0N 11148.3E .. HONG KONG .. ELATO 2220.0N 11730.0E .. MAKUNG .. TAIBEI .. KAGOSHIMA .. MIYAKE JIMA** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART** **Under development**

Action Required	States continue to coordinate to submit proposals for amendments.
	ICAO has circulated proposal for amendment as APAC 05/23.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: A1 has been replaced by A791 between Kolkata VOR in India and Hail VOR in the Middle East, and by L507 between LIMLA and Kolkata VOR. The ATS route A1 applies only east of LIMLA on the Yangon and Bangkok FIRs boundary.

ATS ROUTE NAME: **A202** Requested by :

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Bangkok .. Donghoi .. Hong Kong (CH) .. Kagoshima (HKC) .. Niigata (GTC) .. Chitose (CHE)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

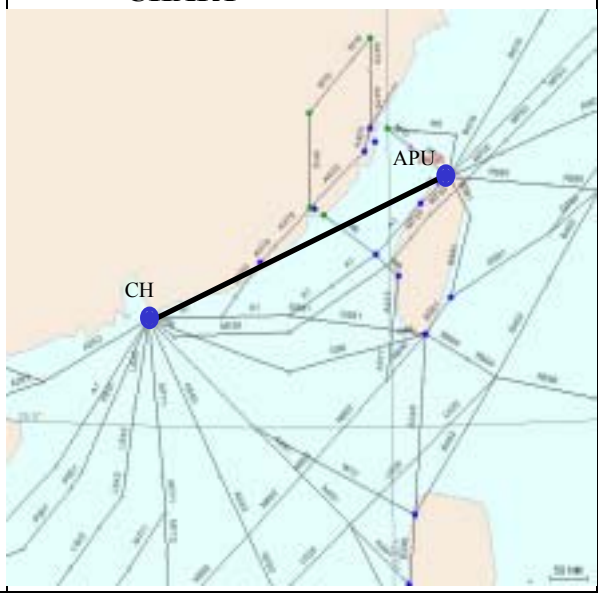
Action Required	States continue to coordinate to retain or submit proposal for deletion from BANP.
	.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: Segment between Bangkok and Donghai implemented; Segment between Hong Kong and Chitose is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **A203**

Requested by :

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Hong Kong (CH) .. Taipei (APU)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	States continue to coordinate to submit proposals for deletion or to retain in BANP.
	.

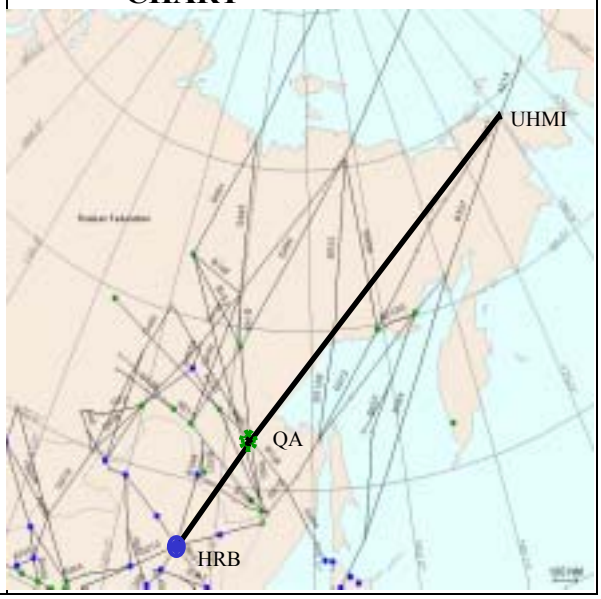
Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between Hong Kong and Taibei is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **A218**

Requested by :

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Harbin (HRB) .. Ekimchan (QA) .. Mys Shmidta (UHMI) .. Barrow** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART**



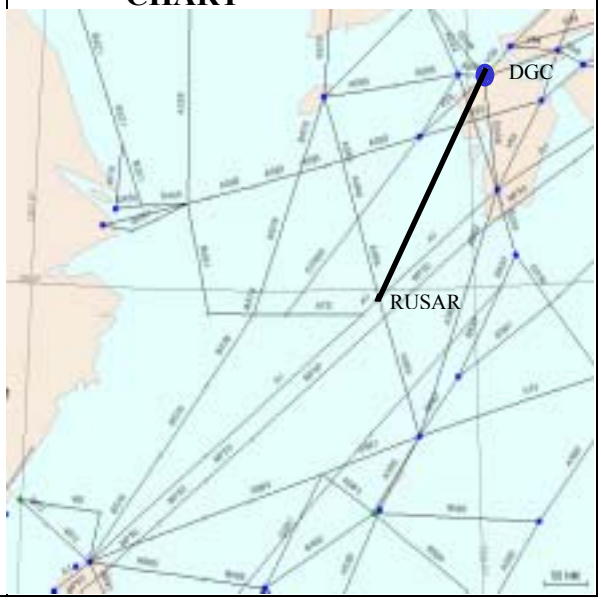
Action Required	China continues to coordinate with Russia to submit proposals for deletion of the segment between Harbin and Ekimchan from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between Harbin and Ekimchan is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **A223**

Requested by :

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **RUSAR .. Fukuoka (DGC)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

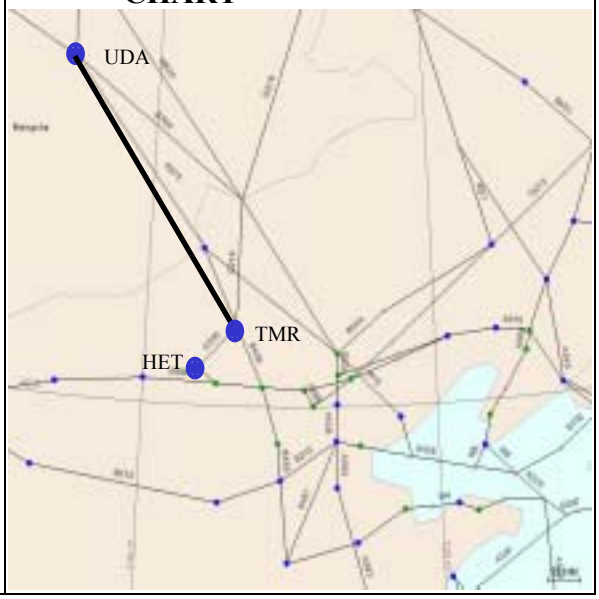
Action Required	Japan to continue to review or submit proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between RUSAR and FUKUOKA is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **A335**

Requested by :

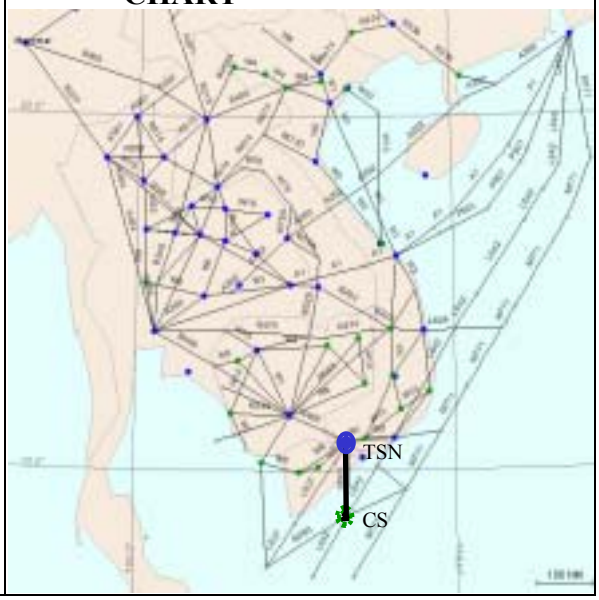
ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Hohhot .. Tumurtai (TMR) .. Ulaanbaatar (UDA) .. (Irkutsk)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

Action Required	China to submit proposals for deletion from BANP.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between Tumurtai and Ulan Bator is being served by other available ATS route.

ATS ROUTE NAME: **A469** Requested by :

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Tansonnhat (TSN) .. Conson (CS)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

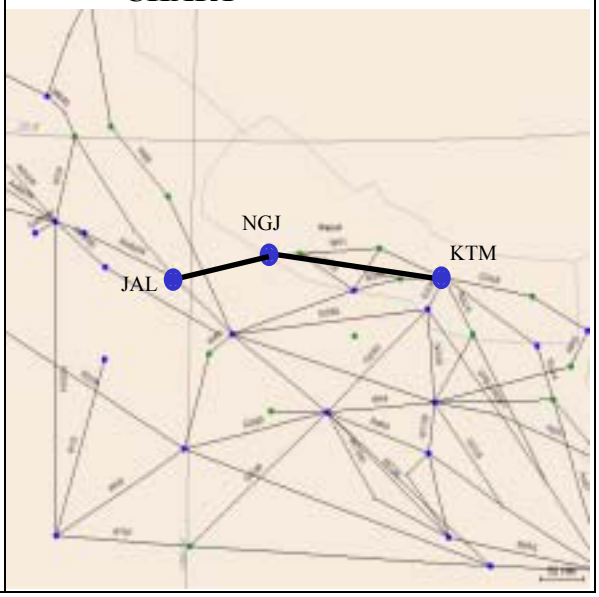
Action Required	Viet Nam to submit proposals for deletion from BANP.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route is being served by other available ATS route.

ATS ROUTE NAME: **A473**

Requested by :

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Jalalabad (JAL) .. Nepalgunj (NGJ) .. Kathmandu (KTM)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	States to implement the requirement as L626 in June 2005.
	Amendment proposal to delete be submitted

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route will be served as L626 in June 2005.

ATS ROUTE NAME: **A584**

Requested by :

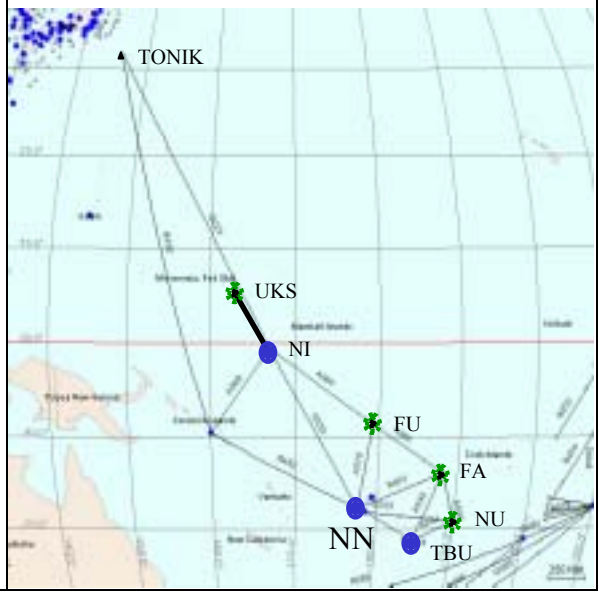
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Tonga (TBU) .. Niue (NU) .. Faleolo (FA) .. Funafuti (FU) .. Nauru (NI) .. Kosrae (UKS)

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



Action Required	US to submit proposal for deletion of the segment between Nauru and Kosrae.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The segment will be proposed by US to delete from the BANO.

ATS ROUTE NAME: **B201** Requested by :

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Niue (NU) .. Auckland (AA)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**Under construction**

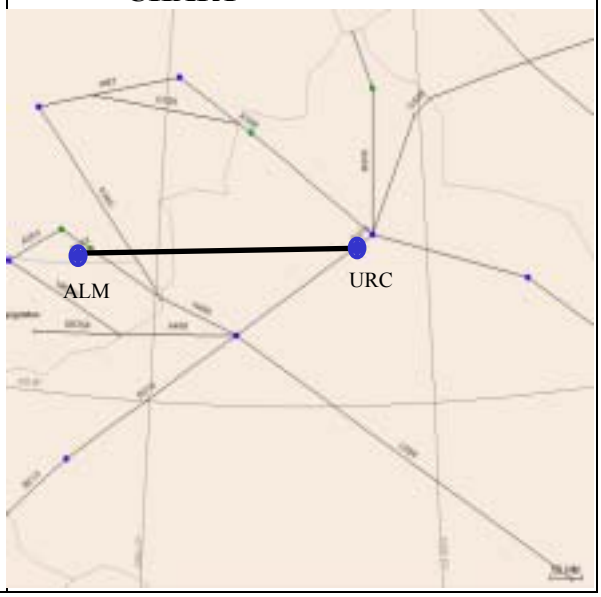
Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The segment will be delete after the States' proposals.

ATS ROUTE NAME: **R216**

Requested by :

ENTRY/EXIT POINT	**CHART**
XXXXX **ROUTE DESCRIPTION** **Urumqi (URC) .. Almaty (ALM)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

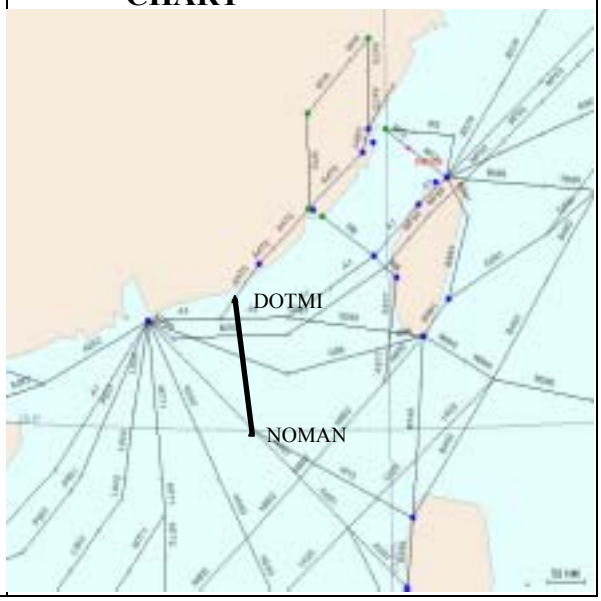
Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between URUMQI and ALMA ATA is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **R333**

Requested by :

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **DOTMI .. NOMAN** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART**



Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

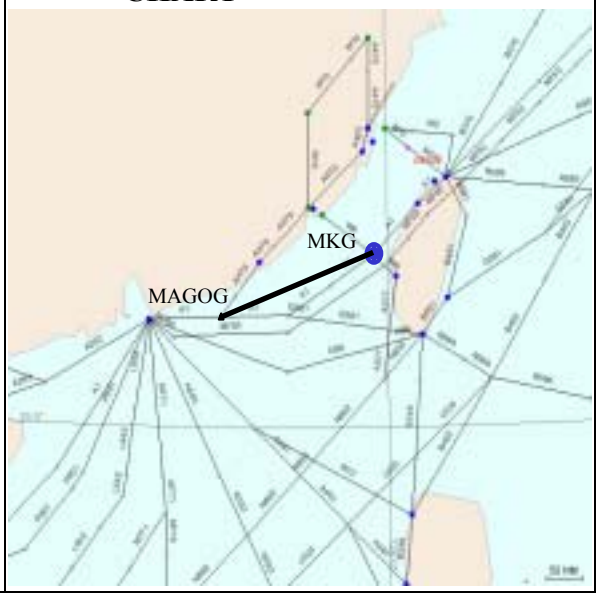
Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route requirement between DOTMI and NOMAN (formerly AKERO) need to be collectively considered with other future ATS route system to be developed in the region to reap the best overall result for all concerned parties. The direct route requirement will be kept under review.

ATS ROUTE NAME: **R335**

Requested by :

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **MAGOG .. Makung (MKG)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART**



Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route between MAGOG and MAKUNG is not possible and cannot be implemented at present. The requirement is being served by other available ATS route. The direct route requirement will be kept under review.

ATS ROUTE NAME: **R345**

Requested by :

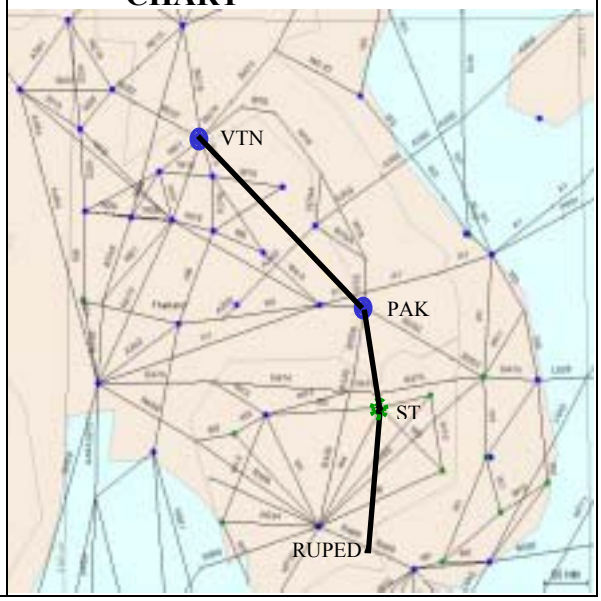
ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
Vientiane (VTN) .. Takhaek .. Pakse (PAK) .. Stung Treng (ST) .. RUPED

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: The route is not possible and cannot be implemented at present. The requirement is being served by other available ATS route.

Chapter 3: Routes Implemented Not In the BANP/Not In Accordance with the BANP

ATS Routes	Route Description /Significant points	Coordinates	FIR	Remarks
M512 (on operational trial, target implementation date 12 May 2005)	KATUNAYAKE ANIVE DOPDO		Colombo Maldives	APAC ….approved on …. Circulated on … (other relevant information e.g. ATC Coordination Group)
M772 (to be updated by ICAO Regional Office)				
EMMARSH Routes (to be updated by ICAO Regional Office)				

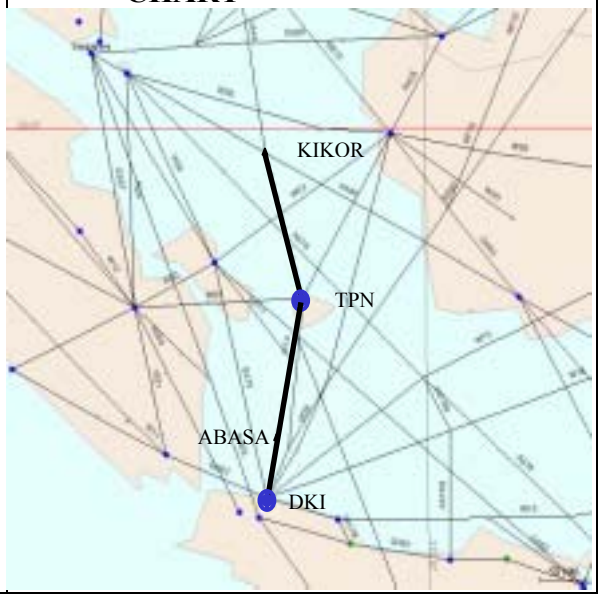
Chapter 4, Part A: Route Requirements − States

(This section contains routes that have been agreed to be included in the BANP and will be progressed as BANP amendments)

PROPOSER	ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
Indonesia	L644	Jakarta ABASA Tanjung Pandan KIKOR	0557.7N 10702.1E 0456.9N 10715.7E 0243.5N 10745.2E 0024.0N 10705.1E	Jakarta Jakarta Jakarta Jakarta/Singapore	APAC-ATS-
	M635	Tanjung Pinang SANOS RAMPY Curtin	0054.2N 10430.9E 0042.0N 10619.6E 0620.8S 11320.8E 1735.3S 12351.1E	Singapore Singapore/Jakarta Jakarta Brisbane	
	M774	Tanjung Pinang KIKOR BOMAX BOLSA KIBON Pangkalan Bun KOBAS KEVOK KEONG KIKEM	0054.2N 10430.9E 0024.0N 10705.1E 0054.2S 10805.6E 0112.1S 10841.2E 0150.0S 11000.0E 0243.6S 11141.8E 0300.0S 11214.6E 0420.5S 1145605E 0655.3S 12002.0E 0952.9S 12607.4E	Singapore Singapore/Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta/Brisbane	
	P648	Jakarta ATOSO AMBOY AKULA KIBON OSUKA OMEGA OKADA Kinabalu	0057.9S 10702.3E 0508.9S 10728.0E 0408.0S 10810.0E 0307.2S 10857.1E 0150.0S 11000.0E 0117.5S 11024.7E 0023.0S 11107.2E 0134.0N 11238.0E 0553.9N 11601.9E	Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Jakarta Kota Kinabaru	
	M522	Bali GALKO KEVOK ELANG MAMOK Kinabalu	0845.0S 11509.8E 0649.6S 11504.9E 0420.5N 11456.5E 0055.6S 11450.1E 0405.1N 11547.2E 0553.9N 11601.9E	Jakarta Jakarta Jakarta Jakarta Jakarta Kota Kinabaru	
Indonesia	M768	ELBIS PORAK LADOP MAMOK	0905.3S 12743.7E 0458.6S 12400.4E 0001.7N 11930.7E 0405.1N 11547.2E	Brisbane/U Pandang Ujung Pandang Jakarta Jakarta	

ATS ROUTE NAME: **L644**

Requested by : Indonesia

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Jakarta (DKI) .. ABASA .. Tanjung Pandan (TPN) .. KIKOR** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

Action Required (Move to 4A)	States to coordinate imeplementation.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **M635**

Requested by : Indonesia

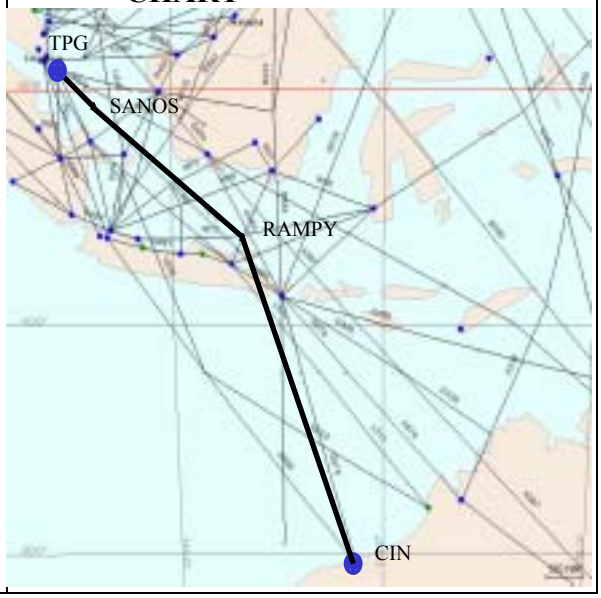
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Tanjung Pinang (TPG) .. SANOS .. RAMPY .. Curtin (CIN)

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



Action Required (Move to 4A)	States to coordinate to implementation.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **M774**

Requested by : Indonesia

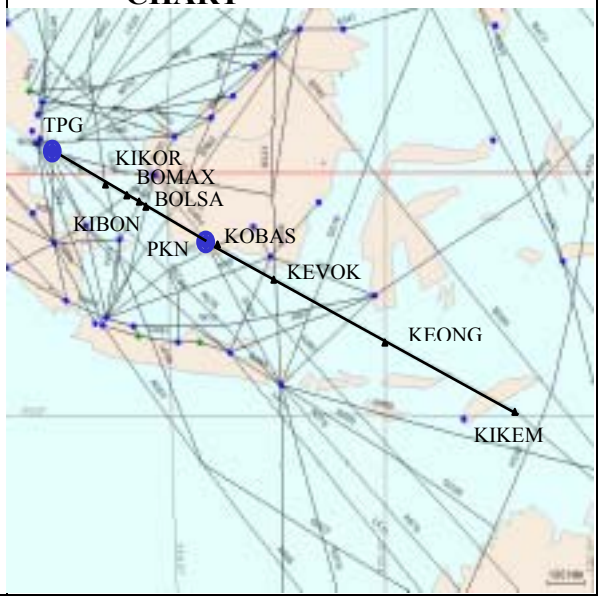
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Tanjung Pinang (TPG) .. KIKOR .. BOMAX .. BOLSA .. KIBON .. Pangkalan Bun (PKN) .. KOBAS .. KEVOK .. KEONG .. KIKEM

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



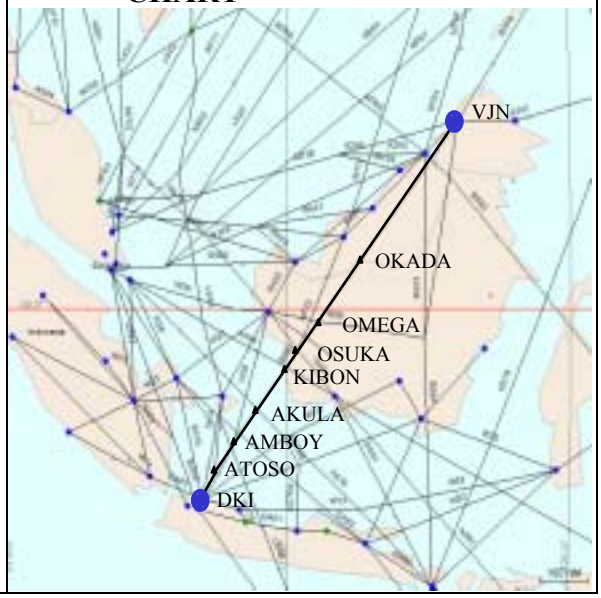
Action Required (Move to 4A)	States agreed to implementation.
	BANP amendment proposal APAC-ATS/05/5 pending approval.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **P648**

Requested by : Indonesia

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Jakarta (DKI) .. ATOSO .. AMBOY .. AKULA .. KIBON .. OSUKA .. OMEGA .. OKADA .. Kinabalu (VJN)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

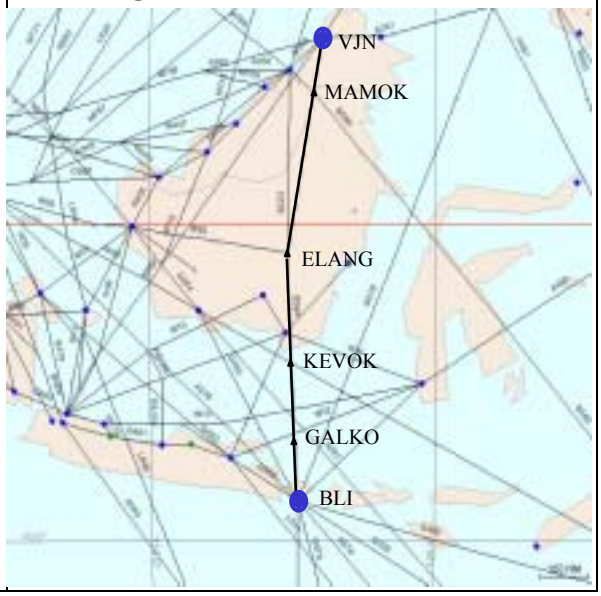
Action Required (Move to 4A)	States agreed to implementation. BANP amendment proposal APAC-ATS/05/5 pending approval.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **M522**

Requested by : Indonesia

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Bali (BLI) .. GALKO .. KEVOK .. ELANG .. MAMOK .. Kinabalu (VJN)** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

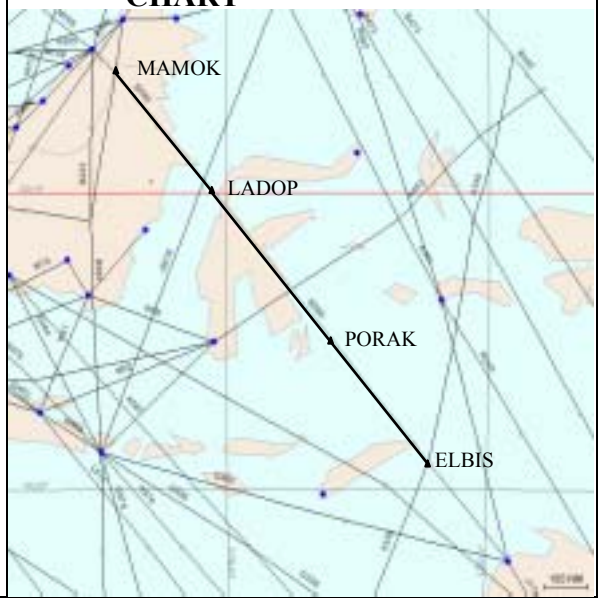
Action Required (Move to 4A)	States to coordinate implementation.
	BANP amendment proposal APAC-ATS/05/5 pending approval

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **M768**

Requested by : Indonesia

ENTRY/EXIT POINT **ROUTE DESCRIPTION** **ELBIS .. PORAK .. LADOP .. MAMOK** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required (Move to 4A)	States to coordinate imeplementation. ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

Chapter 4, Part B: Future Route Requirements – States

(The routes in this section have been submitted by States for consideration to be included in the BANP and are subject to coordination and agreement)

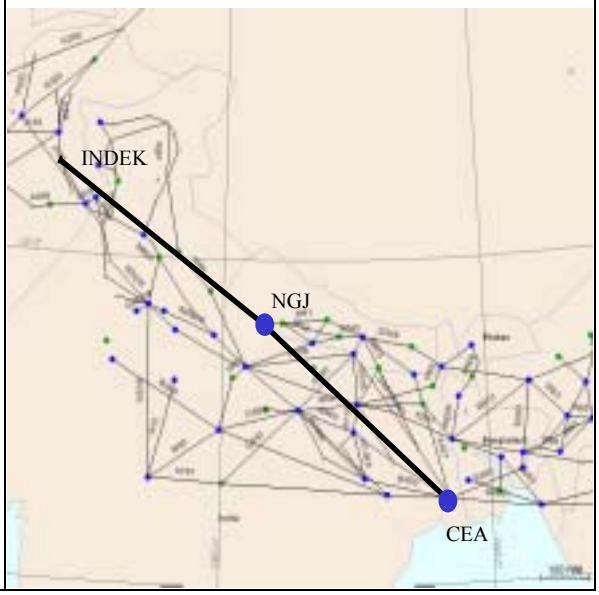
(Coordinates are indicative only, not for operational use)

PROPOSER	ATS ROUTE	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
Cambodia Thailand Vietnam	R575	(provisional) PARPA UPNEP SURAT THANI Phuket			
Cambodia Thailand	R589	(provisional) Phnom Penh UPNEP SURAT THANI			
Nepal	Himalaya 1	Kolkata Nepalgunj INDEK	2238.7N 08827.2E 2806.1N 08139.1E 3246N 7316E	Kolkata Kathmandu Lahore	
	Himalaya 2	Kathmandu Baghdogra Guwahati Silchar Imphal Kunming	2740.5N 08521.0E 2641.3N 08819.8E 2606.1N 09135.3E 2454.8N 09258.9E 2446.0N 09354.5E 2501N 10244E	Kathmandu Kolkata Kolkata Kolkata Kolkata Kunming	
Republic of Korea		AGAVO Anyang	3710.0N 12400.0E 3724.8N 12655.7E	Incheon Incheon/Shang hai	
Tahiti	R582	KRILL MAITO Tahiti PAERE TOLAB TAMUR TIERE TARAO TUNBA TIAMU	2016.1N 15700.0E 1732.8S 14936.1E 1625.0S 14752.6W 1428.0S 14500.0W 1104.0S 14000.0W	Auckland Ocn/Tahiti Tahiti Tahiti Tahiti Tahiti Tahiti Tahiti Tahiti Tahiti Tahiti	

Viet Nam		HANOI DANANG PLEIK HO CHI MINH			
		NOBAI/ KUNMING			
		NOBAI CATBI SAMAS HONG KONG			
		ASSAD (LUANG PRABANG)			

ATS ROUTE NAME: Himalaya 1

Requested by : Nepal

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Kolkata (CEA) .. Nepalgunj (NGJ) .. INDEK** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	States to coordinate implementation.
	.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: Himalaya 2

Requested by : Nepal

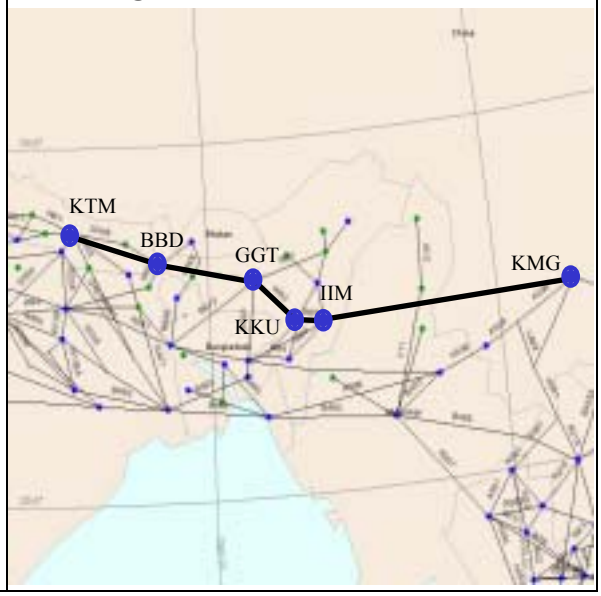
ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
Kathmandu (KTM) .. Baghdogra (BBD) .. Guwahati (GGT) .. Silchar (KKU) .. Imphal (IIM) .. Kunming (KTM)

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



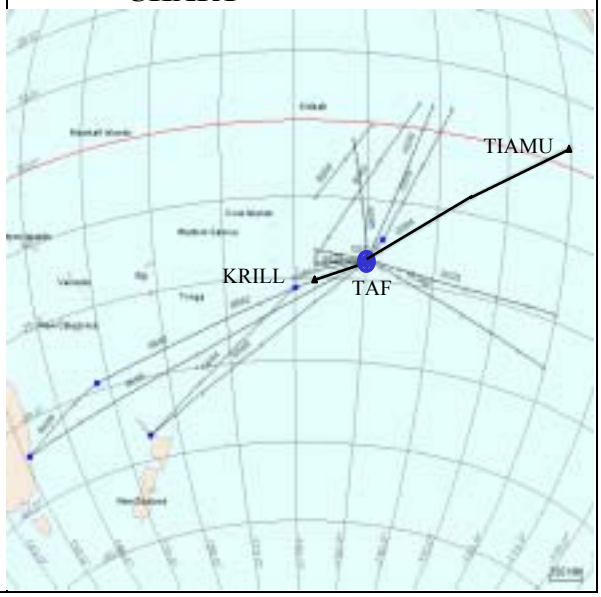
Action Required	States to coordinate imeplementation.
	.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: **R582**

Requested by : Tahiti

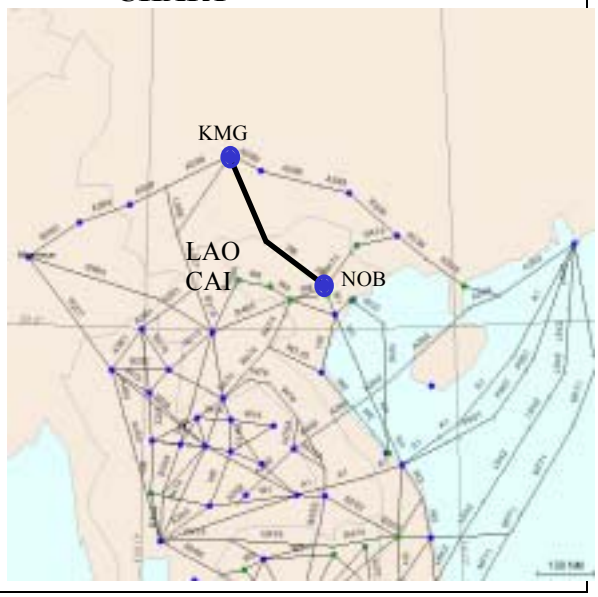
ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Decommissioned G594 and realigned R582 as KRILL .. MAITO .. Tahiti (TAF) .. PAERE .. TOLAB .. TAMUR .. TIERE.. TARAO .. TUNBA .. TIAMU** **FLIGHT LEVEL BAND** **PRIORITY: HIGH/MED/LOW**	

Action Required	States to coordinate imeplementation.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: Requested by : Vietnam

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Noibai (NOB) .. LAOCAI .. Kunming (KMG)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	States to coordinate imeplementation.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: Requested by : Vietnam

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Hanoi .. Danang .. Pleiku .. Buon Mathuot .. Anloc. .Ho Chi Minh** **FLIGHT LEVEL BAND** **29000 – 41000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** **Under Construction**

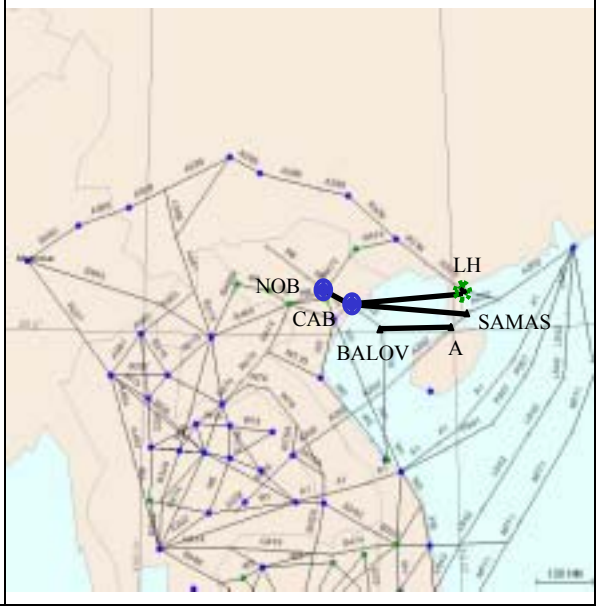
Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks: CAAV has intended plan to upgrade the domestic ATS route W1 (Hanoi – Danang – Ho Chi Minh) to international ATS route in the upper airspace. Proposed to Regional Meeting on 4 May 2005.

ATS ROUTE NAME:

Requested by : Vietnam

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Three Options:** **A) Noibai (NOB) .. Catbi (CAB) .. SAMAS** **B) Noibai (NOB) .. Catbi (CAB) .. BALOV .. A .. SAMAS** **C) Noibai (NOB) .. Catbi (CAB) .. Huguang (LH)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		
Emission	CO_2	
	NO_X	

Remarks:

ATS ROUTE NAME: SEA1

Requested by :Vietnam, Lao PDR
Remarks: This route is also a user requirement as reflected in Chapter 5 under the same ATS Route Name

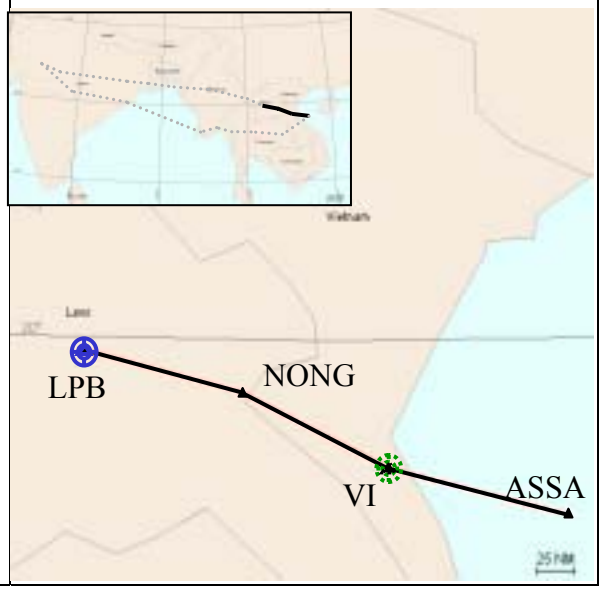
ENTRY/EXIT POINT
ASSAD / Nonghet(NONGT) / AKSAG

ROUTE DESCRIPTION
ASSAD .. Vinh(VIN) ..
Nonghet(NONGT) ..
LuangPrabang(LPB) ..

FLIGHT LEVEL BAND
28000 – 41000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	States to coordinate to submit proposal for deletion of the requirement.
	ICAO to circulate proposal for deletion from BANP.

Benefit		
Cost		
Fuel Saving		Mileage saving 100NM
Emission	CO_2	
	NO_X	

Remarks:

Chapter 5: Part A: Route Requirements − Users

(The routes in this section have been submitted by Users and agreed to be included in the BANP and are subject to an amendment proposal to the BANP)

ATS ROUTES	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS

Chapter 5: Part B: Future Route Requirements − Users

(The routes in this section have been submitted by Users for consideration to be included in the BANP and are subject to coordination and agreement)

ATS ROUTES	SIGNIFICANT PTS	COORDINATES	FIR	REMARKS
IND 1	BBS BPL	N2014.6 E08548.8 N2317.0 E07720.2	KOLKATTA MUMBAI	
IND 2	GGC ASARI	N2444.5 E08456.6 N3048.3 E07509.5	KOLKATTA DELHI	
IND 3	LAPAN BUTOP	N2343.9 E08326.1 N2919.7 E07523.9	KOLKATTA DELHI	
IND 4	KAKID LAPAN	N2038.6 E08639.9 N2343.9 E08326.1	KOLKATTA KOLKATTA	
IND 5	BUTOP JHANG	N2919.7 E07523.9 N3116.0 E07218.0	DELHI PAKISTAN	
IND 6	BBS PRA	N2014.6 E08548.8 N2401.8 E07445.0	KOLKATTA MUMBAI	
IND 7	PRA SERKA KAMAR BIRJAND	N2401.8 E07445.0 N2951.0 E06615.0 N3239.0 E06044.0 N3258.3 E05912.0	MUMBAI DELHI KABUL TEHERAN	N877 Extension
SEA1	ASSAD VINH NONGT LPG	N1820.5 E10740.9 N1844.0 E 10540.1 N1930.0 E10359.0 N1954.0 E10209.6	HANOI HANOI VIENTIENE VIENTIENE	
SEA 2	DANANG SYX	N1603.2 E10811.9 N1818.4 E10910.4	HOCHIMINH SANYA AOR	
SEA 3	BUT ENREP	N1240.0E10100.0 N0452.4 E10414.7	BANGKOK SINGAPORE	
SEA 4	BITOD PNOMPENH	N0715.4 E10450.3 N1132.5 E10450.3	HOCHIMINH PNOMPENH	REALIGN M753
SEA 5	STUNG TRENG DANANG	N1331.5 E10600.9 N1603.2 E10811.9	PNOMPENH HOCHIMINH	
SEA 6	PAKSE ASSAD	N1511.8 E10544.5 N1820.5 E10740.9	VIENTIANE ASSAD	

SEA 7	BATAR PARDI	N0210.0 E10205.2 S0034.0 E10413.0	LUMPUR JAKARTA	UNIDIRECTIONAL ROUTE
SEA 8	ARAMA BOBAG ANITO	N0136.9 E10307.2 N0102.5 E10329.9 S0017.0 E10452.0	LUMPUR SINGAPORE JAKARTA	
SEA 9	DANANG SAMUI	N1603.2 E10811.9 N0932.8 E10003.7	HOCHIMINH BANGKOK	
SEA 10	CAVOI/ IGNIS QUNGI SAMUI	N1713.5 E11000.0 N1721.0 E11109.0 N1507.0 E10848.0 N0932.8 E10003.7	SANYA AOR SANYA AOR HOCHIMINH BANGKOK	QUNGI TO CAVOI AND TO IGNIS
SEA 11	NANSHAN BUNTA/ SAMBO	N1818.4 E 10910.4 N1650.0 E 10923.7 N1616.8 E E108 42.5	SANYA AOR HOCHIMINH HOCHIMINH	NANSHAN TO BUNTA AND TO SAMBO
SEA 12	ROT HUGUANG	N16 07.0 E 103 46.7 N21 07.9 E110 20.2	HOCHIMINH GUANGZHOU	
SCS1	DAMEL CH	N1358.7 E11136.4 N2213.2E11401.8	HOCHIMINH HONGKONG	
SCS 2	VEPAM CH	N1358.0 E11000.0 N2213.2 E11401.8	HOCHIMINH HONGKONG	
SCS 3	EXOTO IDOSI	N1521.5 E11103.0 N1900.0 E11230.0	HOCHIMINH HONGKONG	
SCS 4	VKL CONSON	N0243.5 E10144.3 N0843.8 E10637.9	LUMPUR HOCHIMINH	
SCS 5	EXOTO DAMVO MELAS LUSMO	N1521.5 E11103.0 N1106.5 E10932.7 N0705.3 E10809.2 N0333.7 E10655.6	HOCHIMINH HOCHIMINH HOCHIMINH SINGAPORE	
SCS 6	LUSMO MELAS DAMVO	N0333.7 E10655.6 N0705.3 E10809.2 N1106.5 E10932.7	SINGAPORE HOCHIMINH HOCHIMINH	
SCS 7	BRUNEI LAXOR DULOP	N04 52.5E11453.1 N0949.6 E11448.5 N1814.2E11432.6	KINABALU SINGAPORE HONGKONG	TO JOIN M772 AT LAXOR
SCS8	DULOP ELATO	N1814.2E11432.6 N2220.0 E11730.0	HONGKONG HONGKONG	EITHER DULOP/ KAPLI

	ENVAR DULOP KAPLI	N2159.5 E11730.0 N1814.2E11432.6 N2110.0 E11730.0	HONGKONG HONGKONG HONGKONG	G86, OR DULOP/ ELATO& ENVAR
SCS 9	TOKON DILIS TOKON ENDAX	N1142.0 E11940.5 N1431.1 E12600.1 N1142.0 E11940.5 N1415.0 E13000.0	MANILA MANILA MANILA MANILA	EITHER TOKON/ DILIS OR TOKON/ ENDAX
PHI 1	MIA CAB MEVIN	N1430.5 E12101.3 N1528.9 E12101.5 N2100.0 E12233.0	MANILA MANILA MANILA	
PHI 2	MIA MYC	N1430.5 E12101.3 N2447.2 E12518.1	MANILA NAHA	
TWN 1	APU MIKES	N2510.6 E12131.3 N2935.2 E12544.9	TAIPEH NAHA	
THA 1	KORAT DAWEI	N1455.0 E10208.4 N1405.9 E09812.2	BANGKOK YANGON	
IDO 1	SJ MABIX	N0113.4 E10351.3 N0316.0 E09450.9	SINGAPORE JAKARTA	
COL 1	KAT TNV	N0709.7 E07952.1 S1842.2 E04731.1	COLOMBO MADAGASCAR	
KAB 1	HANGU GHAZNI	N33 29.1 E07100.4 N33 32.9 E06825.2	PAKISTAN KABUL	
WPC 1	PY VNO ROR ENDAX ELMAS TINHO	S0927.2 E14712.9 S0240.7 E14118.2 N0722.1 E13433.0 N1415.0 E13000.0 N2027.0 E12500.0 N2421.2 E12201.7	PT MORESBY PT MORESBY OAKLAND MANILA MANILA TAIPEI	
CHA 1 (CHA 5)	YNC GUPAD CGO SB	N3819.4 E 10623.8 N3618.7 E11028.4 N3430.9 E11350.6 N3150.4 E11714.0	LANZHOU LANZHOU WUHAN SHANGHAI	
CHA 2 (CHA 7)	KUQA CHW	N4143.0 E08300.0 N3951.0E09821.0	URUMQI LANZHOU	
CHA 3 (CHA 9A)	FKG OMBON	N4410.0 E08759.0 N3238.5 E10420.0	URUMQI KUNMING	

CHA 4 (CHA 10A)	MORIT NSH POU	N4202.0 E10249.0 N3319.1 E10818.7 N2301.2 E11311.4	LANZHOU LANZHOU GUANGZHOU	
CHA 5 (CHA 11A)	YIN INTIK	N2412.4E11324.6 N4340.8 E11154.1	GUANGZHOU BEIJING	
CHA 6 (CHA14)	OMBON NSH OBLIK SB (LUOGANG)	N3238.5 E10420.0 N3319.1 E10818.7 N3218.0 E11432.0 N3146.8 E11718.1	KUNMING LANZHOU WUHAN SHANGHAI	
CHA 7 (CHA 15)	KANSU KICHA CGQ HLD	N3838.0 E13228.5 N4041.0 E12911.5 N4338.0 E12400.5 N4912.1 E11949.4	PYONGYANG PYONGYANG SHENYANG SHENYANG	
CHA 8 (CHA16)	SCH HTN CHW	N3825.7 E07714.4 N3702.2 E07952.3 N3951.0E09821.0	URUMQI URUMQI LANZHOU	
CHA 9 (CHA17)	YBL SANLI	N3925.7 E10246.3 N3200.0 E100.00.0	LANZHOU KUNMING	
CHA 10 (CHA18)	ARGUK DALIAN HEFEI BEMAG	N4753.0E13439.5 N3857.6 E12130.8 N3146.8 E11718.1 N2601.1 E11400.1	SHENYANG SHENYANG SHANGHAI GUANGZHOU	
CHA 11 (CHA19)	DALIAN XJT	N3857.6 E12130.8 N3557.7 E12014.4	SHENYANG SHANGHAI	
IATA1	KCA RED3 RED2 RED1 OMBON	N4143.0 E08300.0 N3810.0 E09230.0 N3700.0 E09530.0 N3609.1 E09738.0 N3238.5 E10420.0	URUMQI LANZHOU LANZHOU LANZHOU KUNMING	
IATA2	OMBON RO	N3238.5 E10420.0 N2546.1 E10936.4	KUNMING GUANGZHOU	
IATA3	OMBON SB (LUOGANG)	N3238.5 E10420.0 N3146.8 E11718.1	KUNMING SHANGHAI	
PRD 1	POU ZUH SIERA	N2301.2 E11311.4 N2213.3 E11328.0 N2159.1 E11333.2	GUANGZHOU GUANGZHOU HONGKONG	
PRD2	POU ZUH SIERA	N2301.2 E11311.4 N2213.3 E11328.0 N2159.1 E11333.2	GUANGZHOU GUANGZHOU HONGKONG	

	SIKOU	N2050.6 E11130.0	HONGKONG	
RUS 1	SESUR KAE	N4217.5 E13041.5 N3742.0 E12845.2	VLADIVOSTOK INCHOEN	
RUS 2	TEKUK KAE	N4241.0 E13527.0 N3742.0 E12845.2	VLADIVOSTOK INCHOEN	
RUS 3	BG (Muraveyka) TELOD KAE	N 4353.0 E13315.0 N4219.6 E13211.8 N3742.0 E12845.2	VLADIVOSTOK VLADIVOSTOK INCHOEN	

Note1: Acronyms used for route names are only intended as a rough guide to the location of the routes. They are explained below:

IND-India
SEA- South East Asia
SCS-South China Sea
PHI-Philippines
THA-Thailand
TWN-Taiwan
PRD-Pearl River Delta
KAB-Kabul
IDO-Indonesia
COL-Colombo
CHA-China
IATA- earlier IATA requested routes in China
WPC- West Pacific Area

Note 2: Route names in parenthesis refer to the original names from the earlier route catalogue. They are renamed following consolidation of China routes and ARNR TF 3 meeting.

ATS ROUTE NAME: IND1

REQUESTED BY: IATA

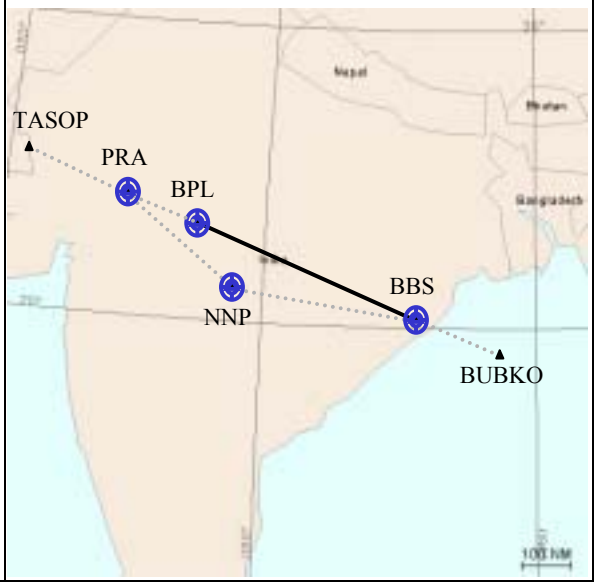
ENTRY/EXIT POINT
BBS / BPL

ROUTE DESCRIPTION
BBS .. BPL

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

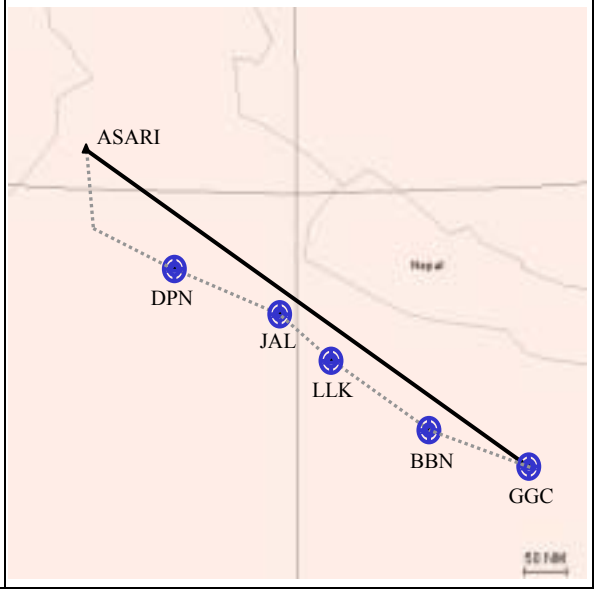
Saving	Per flight	Annual
Mileage / Time	25nm /3 mins	
Fuel	406kg	148190 kg
CO_2	1250kg	456250kg
No_x		

Remarks

Potential City Pairs: Europe/South East Asia

ATS ROUTE NAME: IND2

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **GGC .. ASARI** **FLIGHT LEVEL BAND** **29000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

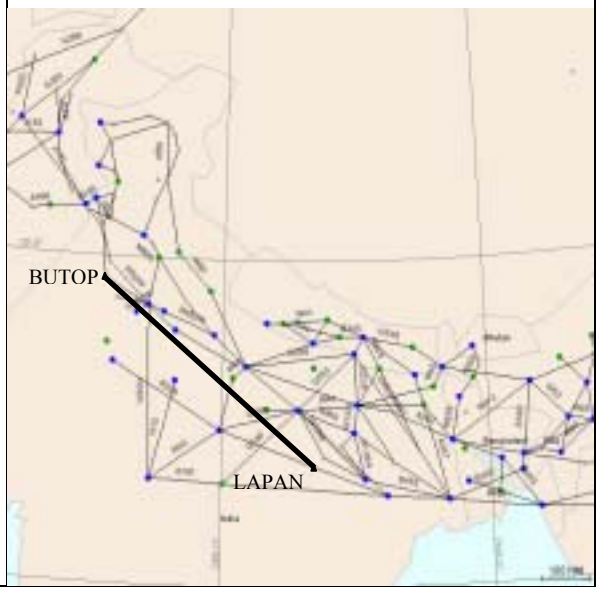
Saving	Per flight	Annual
Mileage / Time	40nm/ 5 mins	
Fuel	650kg	237250kg
CO_2	2000kg	730000kg
No_x		

Remarks

Potential City Pairs: Europe/South East Asia

ATS ROUTE NAME: IND 3

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION LAPAN ..BUTOP **FLIGHT LEVEL BAND** **28000 –46000 FEET** **PRIORITY: HIGH/MED/LOW** HIGH	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	26nm/3.25mins	
Fuel	422kg	154,213kg
CO_2	1,300kg	474,500kg
No_x		

Remarks

Potential City Pairs: Europe – SEA airports

ATS ROUTE NAME: IND 4

REQUESTED BY: IATA

ENTRY/EXIT POINT

KAKID -LAPAN

ROUTE DESCRIPTION

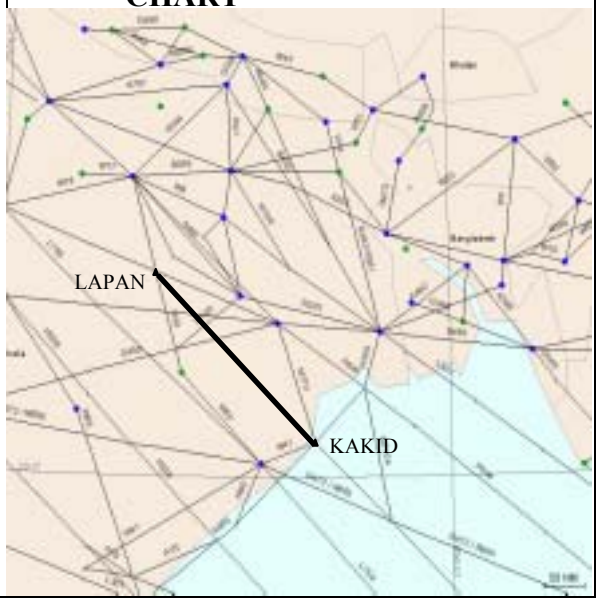
KAKID .. LAPAN

FLIGHT LEVEL BAND
28000- 46000 Feet

PRIORITY: HIGH/MED/LOW

HIGH

CHART



Action Required	IATA.
	ICAO

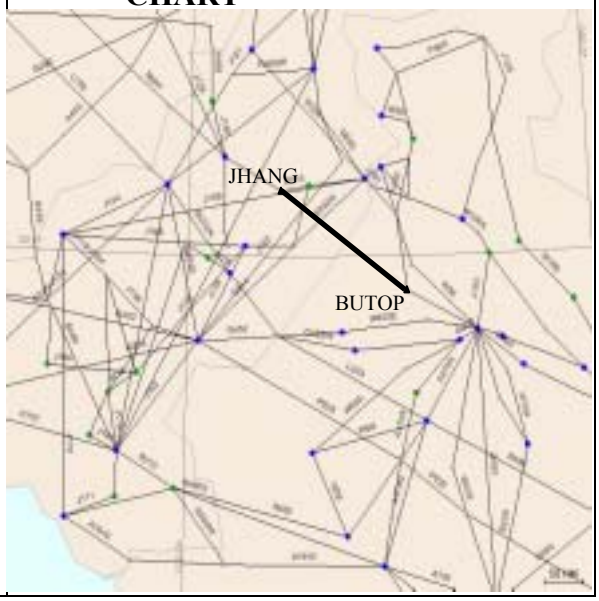
Saving	Per flight	Annual
Mileage / Time	18 nm/ 2.25min	
Fuel	292 kg	106,763kg
CO_2	900kg	328,500kg
No_x		

Remarks

Potential City Pairs: Europe – SEA Airports

ATS ROUTE NAME: IND 5

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
BUTOP- JHANG **ROUTE DESCRIPTION** BUTOP- JHANG **FLIGHT LEVEL BAND** **28000-46000 Feet** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA.
	ICAO

Saving	Per flight	Annual
Mileage / Time	56nm/ 7min	
Fuel	910kg	332,150kg
CO_2	2,800kg	1,022 tons
No_x		

Remarks

Potential City Pairs: Europe – SEA Airports

ATS ROUTE NAME: IND 6

REQUESTED BY: IATA

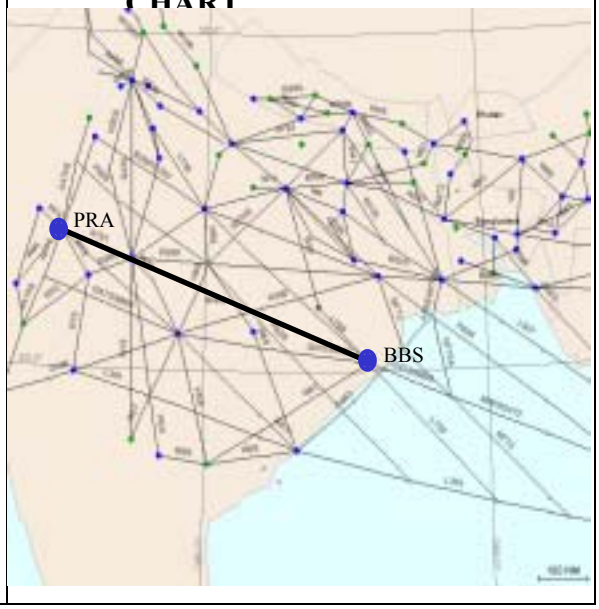
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Bhubaneshwar (BBS).. Pratapgarh (PRA)

FLIGHT LEVEL BAND
28000- 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA.
	ICAO

Saving	Per flight	Annual
Mileage / Time	21nm/ 2.6min	
Fuel	341kg	124,556kg
CO_2	1050kg	383,250kg
No_x		

Remarks

Potential City Pairs: Europe – SEA /Pearl River Delta Airports

ATS ROUTE NAME: IND 7 (N877 Extension)

REQUESTED BY: IATA

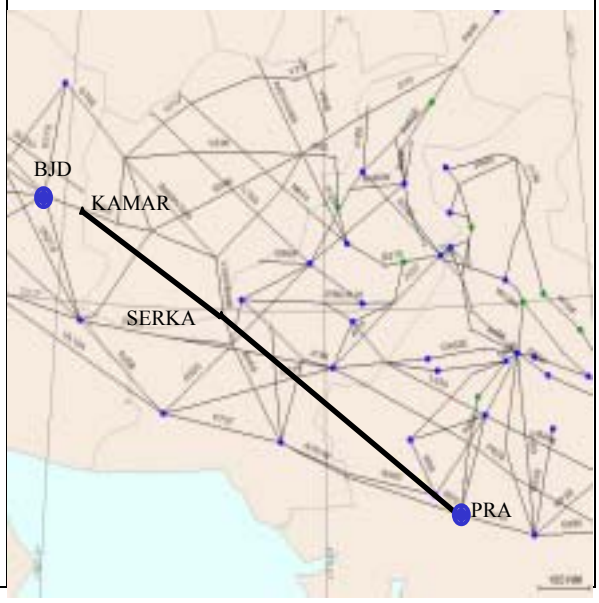
ENTRY/EXIT POINT
PRA - KAMAR

ROUTE DESCRIPTION
Direct Route Track from PRATAGARH
PRA – SERKA– KAMAR – BIRJAND
FLIGHT LEVEL BAND

28000-46000

PRIORITY: HIGH/MED/LOW
HIGH

CHART



Action Required	IATA.
	ICAO

Saving	Per flight	Annual
Mileage / Time	294 nm/37 min.	
Fuel	4777kg	1,743 tonnes
CO_2	147,000kg	5,365 tonnes
No_x		

Remarks

Potential City Pairs: KUL/SIN – MID-EAST/EUROPE

ATS ROUTE NAME: SEA1

REQUESTED BY: IATA

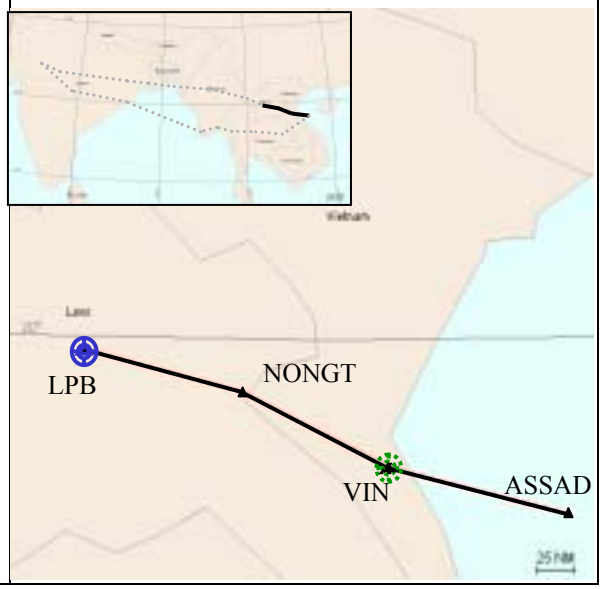
ENTRY/EXIT POINT
ASSAD / Nonghet(NONGT) / AKSAG

ROUTE DESCRIPTION
ASSAD .. Vinh(VIN) .. Nonghet(NONGT) .. LuangPrabang (LPB) ..

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	100nm/ 12.5mins	
Fuel	1625 kg	593125 kg
CO_2	5000kg	1,825 tonnes
No_x		

Remarks

Potential City Pairs: Middle East /Karachi – Pearl River Delta

ATS ROUTE NAME: SEA2

REQUESTED BY: IATA

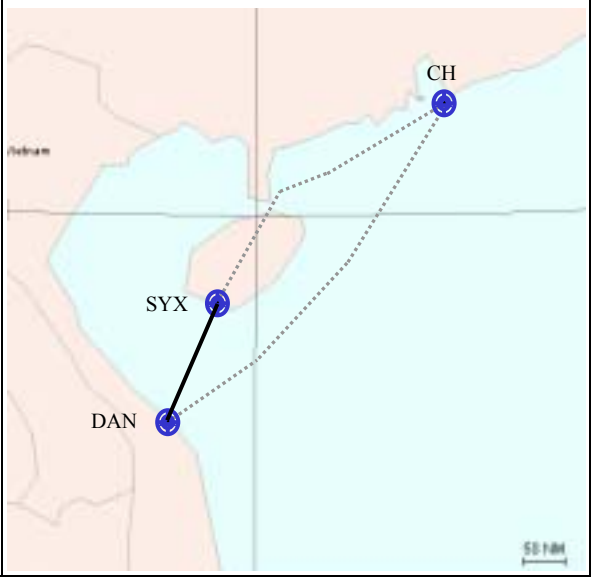
ENTRY/EXIT POINT
DAN / XXXXX / SYX

ROUTE DESCRIPTION
DAN .. SYX

FLIGHT LEVEL BAND
29000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	739nm/93 mins	
Fuel	12090 kg	4,412 tonnes
CO_2	37200kg	13,578 tonnes
No_x		

Remarks

Potential City Pairs: South East Asia - Hainan

ATS ROUTE NAME: SEA3

REQUESTED BY: IATA

ENTRY/EXIT POINT
BUT / XXXXX / ENREP

ROUTE DESCRIPTION
BUT- ENREP

FLIGHT LEVEL BAND
29000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Bangkok- Australia

ATS ROUTE NAME: SEA 4 (REALIGN M753)
REQUESTED BY: IATA

ENTRY/EXIT POINT
BITOD – PHNOM PENH (PNH)

ROUTE DESCRIPTION

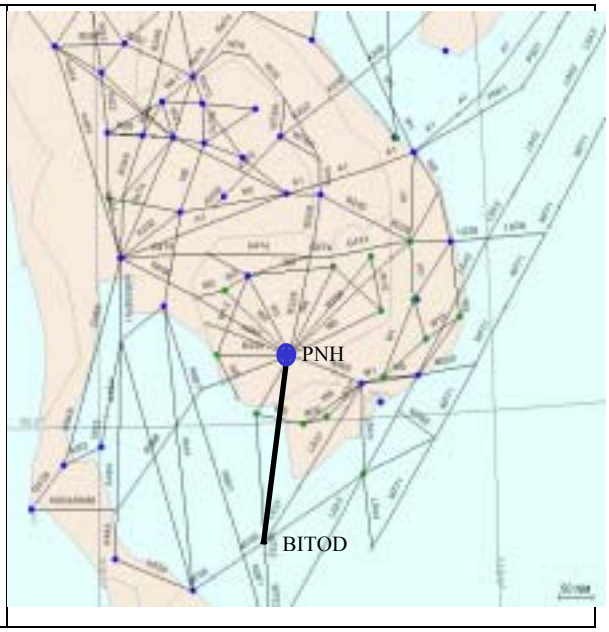
BITOD – PNH

FLIGHT LEVEL BAND

29000 - 46000

PRIORITY: HIGH/MED/LOW

MED



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	42 nm/5.25 min	
Fuel	682 kg	249,113kg
CO_2	2100kg	766,500kg
No_x		

Remarks

Potential City Pairs: Singapore/KL –Pnom Penh

ATS ROUTE NAME: **SEA 5**
REQUESTED BY: IATA

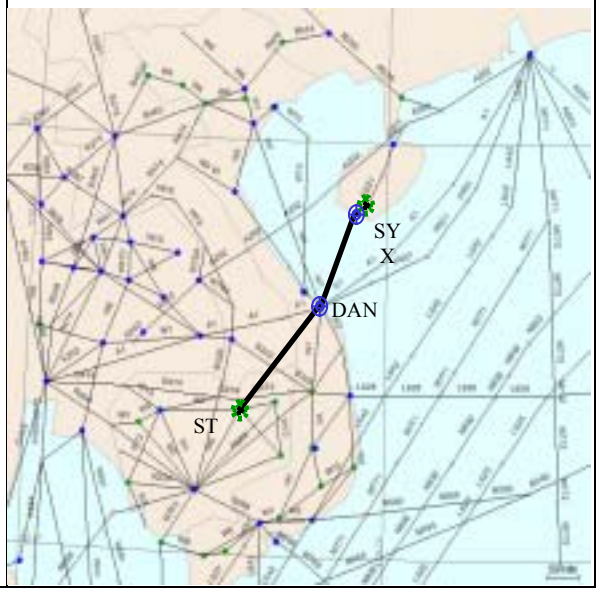
ENTRY/EXIT POINT
STUNG TRENG (ST) – DANANG (DAN)

ROUTE DESCRIPTION
Direct STUNG TRENG (ST) to DANANG (DAN)

FLIGHT LEVEL BAND
29000 – 46000

PRIORITY: HIGH/MED/LOW
MED

CHART



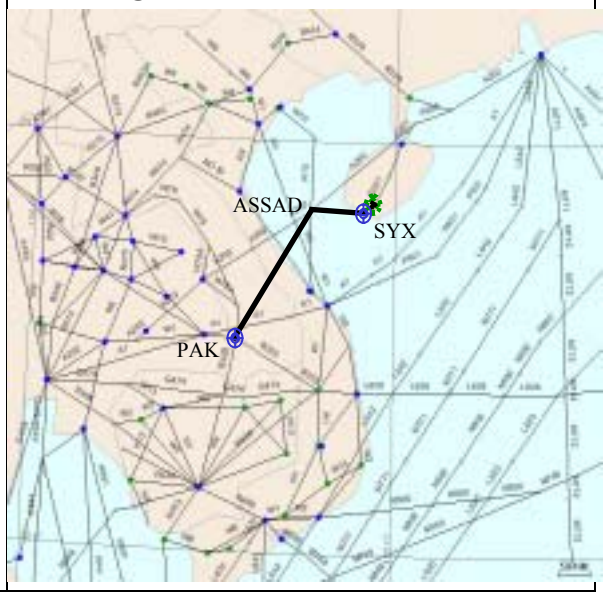
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	64 nm / 8 min	
Fuel	1040 kg	379,600kg
CO_2	3200 kg	1168 tonnes
No_x		
SO_2		

Remarks

Potential City Pairs: Singapore/ KL –Hainan/Hong Kong

ATS ROUTE NAME: **SEA 6** REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
PAKSE - ASSAD **ROUTE DESCRIPTION** **Direct PAKSE to ASSAD** **FLIGHT LEVEL BAND** **29000 – 46000 feet** **PRIORITY: HIGH/MED/LOW** **MED**	

Action Required	IATA
	ICAO

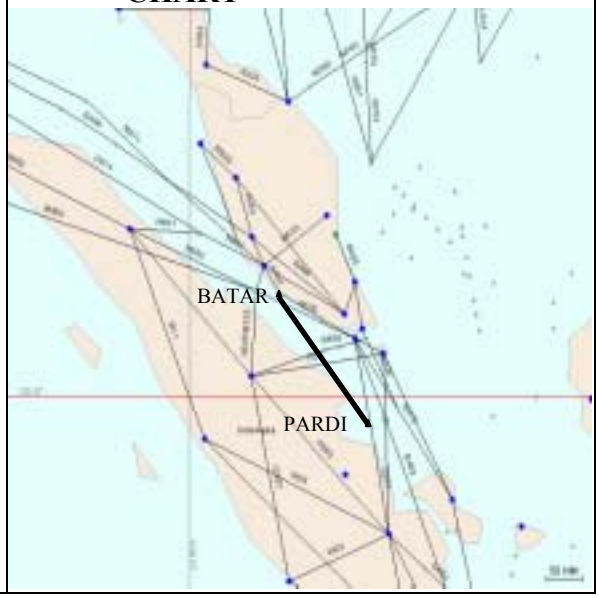
Saving	Per flight	Annual
Mileage / Time	126 nm / 16 min	
Fuel	2047 kg	747.338 kg
CO_2	6300 kg	2299,500 kg
No_x		

Remarks

Potential City Pairs: KUL/SIN/Phnom Penh/JKT – Hainan/ Hong Kong

ATS ROUTE NAME: SEA 7

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION PARDI ..BATAR **FLIGHT LEVEL BAND** **28000 –46000 FEET** **PRIORITY: HIGH/MED/LOW** MED **UNIDIRECTIONAL ROUTE**	

Action Required	IATA
	ICAO

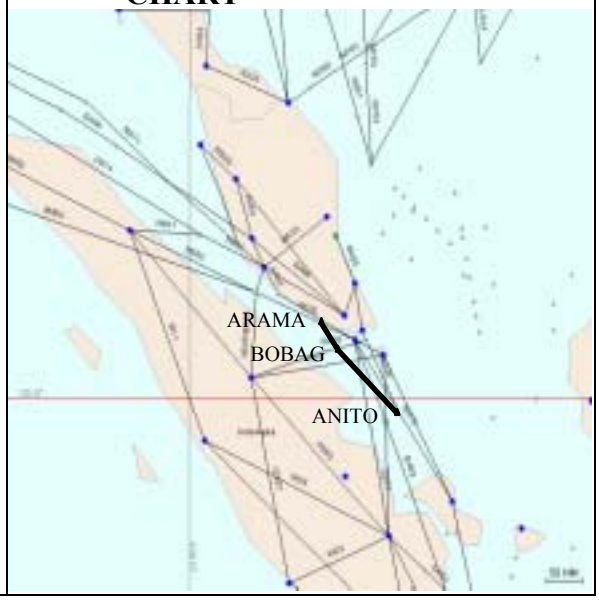
Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Kuala Lumpur -Jakarta

ATS ROUTE NAME: **SEA 8**

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **ARAMA..BOBAG..ANITO** **FLIGHT LEVEL BAND** **28000- 46000 Feet** **PRIORITY: HIGH/MED/LOW** **MED** UNIDIRECTIONAL	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs:

Potential City Pairs: Kuala Lumpur – Jakarta

ATS ROUTE NAME: **SEA 9**

REQUESTED BY: IATA

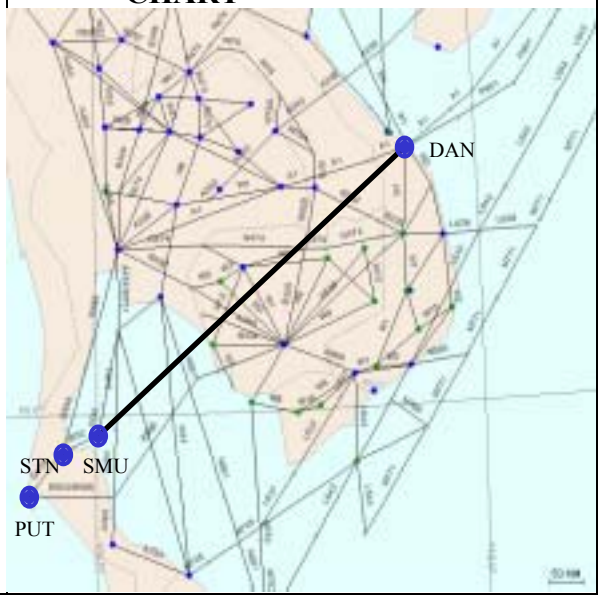
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Danang (DAN) .. SAMUI (SMU)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



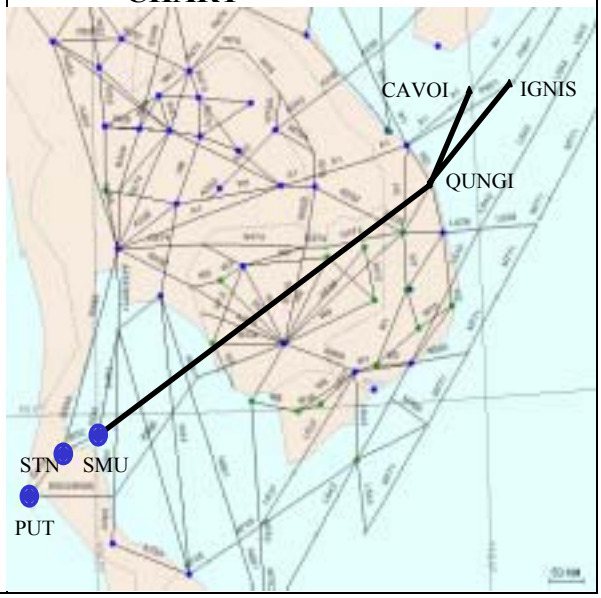
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Colombo/Phuket- Pearl River Delta

ATS ROUTE NAME: SEA 10 REQUESTED BY: IATA

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **CAVOI and IGNIS ..** **Quangngai/QUNGI .. SAMUI (SMU)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	IATA
	ICAO

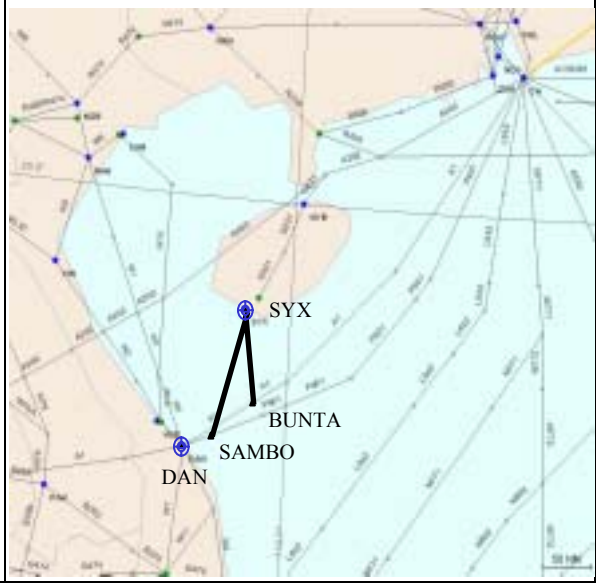
Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Colombo/ Phuket - Pearl River Delta

ATS ROUTE NAME: SEA11

REQUESTED BY: IATA

ENTRY/EXIT POINT **XXXXX** **ROUTE DESCRIPTION** **Danang (DAN) .. SAMBO .. Nanshan (SYX) and** **Danang (DAN) .. BUNTA .. Nanshan (SYX)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: South East Asia -Hainan

ATS ROUTE NAME: SEA 12

REQUESTED BY: IATA

ENTRY/EXIT POINT
ROT - HUGUANG

ROUTE DESCRIPTION

Direct ROT - HUGUANG

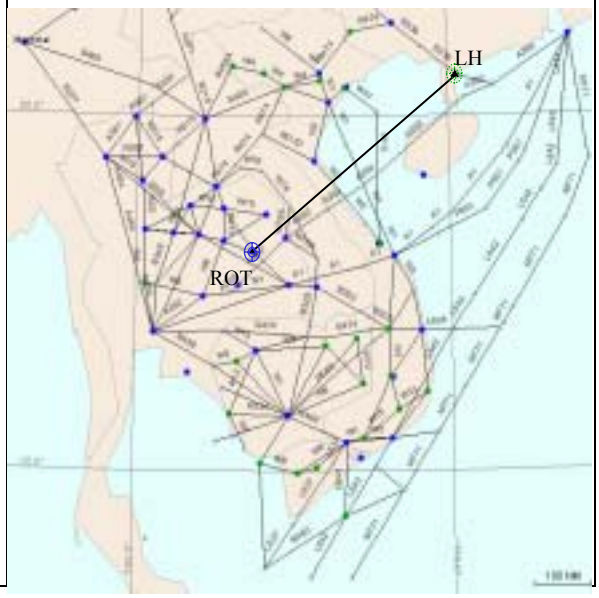
FLIGHT LEVEL BAND

29000 - 46000

PRIORITY: HIGH/MED/LOW

HIGH

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: KUL/SIN/Phnom Penh/JKT – SANYA/HKG

ATS ROUTE NAME: SCS1

REQUESTED BY: IATA

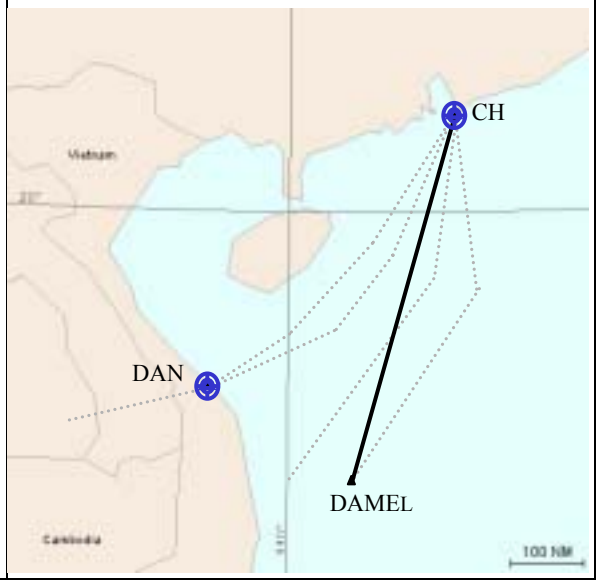
ENTRY/EXIT POINT
DAMEL / CH

ROUTE DESCRIPTION
DAMEL .. CH

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	35nm / 4mins	
Fuel	568kg	207594kg
CO_2	1750kg	638,750kg
No_x		

Remarks

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS2

REQUESTED BY: IATA

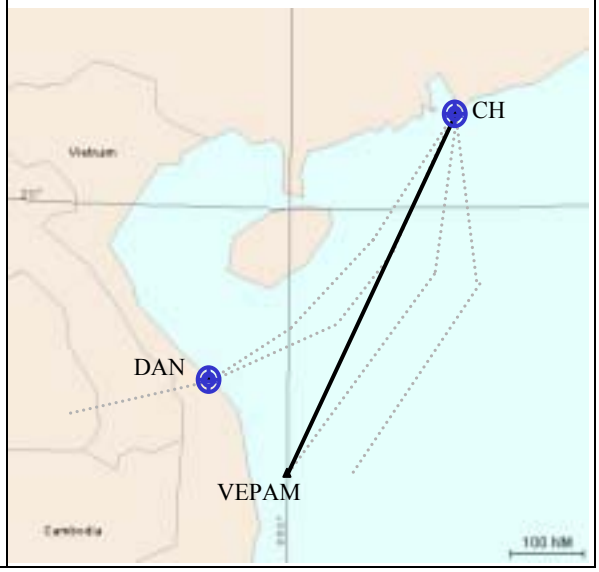
ENTRY/EXIT POINT
CH / VEPAM

ROUTE DESCRIPTION
CH .. VEPAM

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	17nm/ 2 mins	
Fuel	276kg	100,831kg
CO_2	850kg	310,250kg
No_x		

Remarks

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS3

REQUESTED BY: IATA

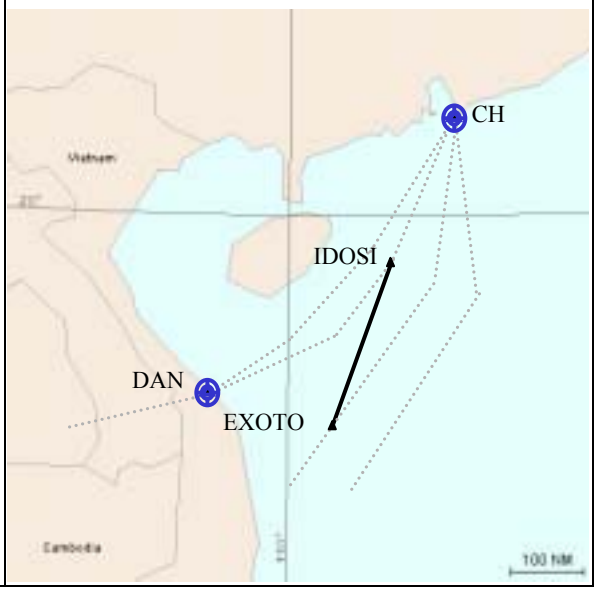
ENTRY/EXIT POINT
IDOSI / EXOTO

ROUTE DESCRIPTION
IDOSI .. EXOTO

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	15 nm / 2 mins	
Fuel	260kg	94,900kg
CO_2	800kg	292,000kg
No_x		

Remarks

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS4

REQUESTED BY: IATA

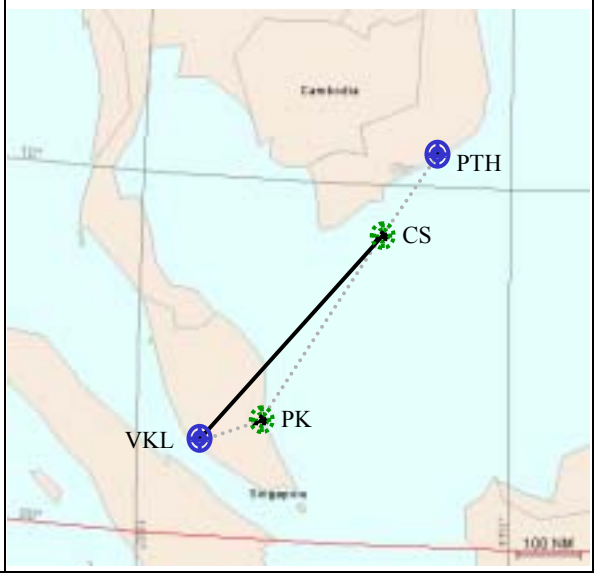
ENTRY/EXIT POINT
CS / VKL

ROUTE DESCRIPTION
CS .. VKL

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	18nm / 2.25 mins	
Fuel	292kg	106,763kg
CO_2	900kg	328,500kg
No_x		

Remarks

Potential City Pairs: Kuala Lumpur-Pearl River Delta Airports

ATS ROUTE NAME: SCS5

REQUESTED BY: IATA

ENTRY/EXIT POINT
EXOTO / MELAS / LUSMO

ROUTE DESCRIPTION
EXOTO .. DAMVO .. MELAS .. LUSMO

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	76nm/ 9.5 mins	
Fuel	1235kg	450,775kg
CO_2	3800kg	1,387 tonnes
No_x		

Remarks

Potential City Pairs: Jakarta- Pearl River Delta Airports

ATS ROUTE NAME: SCS6

REQUESTED BY: IATA

ENTRY/EXIT POINT
LUSMO / MELAS / DALBA

ROUTE DESCRIPTION
LUSMO .. MELAS .. DAMVO

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	85nm/ 10.5 mins	
Fuel	1381kg	504,156kg
CO_2	4,250kg	1,551,250kg
No_x		

Remarks

Potential City Pairs: Jakarta- Pearl River Delta Airports

ATS ROUTE NAME: SCS7

REQUESTED BY: IATA

ENTRY/EXIT POINT
DULOP/ M772 / LAXOR / XXXXX / BRU

ROUTE DESCRIPTION
DULOP M772 LAXOR .. XXXXX .. BRU

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	60nm/ 7.5mins	
Fuel	975kg	355,875kg
CO_2	3000kg	1,095 tonnes
No_x		

Remarks

Potential City Pairs: Pearl River Delta Airports-Bali/ Surabaya/ Perth

ATS ROUTE NAME: SCS 8

REQUESTED BY: IATA

ENTRY/EXIT POINT

1. DULOP / ELATO(ENVAR)

2. DULOP / KAPLI

ROUTE DESCRIPTION
DULOP .. ELATO (A1)/ENVAR (M750)
or
DULOP .. KAPLI (G86)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	a.DULOP/ENVAR 140nm/17.5min b.DULOP/KAPLI 238nm/ 30min	
Fuel	a.2275kg b.3867kg	a.830,000kg b.1,411 tonnes
CO_2	a. 7000kg b.11,900kg	a.2,555tonnes b.4,343 tonnes
No_x		

Remarks

Potential City Pairs: SEAsia-North Asia Airports

ATS ROUTE NAME: SCS 9 REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
1. ENDAX (FIR Boundary between Oakland and Manila FIRs) or DILIS on G467 **2. TOKON on M767 (Manila FIR)** **ROUTE DESCRIPTION** **ENDAX .. TOKON or** **DILIS .. TOKON** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW** **(Immediate request with DILIS – TOKON)**	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	a.TOKON-DILIS 45nm/ 5.5in b.TOKON-ENDAX 110nm/14min	
Fuel	a.731kg b. 1788kg	a.266,906kg b.652,440kg
CO_2	a.2250kg b.5,500kg	a.821,250kg b.2,007 tonnes
No_x		

Remarks

Potential City Pairs: SEA –San Francisco/Los Angeles

ATS ROUTE NAME: PHI 1

REQUESTED BY: IATA

ENTRY/EXIT POINT

ROUTE DESCRIPTION
Manila (MIA) .. MEVIN or
Cabanatuan (CAB) .. MEVIN

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	11nm/1.5min	
Fuel	179kg	59,300kg
CO_2	550kg	200,750kg
No_x		

Remarks

Potential City Pairs: Philippines-Japan/North America

ATS ROUTE NAME: PHI 2

REQUESTED BY: IATA

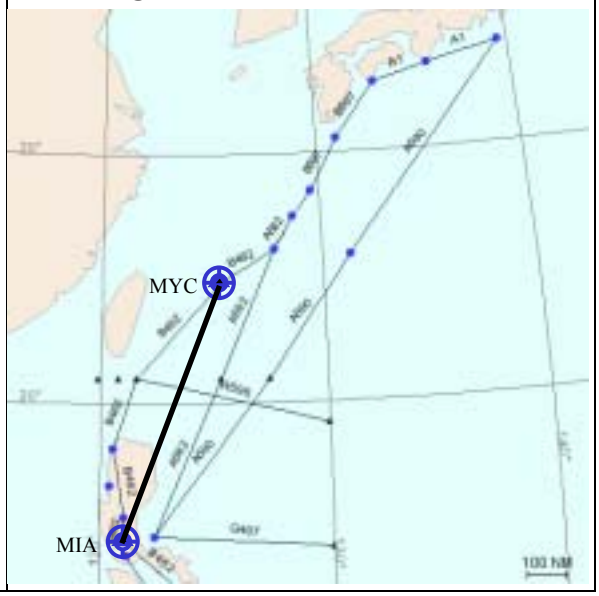
ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
Manila (MIA) .. XXXXX .. Miyakojima (MYC)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	46nm/ 6min	
Fuel	748kg	272800kg
CO_2	2,300kg	839,000kg
No_x		

Remarks

Potential City Pairs: Philippines-Japan/North America

ATS ROUTE NAME: TWN1

REQUESTED BY: IATA

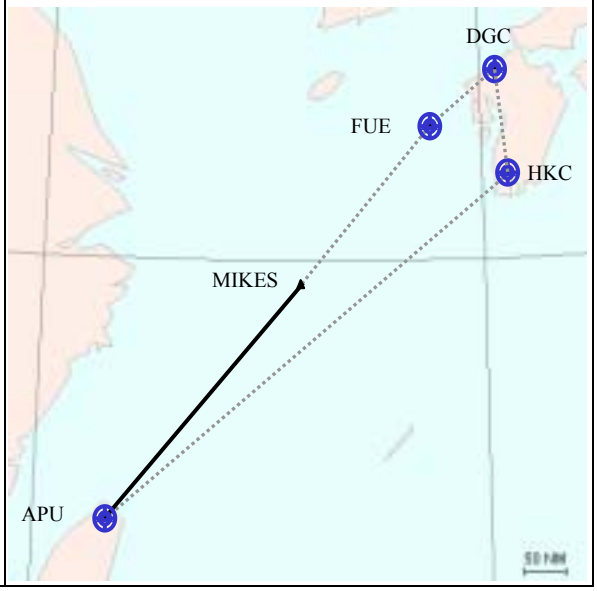
ENTRY/EXIT POINT
APU / XXXXX / MIKES

ROUTE DESCRIPTION
APU- MIKES

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	40nm/ 5min	
Fuel	650kg	237,000kg
CO_2	2,000kg	730,000kg
No_x		

Remarks

Potential City Pairs: SEA/HKG/TPE-Fukuoka

ATS ROUTE NAME: THA1

REQUESTED BY: IATA

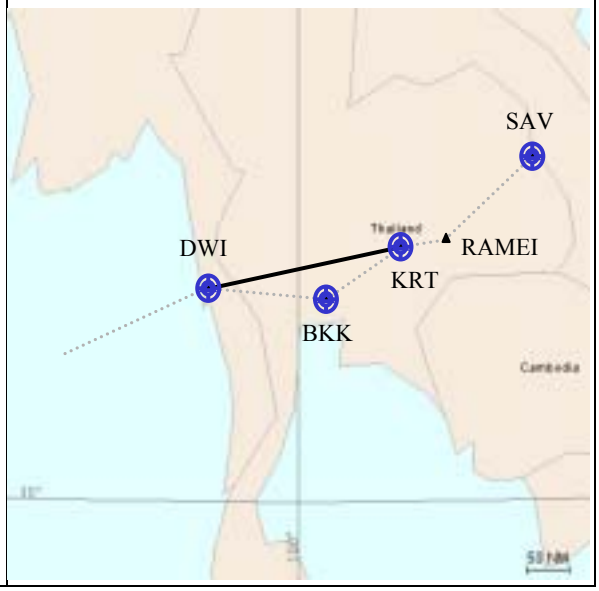
ENTRY/EXIT POINT
KRT / DWI

ROUTE DESCRIPTION
KRT .. DWI

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	15nm/ 2min	
Fuel	245kg	89,000kg
CO_2	750kg	274,000kg
No_x		

Remarks

Potential City Pairs:

ATS ROUTE NAME: IDO1

REQUESTED BY: IATA

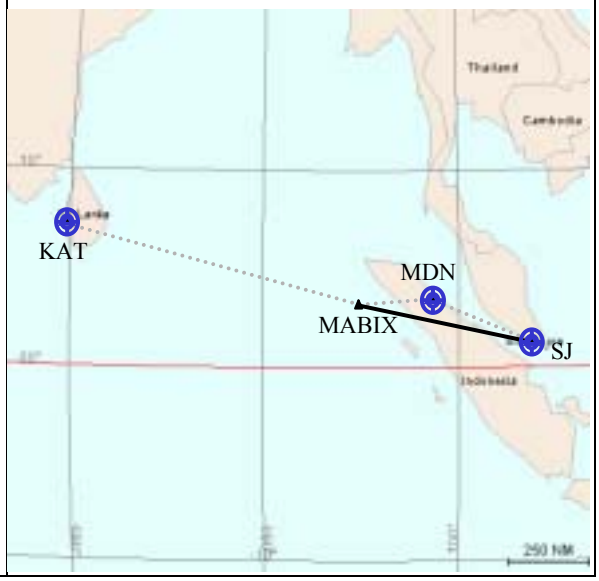
ENTRY/EXIT POINT
SJ / MABIX

ROUTE DESCRIPTION
SJ .. MABIX

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	16nm/ 2min	
Fuel	260kg	95,000kg
CO_2	800kg	292,000kg
No_x		

Remarks

Potential City Pairs:

ATS ROUTE NAME: COL 1

REQUESTED BY: IATA

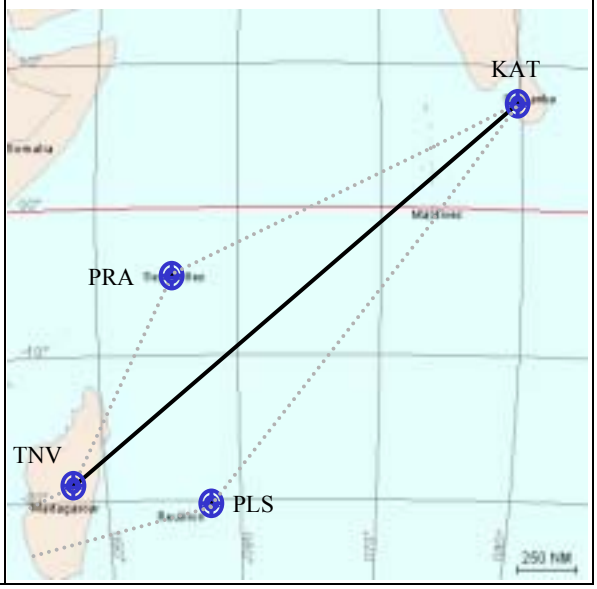
ENTRY/EXIT POINT
KAT / TNV

ROUTE DESCRIPTION
KAT .. TNV (ANTANANARIVO)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

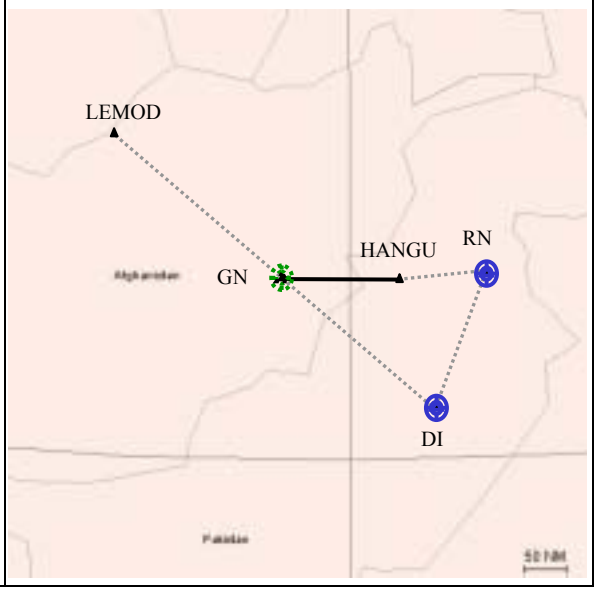
Saving	Per flight	Annual
Mileage / Time	130nm /16 min	
Fuel	2110kg	770,000kg
CO_2	6,500kg	2,370 tonnes
No_x		

Remarks

Potential City Pairs:

ATS ROUTE NAME: **KAB1**

REQUESTED BY: IATA

ENTRY/EXIT POINT **HANGU / XXXXX / GN** **ROUTE DESCRIPTION** **HANGU -GN** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW** HIGH	**CHART** 

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	66nm/ 8min	
Fuel	1070kg	391,000kg
CO_2	3,300kg	1,204 tonnes
No_x		

Remarks

Potential City Pairs:

ATS ROUTE NAME: WPC 1

Requested by : IATA

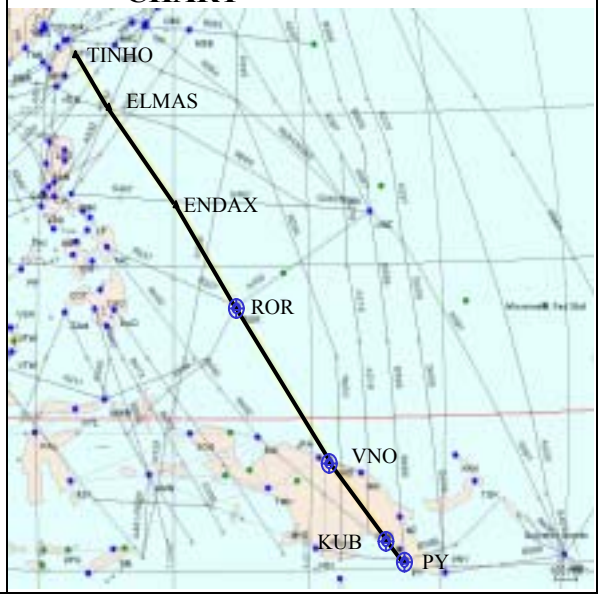
ENTRY/EXIT POINT
PY-TINHO

ROUTE DESCRIPTION
Port Moresby (PY) .... Vanimo (VNO) .. Koror (ROR) .. ENDAX .. ELMAS .. TINHO

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW
HIGH

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	160 nm/20min	
Fuel	2600kg	949,000kg
CO_2	8000kg	2,920 tonnes
No_x		

Remarks

Potential City Pairs: Auckland-Taipei.

ATS ROUTE NAME: CHA 1 (Renumbered from CHA5)

REQUESTED BY: IATA

ENTRY/EXIT POINT

ROUTE DESCRIPTION
Yinchuan (YNC) .. GUPAD .. Zhengzhou (CGO) .. Zhoukou (ZHO) .. Luogang (SB)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART

Action Required	IATA
	ICAO

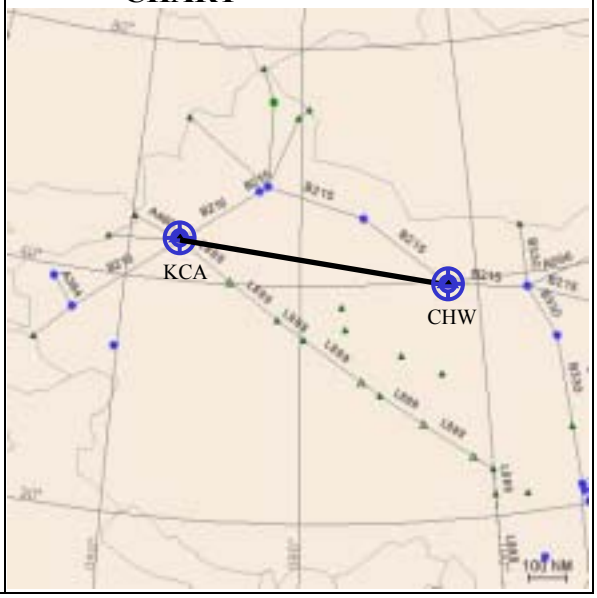
Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe-Shanghai

ATS ROUTE NAME: CHA2 (Renumbered from CHA 7)

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Kuqa (KCA) .. Jiayuguan (CHW)** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	93nm/ 12min	
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Middle East/Pakistan-China/Korea/Japan

ATS ROUTE NAME: CHA 3 (Renumbered from CHA 9A)

REQUESTED BY: IATA

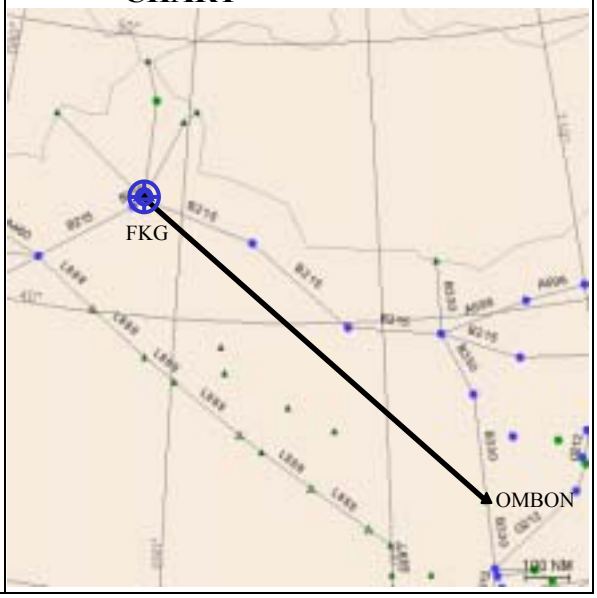
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Fukang (FKG) .. OMBON

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	123nm/ 15.5min	
Fuel	2000kg	730,000kg
CO_2	6,150kg	2,245 tonnes
No_x		

Remarks

Potential City Pairs: Europe/Russia-Pearl River Delta Airports

ATS ROUTE NAME: CHA4 (Renumbered from CHA 10A)

REQUESTED BY: IATA

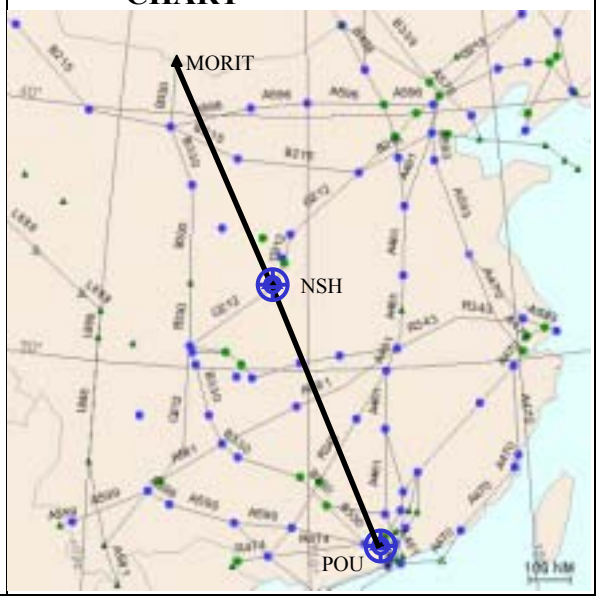
ENTRY/EXIT POINT

ROUTE DESCRIPTION
MORIT .. Ningshan (NSH) .. Pingzhou (POU)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	152nm/ 19min	
Fuel	2470kg	901,000kg
CO_2	7,600kg	2,774 tonnes
No_x		

Remarks

Potential City Pairs: Europe Russia-Pearl River Delta Airports

ATS ROUTE NAME: CHA 5 (Renumbered from CHA 11A)

REQUESTED BY: IATA

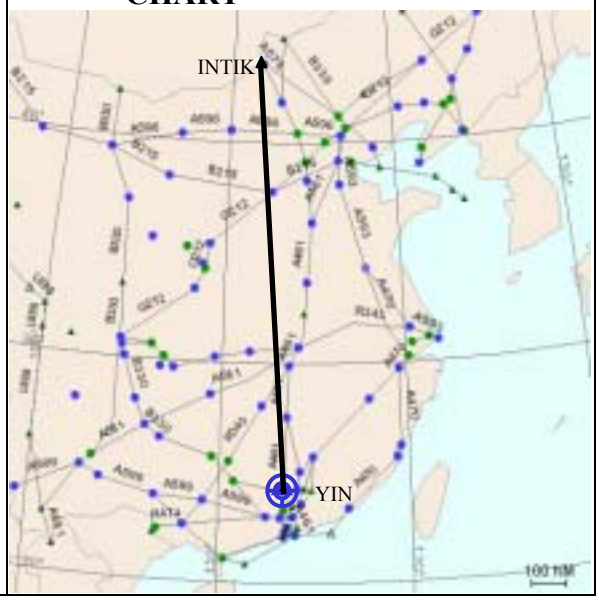
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Yingde (YIN) .. INTIK

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	140nm/17.5min	
Fuel	2275kg	830,000kg
CO_2	7,000kg	2,555 tonnes
No_x		

Remarks

Potential City Pairs: Europe/Russia –Pearl River Delta Airports

ATS ROUTE NAME: CHA 6 (Renumbered from CHA 14)

REQUESTED BY: IATA

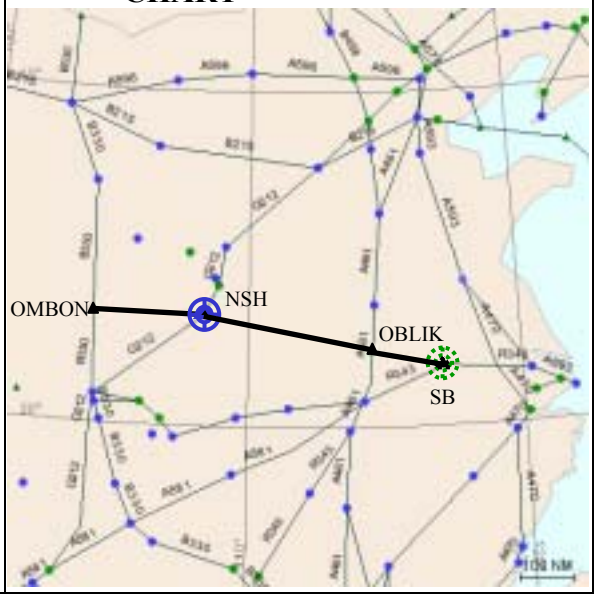
ENTRY/EXIT POINT

ROUTE DESCRIPTION
OMBON .. Ningshan (NSH) .. OBLIK .. Luogang (SB)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe-Shanghai

ATS ROUTE NAME: CHA 7 (Renumbered from CHA 15)

REQUESTED BY:IATA

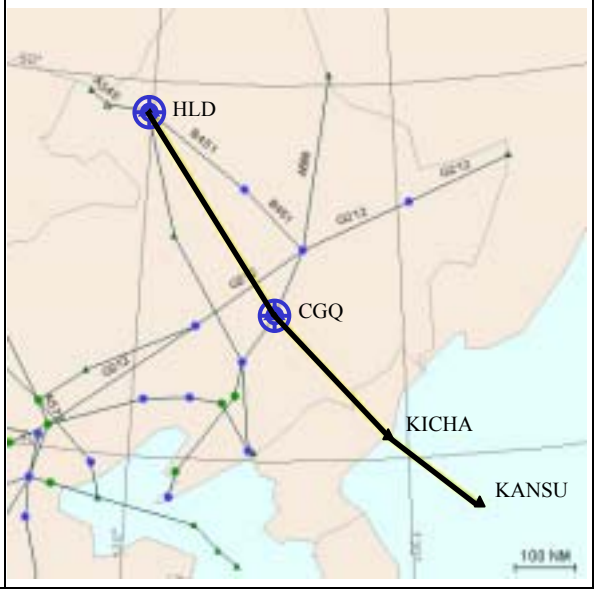
ENTRY/EXIT POINT
KANSU/XXXXX

ROUTE DESCRIPTION
KANSU .. KICHA .. Changchun (CGQ) .. Hailar (HLD)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

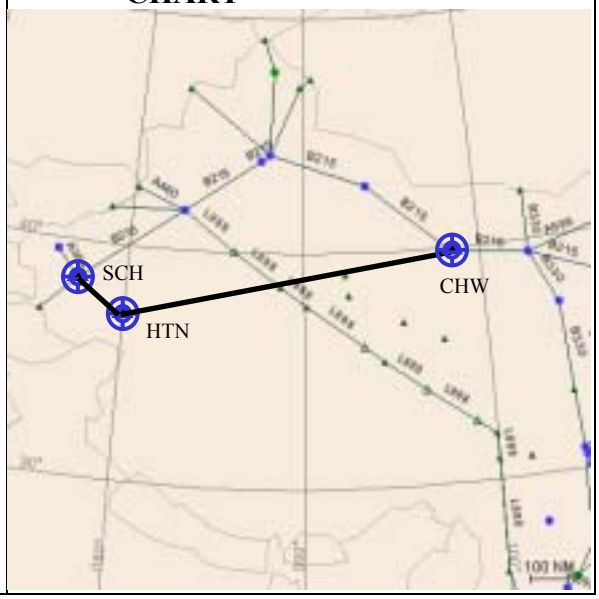
Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe-Korea /Japan

ATS ROUTE NAME: CHA 8 (Renumbered from CHA 16)

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Shache (SCH) .. Hotan (HTN) .. Jiayuguan (CHW)** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

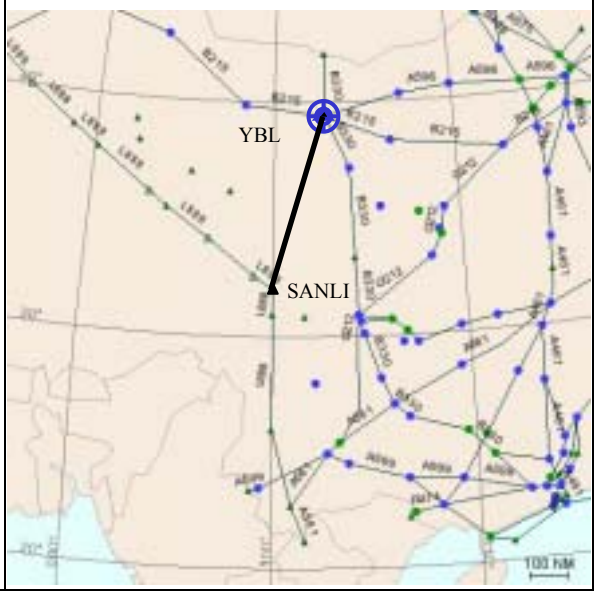
Saving	Per flight	Annual
Mileage / Time	69nm/9min	
Fuel	1121kg	409,000kg
CO_2	3,450 kg	1,260 tonnes
No_x		

Remarks

Potential City Pairs: Middle East /Pakistan-China/Korea/Japan

ATS ROUTE NAME: CHA 9 (Renumbered from CHA 17)

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Yabrai (YBL) .. SANLI** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA.
	ICAO

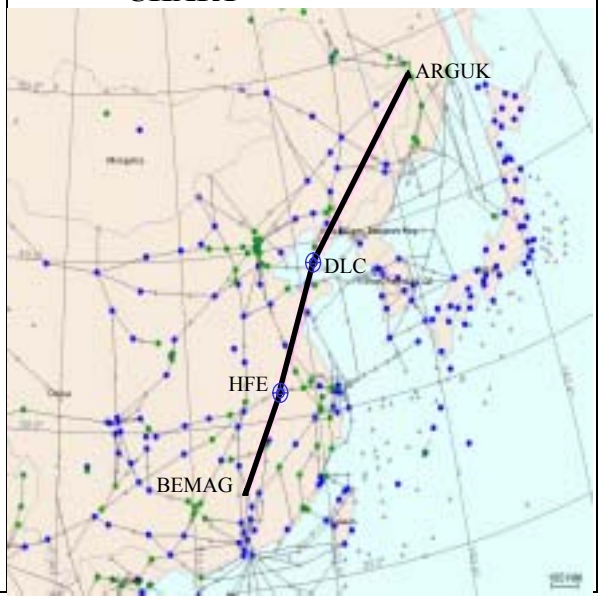
Saving	Per flight	Annual
Mileage / Time	48nm/ 6min	
Fuel	780kg	284,000kg
CO_2	2,400kg	876,000kg
No_x		

Remarks

Potential City Pairs: North America-SE Asia

ATS ROUTE NAME: CHA 10 (Renumbered from CHA18-formerly SE1 in CTF/2000)

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ARGUK/BEMAG **ROUTE DESCRIPTION** ARGUK/DALIAN/HEFEI/BEMAG **FLIGHT LEVEL BAND** 8400-15000 metres **PRIORITY: HIGH/MED/LOW** HIGH	

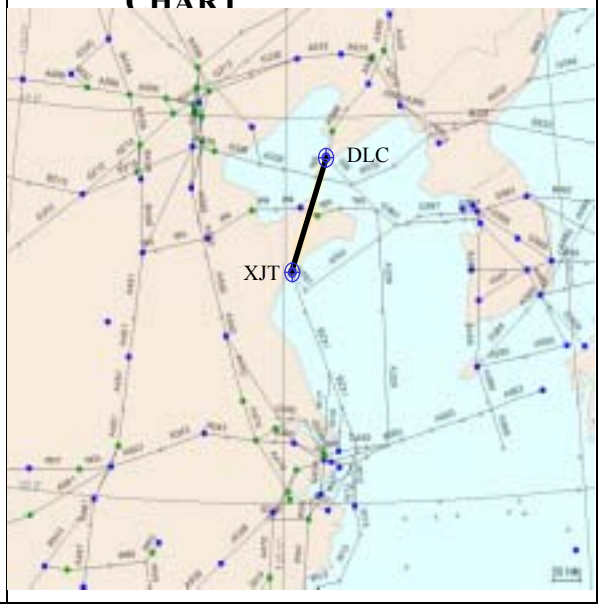
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: North America- Pearl River Delta

ATS ROUTE NAME: CHA 11 (Renumbered from CHA19 formerly SE2 in CTF/2000) REQUESTRED BY:IATA

ENTRY/EXIT POINT DALIAN/(DLC) to XJT/B221 **ROUTE DESCRIPTION** DALIAN/ XJT /B221 **FLIGHT LEVEL BAND** 8400-15000 metres **PRIORITY: HIGH/MED/LOW** HIGH	**CHART** 

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: North America-Shanghai

ATS ROUTE NAME: IATA 1

REQUESTED BY: IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Kuqa (KCA) .. RED3 .. RED2 .. RED1 .. OMBON** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

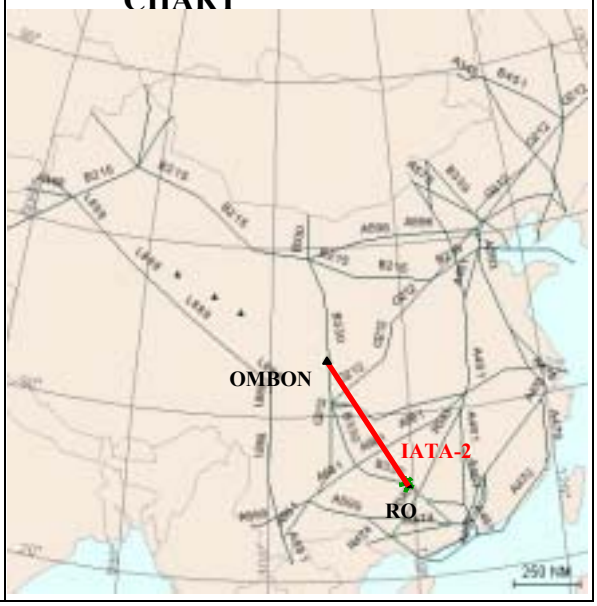
Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe –Pearl River Delta Airports

ATS ROUTE NAME: IATA 2

REQUESTED BY: IATA

ENTRY/EXIT POINT **ROUTE DESCRIPTION** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe –Pearl River Delta Airports

ATS ROUTE NAME: IATA 3

REQUESTED BY: IATA

ENTRY/EXIT POINT **ROUTE DESCRIPTION** **FLIGHT LEVEL BAND** **8400 – 15000 meters** **PRIORITY: HIGH/MED/LOW**	**CHART**

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO_2		
No_x		

Remarks

Potential City Pairs: Europe-Shanghai

ATS ROUTE NAME: PRD 1

ENTRY/EXIT POINT SIERA / XXXXX / ZUH **ROUTE DESCRIPTION** **POU .. ZUH .. SIERA** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	**CHART** 

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	80nm/ 10min	
Fuel	1300kg	475,000kg
CO_2	4,000kg	1,460 tonnes
No_x		

Remarks

Potential City Pairs: Mainland China/Pearl River Delta Airports to SEAsia

ATS ROUTE NAME: PRD 2

ENTRY/EXIT POINT
SIERA / XXXXX / ZUH

ROUTE DESCRIPTION
POU .. ZUH .. SIERA .. SIKOU

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART

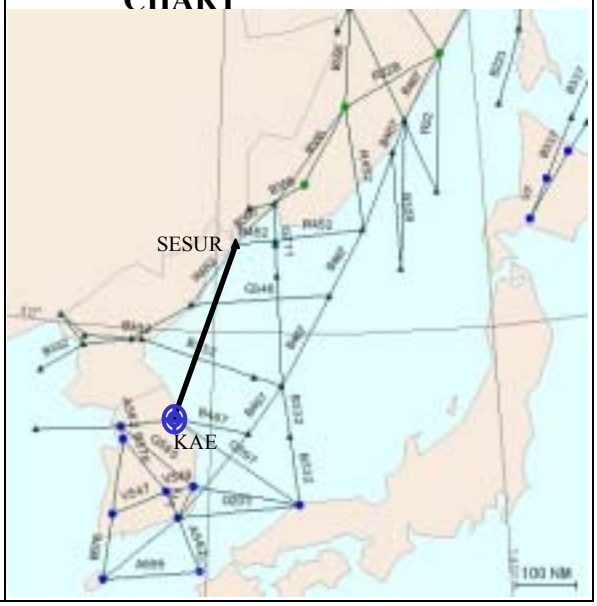
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	80nm/10 mins	
Fuel	1,300kg	474,000kg
CO_2	4,000kg	1,460 tonnes
No_x		

Remarks

Potential City Pairs: Mainland China /Pearl River Delta Airports to SEAsia

ATS ROUTE NAME: RUS 1 Requested by : IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **SESUR .. Gangwon (KAE)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	121nm/15min	
Fuel	1966kg	717,000kg
CO_2	6050kg	2,208 tonnes
No_x		

Remarks

Potential City Pairs: North America- Inchoen

ATS ROUTE NAME: RUS 2

Requested by : IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **TEKUK .. Gangwon (KAE)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	

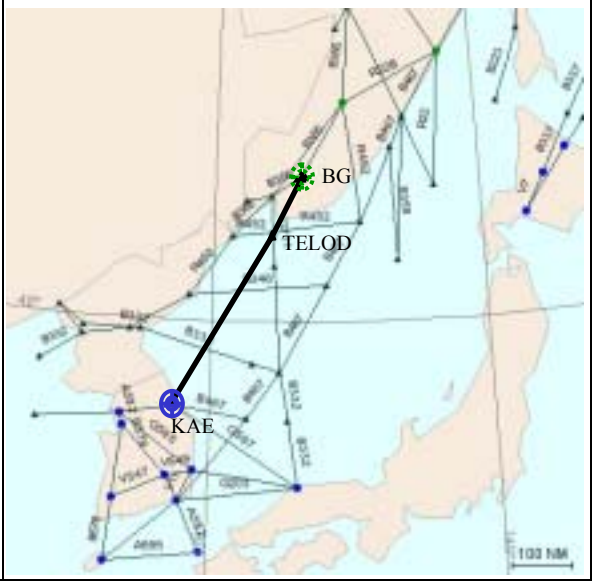
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	67nm/8mins	
Fuel	1088kg	1,222 tonnes
CO_2	3350kg	397400kg
No_x		

Remarks

Potential City Pairs: North America- Inchoen

ATS ROUTE NAME: RUS 3 Requested by : IATA

ENTRY/EXIT POINT	**CHART**
ROUTE DESCRIPTION **Muraveyka (BG) .. TELOD .. Gangwon (KAE)** **FLIGHT LEVEL BAND** **28000 – 46000 feet** **PRIORITY: HIGH/MED/LOW**	

Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	136/17mins	
Fuel	2,194kg	800,000kg
CO_2	6750kg	2,464 tonnes
No_x		

Remarks

Potential City Pairs: North America- Inchoen

CONSOLIDATED CHART OF USERS REQUESTED ROUTES IN CHINA