



International Civil Aviation Organization

**The Twenty-Second Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/22)**

Bangkok, Thailand, 25 – 29 June 2012

Agenda Item 5: Provision of ATM/AIS/SAR in the Asia/Pacific Region, including associated CNS matters

ASIA/PACIFIC REGION ATS ROUTE CATALOGUE

(Presented by the Secretariat)

SUMMARY

This paper presents the *Asia and Pacific Region ATS Route Catalogue* Version 11 for review and update.

This paper relates to –

Strategic Objectives:

- A: *Safety – Enhance global civil aviation safety*
- C: *Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:

- GPI-7 Dynamic and flexible ATS route management
- GPI-11 RNP and RNAV SIDs and STARs

1. INTRODUCTION

1.1 The most recent Version 10 of the *Asia/Pacific ATS Route Catalogue* is available at the ICAO Asia/Pacific website (<http://www.bangkok.icao.int/>) under the menu ‘APAC eDocuments’. On-going updates have been undertaken by the Regional Office based on the information made available by States and airspace users. The Catalogue simply records the current status of the international route requirements in the *Basic Air Navigation Plan* (BANP, Volume I of Doc 9673) and does not require any formal approval to be included in the Catalogue.

1.2 The Route Catalogue provides two functions – it contains updated information from the Regional Air Navigation Plan (Doc 9673), until such time as this is in electronic form, and it contains a number of proposals for route changes that have not been agreed by States yet. The structure of the Catalogue is as follows:

- Chapter 1: The unofficial but electronic, up-to-date version of the BANP.
- Chapter 2: ATS routes that have been formally approved but not implemented.
- Chapter 3: Implemented but not formally approved (i.e.: no BANP amendment).
- Chapter 4: State requests.

- Chapter 5: User (airline) requests.

2. DISCUSSION

2.1 The current ATS Route Catalogue Version 10 has had minor amendments with mark-up and labelled Version 11 as a draft for consideration and review by the ATM/AIS/SAR/SG/22 meeting (**Attachment A**). The draft amendments are as follows:

- deletion of reference to a specific named ICAO Regional Officer;
- amendment record change to reflect a review by the ATM/AIS/SAR/SG/22 meeting;
- deletion of reference to ATS route R216 from Urumqi to Alma Ata (Almaty) in Chapter 1 and 2, in anticipation of the related APANPIRG deficiency being closed; and
- insertion of a generic Urumqi to Alma Ata (Almaty) proposal in Chapter 5.

2.2 In analysing the actual effectiveness of the Route Catalogue, the following is noted:

- a) Chapter 1 is expected to become obsolete in the near future as the BANP migrates to an electronic format provided by ICAO HQ, which is already being tested.
- b) Chapter 2 contains seven ATS routes, not counting R216. These seven routes appear to be a matter of administrative follow-up by the Regional Office and the States concerned, without requiring a specific listing in the Catalogue. The routes are as follows:
 - **China:** A218 from HARBIN (HRB) to (EKIMCHAN) (QA) was approved on 01 February 2000 as part of APAC 99/1-ATS;
 - **Viet Nam:** A469 from HO CHI MINH (TSN) to CONSON IS (CS) was approved on 19 August 1994 as part of APAC 93/4-ATS but implemented as L643;
 - **Nauru, USA:** A584 from NAURU (NI) to KOSRAE (UKS) segment was not implemented but an amendment for the BANP has not been received;
 - **Niue, New Zealand:** B201 from NIUE (NU) to AUCKLAND (AA) - an amendment to delete this route from the BANP has not been received;
 - **Indonesia, Singapore:** R459 from MANADO (MWB) to TANJUNG PINANG (TI) via BALIKPAPAN (BPN), ELANG, PONTIANAK (PNK) and MINOS – this appears to be implemented as L504 from MANADO to SINGAPORE and is already in Chapter 1;
 - **Indonesia:** R579 from PADANG (PDG) to MALACCA (MC) via PEKANBARU (PKU) – no information is provided on the status of this route; and
 - **Indonesia, Singapore, Australia:** M635 from SINGAPORE to CURTIN via RAMPY – no information is provided on the status of this route.
- c) Chapter 3 contains only two routes, which again appear to only require administrative follow-up by the Regional Office to correct the BANP information:
 - **Laos, Viet Nam:** A206 ASSAD to LPB via VINH and NONGT (implemented 9 September 2005); and
 - **China:** L888 BIDRU to KUQA via SANLI (implemented about 2000).

- d) Chapter 4 has five route proposals, which would have a better focus if they were assigned as specific tasks on the Task List of the appropriate ATM Coordination Group, as they would be reviewed and either deleted if not possible, or subject to a planned implementation by the States involved, even if this took some years. The routes are as follows:
- **Nepal, India:** Himalaya 1 from Kolkata to INDEK via Nepalgunj – this should be assigned to SAIOACG;
 - **Nepal, India:** Himalaya 2 from Kathmandu to Kunming via Baghdogra, Guwahati, Silchar, and Imphal – this should be assigned to SAIOACG;
 - **New Zealand, French Polynesia:** R582 from KRILL to TIAMU via MAITO, Tahiti, PAERE, TOLAB, TAMUR, TIERE, TARAO, TUNBA – ISPACG – this should be requested to be managed by ISPACG;
 - **Viet Nam, China:** Noibai to Kunming – this should be assigned to SEACG; and
 - **Viet Nam, China:** Noibai to SAMAS or Huguang via Catbi – this should be assigned to SEACG.
- e) Chapter 5 has two parts – one section with only three routes that the States have apparently agreed to implement, but have not done so and thus need review as to their status by the appropriate parties:
- **Thailand, Singapore:** SEA3 from BUT to ENREP – this route was designated as M904 by Thailand but there does not appear to be a formal BANP amendment request (HQ was involved in this) – review by SEACG or the States involved;
 - **China, Viet Nam:** SEA 5 from STUNG TRENG to DANANG – review by SEACG or the States concerned; and
 - **Philippines, USA:** SCS 9 from TOKON to ENDAX (FIRB) via DILIS – review by the Philippines.
- f) Chapter 5 Section 2 contains 42 ‘future’ proposals by airlines, which are either (1) not possible, or are (2) possible, but not in the short term. Unfortunately the sheer volume of these proposals in the form of the ATS Route Catalogue, with different regions mixed, makes this a very difficult and time consuming process to review and keep current (by either deleting the ‘not possible’ proposals, or ensuring proper review by the appropriate parties for the ‘possible’ proposals as in **Table 1**.

Route Code	Route Proposal	Segments	Status Review
IND 1	BBS BPL	KOLKATTA MUMBAI	India
IND 7	PRA SERKA KAMAR BIRJAND	MUMBAI DELHI KABUL TEHERAN	SAIOACG (PRA-SERKA was already discussed at SAIOACG/2)
SEA 2	DANANG SYX	HOCHIMINH SANYA AOR	SEACG
SEA 6	PAKSE ASSAD	VIENTIANE ASSAD	SEACG
SEA 10	CAVOI/ IGNIS QUNGI SAMUI	SANYA AOR SANYA AOR HOCHIMINH BANGKOK	SEACG

SEA 11	NANSHAN BUNTA/ SAMBO	SANYA AOR HOCHIMINH HOCHIMINH	SEACG
SEA 12	ROT HUGUANG	HOCHIMINH GUANGZHOU	SEACG
SCS1	DAMEL CH	HOCHIMINH HONGKONG	SEACG
SCS 2	VEPAM CH	HOCHIMINH HONGKONG	SEACG
SCS 3	EXOTO IDOSI	HOCHIMINH HONGKONG	SEACG
SCS 4	VKL CONSON	LUMPUR HOCHIMINH	SEACG
SCS 5	EXOTO DAMVO MELAS LUSMO	HOCHIMINH HOCHIMINH HOCHIMINH SINGAPORE	SEACG
SCS 7	BRUNEI LAXOR DULOP	KINABALU SINGAPORE HONGKONG	SEACG
SCS8	DULOP ELATO ENVAR DULOP KAPLI	HONGKONG HONGKONG HONGKONG HONGKONG HONGKONG	SEACG
PHI 1	MIA CAB MEVIN	MANILA MANILA MANILA	Philippines
PHI 3	TKK MUMOT	TAIPEI MANILA	Philippines, Taipei ACC
PHI 4	HCN AKOTA	TAIPEI MANILA	Philippines, Taipei ACC
TPE 1	APU MIKES	TAIPEI NAHA	Japan, Taipei ACC
THA 1	KORAT DAWEI	BANGKOK YANGON	SEACG (Myanmar to be invited to SEACG)
IDO 1	SJ MABIX	SINGAPORE JAKARTA	SAIOACG
COL 1	KAT TNV	COLOMBO MADAGASCAR	SAIOACG (to be coordinated with ICAO ESAF Office)
KAB 1	HANGU GHAZNI	PAKISTAN KABUL	Afghanistan, Pakistan, SAIOACG
WPC 1	PY VNO ROR ENDAX ELMAS TINHO	PT MORESBY PT MORESBY OAKLAND MANILA MANILA TAIPEI	PNG, USA, Philippines and Taipei ACC
CHA 1 (CHA 5)	YNC GUPAD CGO SB	LANZHOU LANZHOU WUHAN SHANGHAI	China

CHA 2 (CHA 7)	KUQA CHW	URUMQI LANZHOU	China
CHA 3 (CHA 9A)	FKG OMBON	URUMQI KUNMING	China
CHA 4 (CHA 10A)	MORIT NSH POU	LANZHOU LANZHOU GUANGZHOU	China, Mongolia*
CHA 5 (CHA 11A)	YIN INTIK	GUANGZHOU BEIJING	China, Mongolia*
CHA 6 (CHA14)	OMBON NSH OBLIK SB (LUOGANG)	KUNMING LANZHOU WUHAN SHANGHAI	China
CHA 7 (CHA 15)	KANSU KICHA CGQ HLD	PYONGYANG PYONGYANG SHENYANG SHENYANG	China, DPRK*
CHA 8 (CHA16)	SCH HTN CHW	URUMQI URUMQI LANZHOU	China
CHA 9 (CHA17)	YBL SANLI	LANZHOU KUNMING	China
CHA 10 (CHA18)	ARGUK DALIAN HEFEI BEMAG	SHENYANG SHENYANG SHANGHAI GUANGZHOU	China, Russian Federation*
CHA 11 (CHA19)	DALIAN XJT	SHENYANG SHANGHAI	China
CHA 12	UNWW WXI	SHANGHAI	China, Mongolia, Russian Federation*
IATA2	OMBON RO	KUNMING GUANGZHOU	China
IATA3	OMBON SB (LUOGANG)	KUNMING SHANGHAI	China
PRD 1	POU ZUH SIERA	GUANGZHOU GUANGZHOU HONGKONG	China, Hong Kong China
PRD2	POU ZUH SIERA SIKOU	GUANGZHOU GUANGZHOU HONGKONG HONGKONG	China, Hong Kong China
RUS 1	SESUR XXXXX KAE	VLADIVOSTOK INCHEON	Russian Federation, DPRK, ROK*
RUS 2	TEKUK XXXXX KAE	VLADIVOSTOK INCHEON	Russian Federation, DPRK, ROK*
RUS 3	BG TELOD XXXXX KAE	VLADIVOSTOK VLADIVOSTOK INCHEON	Russian Federation, DPRK, ROK*

2.3 The route proposals marked with an asterisk (*) appear to require the oversight of a body coordinating East Asian States such as China, the Democratic People's Republic of Korea (DPRK), Japan, Mongolia and the Republic of Korea (ROK), plus the Russian Federation.

2.4 APANPIRG/22 (5-9 September 2011) discussed the ICAO Asia/Pacific ATS Route Catalogue (WP/35). IATA presented information on the ICAO Asia/Pacific Region ATS Route Catalogue, which was developed in 2004 as a supplement to the Basic Air Navigation Plan and to assist with the amendment/tracking process. It was intended to be reviewed annually by ATM Coordination Group meetings. The paper suggested a Draft Conclusion that States should 'review the proposals within the ICAO Asia Pacific Route Catalogue and provide feedback to ICAO for new proposals pertaining to their State and then at least annually thereafter'.

2.5 The meeting noted that Chapter 5 of Route Catalogue was for user requirements and it may not be possible to review and agree with these proposals. It was noted that some routes extended beyond the Asia Pacific area, involving States outside the Asia/Pacific Regions. It was suggested to the Meeting that Task Forces and ATM Coordination Groups should deal with proposed route amendments as part of their Task Lists. The Draft Conclusion was not endorsed.

2.6 The discussion at APANPIRG/22 was a clear indication that the management of the route proposals using the Route Catalogue, especially those that had little chance of being implemented, was not working as intended. This is because many proposals remained in the Route Catalogue without update or the possibility of success, and this makes it very difficult to focus on the proposals that are possible.

2.7 Assuming that Chapter 1 was made redundant by the establishment of the e-ANP, Chapters 2 and 3 were followed up by direct correspondence from the Regional Office so as to make these chapters unnecessary, and the proposals in Chapters 4 and 5 be reviewed and updated, it was likely that the ATS Route Catalogue would not be required in its current state. The images and information of any proposals from Chapter 4 and 5 that were possible to implement could therefore be managed by either the States concerned and overseen by an ATM Coordination Group or other body as indicated in Table 1.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
 - b) review and update the ATS Route Catalogue;
 - c) discuss the future of the ATS Route Catalogue, taking into account the expected changes to the BANP to electronic format, and the need to more proactively manage ATS route proposals; and
 - d) discuss any relevant matters as appropriate.
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ASIA/PACIFIC REGION ATS ROUTE CATALOGUE



INTERNATIONAL CIVIL AVIATION ORGANIZATION ASIA/PACIFIC REGIONAL OFFICE

VERSION. 11

22 September 2011

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Foreword

The *Air Navigation Plan – Asia and Pacific Regions* (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 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/PAC 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, ARNR/TF prepared the draft *Asia/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, accepted the Route Catalogue under Decision 16/9. The Route Catalogue is intended to be a living document supplementing the BANP and to be maintained by ICAO Asia and Pacific Office. Communication in relation to the Route Catalogue should be made via email to the ICAO Asia and Pacific Office at icao_apac@bangkok.icao.int.

The ATS Route Catalogue consists of five chapters as follows:

- Chapter 1: Routes in BANP
- 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 contained in the BANP. This chapter will be regularly updated as amendments to the BANP are approved and implemented.

Chapter 2 lists ATS routes which have been contained in the BANP but 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. 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 the BANP. Part B provides information on users' route requests that are subject to further coordination and agreement.

Note: — As the 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 the ATS Route 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 existing 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.

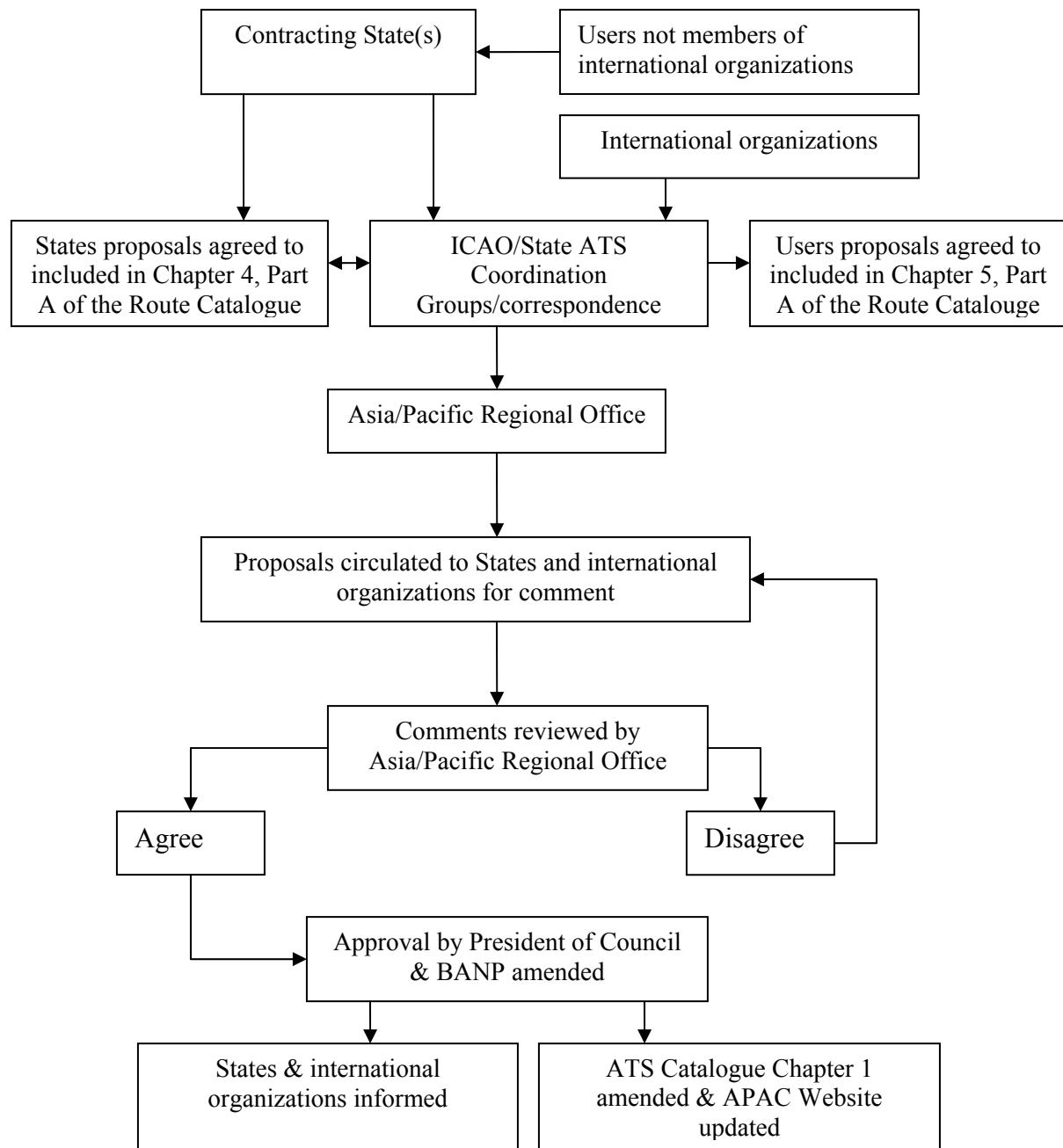
The Regional Office, which is responsible for maintaining the ATS Route Catalogue, will update the Route Catalogue from time to time as amendment proposals are progressed and approved, and include new route requirements of States and users in the Catalogue. The amendment will be indicated by a vertical line in the margin of the Catalogue, and the revision number and date shown on the cover page of the catalogue, which is posted on the ICAO APAC website (<http://www.icao.int/apac>).

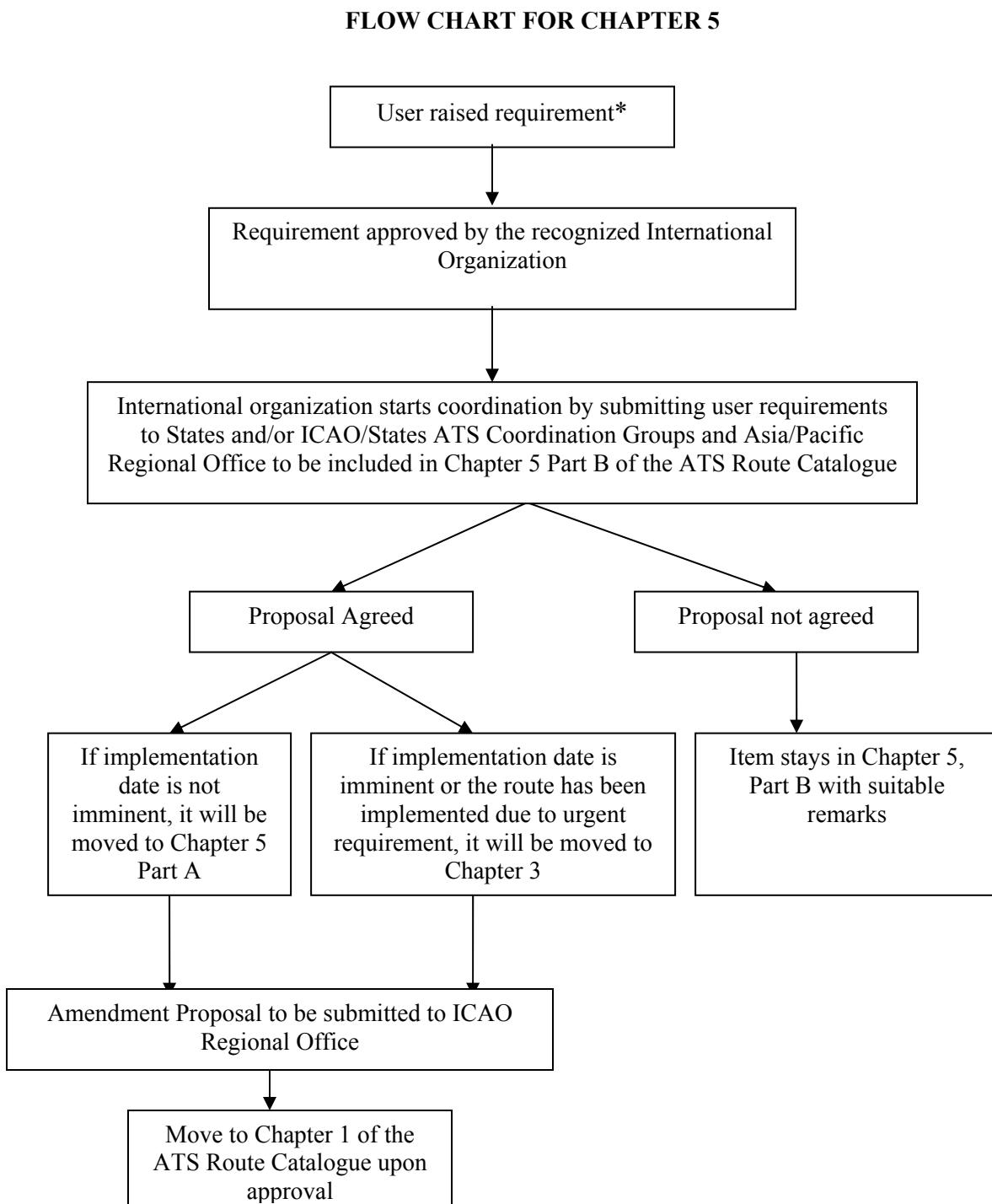
Chapter 1 will be amended by the Regional Office subsequent to approval of an amendment to the BANP by the President of the Council.

Chapters 4 and 5, Part A are amended based on route requirements submitted by States and international organizations, respectively, that have been agreed by the parties concerned to be included in the BANP and are subject to amendment proposals. Upon 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 Groups and/or by correspondence. Users who are not a member of a qualifying international organization should 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 the Catalogue. Communication in relation to the Catalogue should be made via email to Asia and Pacific Office at icao_apac@bangkok.icao.int or Mr. Kyotaro Harano, Regional Officer ATM, at kharano@bangkok.icao.int.

BANP AMENDMENT PROCESS





*Note: — * Users who are not a member of a qualifying international organization submit route requests to the appropriate 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/SG/15	Sub-Group concluded that the Catalogue be adopted (Draft Conclusion 15/3).
1	26 August 2005	APANPIRG/16	APANPIRG/16 decided that the Catalogue be accepted (Decision 16/9).
2	24 January 2006	BBACG/17	Reviewed and updated the Catalogue.
3	19 May 2006	SEACG/13	Reviewed and updated the Catalogue.
4	26 January 2007	BBACG/18	Reviewed and updated the Catalogue.
5	23 May 2008	SEACG/15	Reviewed and updated the Catalogue.
6	15 May 2009	SEACG/16	Reviewed and updated the Catalogue.
7	27 May 2010	SEACG/17	Reviewed and updated the Catalogue.
8	10 March 2011	BBACG/21	Reviewed and updated the Catalogue.
9	6 May 2011	SEACG/18	Reviewed and updated the Catalogue.
10	22 September 2011	SAIOACG/1	Reviewed and updated the Catalogue.
11	28 June 2012	ATM/AIS/SAR/SG/22	Reviewed and updated the Catalogue.
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Chapter 1: Routes in BANP

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

LOWER ATS ROUTES		A215	PORT MORESBY MERAUKE HASANUDDIN KEVOK 0425.0S 11500.0E
A1	LIMLA 1546.0N 09836.0E BANGKOK UBON DANANG IKELA 1839.7N 11214.7E CHEUNG CHAU ELATO 2220.0N 11730.0E MAKUNG TAIBEI KAGOSHIMA MIYAKE JIMA	A216	COOKTOWN AKMIP 1200.0S 14448.6E KIKORI GUNNY 0500.00N 14400.00E RICHH 1711.49N 14249.12E
A91	(KYAKHTA) SERNA 5018.5N 10628.1E ULAN BATOR	A218	HARBIN (EKIMCHAN) (MYS SHMIDTA) BARROW
A201	LASHIO AGARTALA RAJSHABI MONDA 2521.00N 08626.25E PATNA LUCKNOW	A219	(Partially Implemented. See Chapter 2.)
A202	CHEUNG CHAU SIKOU 2050.6N 11130.0E SAMAS 2030.3N 11029.7E ASSAD 182028N 1074053E XONUS 1804.2N 10714.0E DONGHOI VILAO 1718.0N 10600.0E SAVANNAKET KORAT BANGKOK	A220	KARACHI NAWABSHAM KALAT 2902.0N 06635.0E SERKA 2951.0N 06615.0E KANDAHAR (TERMEZ)
A204	YOROI 4500.5N 14147.1E RISHIRI AKSUN 4545.1N 14054.3E (SELTI) (4713.3N 14013.3E)	A221	GUAM ROTA IS TINIAN IS SAIPAN
A211	MANADO TARAKAN TAWAU	A222	GUAM POHNPEI KOSRAE KWAJALEIN
A212	PUPIS PAGO PAGO NIUE	A224	JOHOR BAHRU MERSING
		A325	PRARATAPGARH TASOP 2514.1N 07045.0E KARACHI JIWANI
		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	A346	HAMILTON IS AUCKLAND
A331	ZIGIE 2419.0N 15717.5W SEDAR 4530.4N 12643.0W	A347	MUMBAI BODAR 2236.3N 07413.3E PRATAPGAPH DELHI
A332	APACK 2402.8N 15619.3W AMITY 2626.0N 15229.0W HEMLO 4318.2N 12640.8W	A348	MELBOURNE EAST SALE NISEP 4146.6S 15601.5E
A334	HAT YAI KOTA BHARU	A364	SHACHE KASHI KURUM 4006.0N 07407.0E
A337	ADKAK 3354.0N 14210.0E TEGOD 2100.0N 14512.0E JUNIE 1132.5N 14706.3E KISME 0500.0N 14805.4E	A450	DENPASSAR HASSANUDDIN CAHYO 033000N 1333000E YAP IS GUAM
A338	CHRISTCHURCH APORO 5000.0S 17120.0E BYRD		WAKE KATHS 2104.6N 16123.4W
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	A453	(KANDAHAR) (ZAHEDAN) (BANDER ABBAS)
A340	RAYONG BISOR 1221.0N 10247.0E PHNOM PENH	A455	KARACHI PARET 2527.2N 06451.5E TAPDO 2424.0N 06120.0E (VUSET)
A341	KOTA KINABALU SANDAKAN ZAMBOANGA	A456	PESHAWAR METAR 3406.0N 07128.0E KOTAL 3406.0N 07109.0E
A342	COLD BAY OLCOT 5125.8N 16533.3E		AMRITSAR LAHORE MOLTA 3012.0N 07236.2E BINDO
A344	ROZAX 0245.6S 11140.0E SUMBAWA	A457	HAT YAI TAMOS 0632.2N 10024.0E ALOR SETAR
A345	PYONGYANG GOLOT 4012.5N 12430.5E FENGCHENG KAIYUAN HAILAR KAGAK 4916N 11806E MANLI 4935N 11727E TELOK 4938N 11722E (CHITA)		PENANG KUALA LUMPUR JOHOR BAHRU
		A460	KUQA REVKI 4232.5N 8013.2E (KIRBALTABAY)
		A461	DAWANGZHUANG WEIXIAN ZHOUKOU

	HEKOU LONGKOU LILING YINGDE SHI LONG 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	A469	KAMUD 4134.0N 07850.0E HO CHI MINH CONSON IS
		A470	HONG KONG MAGOG 2217.3N 11549.4E SHANTOU XINGLIN FUZHOU YUNHE TONGLU HANGZHOU LISHUI BANTA PIXIAN
		A472	KOTAL 3406.0N 07109.0E METAR 3406.0N 07128.0E BAREV 3406.0N 07135.0E PESHAWAR
A462	KOLKATA DHAKA	A474	DELHI ASOVO
A464	CHIANG MAI BANGKOK HAT YAI IPOH BATU ARANG KUALA LUMPUR SINGAPORE TINDAL TAROOM LORD HOWE IS AUCKLAND		MUMBIA 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
A465	KOLKATA VISHAKAPATNAM CHENNAI COLOMBO		ULAN BATOR (KYZYL)
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	A576	MEDAN SINGAPORE DENPASAR CURTIN ALICE SPRINGS PARKES SYDNEY
A467	BIRATNAGAR KATHIAR KOLKATA	A577	SHIKANG KADET 2100.0N 11934.0E
A468	KUQIA		

A578	TONIK PHONPEI NAURU TARAWA NADI AUCKLAND	3200.0N 14600.0E	A585	PALEMBANG JAKARTA PORT HEDLAND CEDUNA ADELAIDE
A579	SYDNEY NADI CARRP	1904.4N 15935.0W	A586	INTOS 3722.00N 13120.00E PUSAN CHEJU ERABU NAHA
A580	AUCKLAND NAUSORI APIA		A587	SUMBAWA ALICE SPRINGS
A581	BAGO CHIANG MAI CHIANG RAI PONUK 2018.8N 10023.0E SAGAG 2111.5N 10137.4E BIDRU KUNMING MAGUOHE QIANXI HUAYUAN LINLI WUHAN		A588	DALIAN WAFANGDIAN WANGBINGOU KAIYUAN CHANGCHUN HARBIN SIMLI 5017.4N 12722.1E
			A589	DELHI BUTOP 2919.7N 07523.9E ASARI 3048.3N 07509.5E
A582	JOMALIG CHINEN KAGOSHIMA IKISHIMA PUSAN SEOUL		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
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		A591	QINDAO XUEJIADAO LATUX 3532.0N 12044.0E MUDAL 3651.0N 12322.0E AGAVO 3710.0N 12400.0E
A584	TONGA NIUE APIA FUNAFUTI NAURU KOSRAE		A592	PUPIS 1000.0S 17105.5W APIA VAVA'U TONGA
			A593	TANGHEKOU XILIUHETUN SHIGEZHUANG POTOU PIXIAN WUXI SHANGHAI
		(Partially Implemented. See Chapter 2.)		

	NANHUI FUKUE	B200	ENKIP FICKY	3547.0S 17730.0E 3133.6N 12123.5W
A595	FUKUOKA IKISHIMA CHEJU	(B201 in Chapter 2)		
		B202	UBON PAKSE	
A596	HUAIROU HUAILAI TIANZHEN LIANGCHENG BAOTOU DENGKOU YABRAI	B203	PLEIKU	KATHMANDU BAGDOGRA GUWAHATI SILCHAR IMPHAL LASHIO
A597	GOBOH KUSHIMOTO MONPI 2100.0N 14036.0E GUAM NOUMEA AUCKLAND	B204	GOMES SIEM REAP	1324.0N 10135.3E
		B205	RAYONG BOKAK	1257.5N 10230.0E
A598	BRISBANE HONIARA NAURU MAJURO	B206	URUMQI FUKANG ALTAY GOPTO	4905.5N 08728.0E
A599	CHITTAGONG LINSO 2322.5N 09855.0E GENGMA KUNMING LUXI BOSE LAIBIN GAOYAO PINGZHOU ZHULIAO WONGYUAN NANXIONG GANZHOU NANFENG SHANGRAO TONGLU NANXUN SHANGHAI	B209	JAMSHEDPUR KHAJURAHO TIGER	(AKTASH) 2828.8N 07214.9E
		B210	TASOP	2513.3N 07048.9E
		B211	MUMBAI EPKOS	NAWABSHAH 1653.1N 07407.2E
		B213	CHENNAI	
		B214	LHASA CHENGDU	
		B215	NASAN LADON	2106.2N 10258.0E
			AKSAG	2049.1N 10027.3E
A791	(IMLOT) JIWANI KARACHI PRATAGARH BHOPAL JAMSHEDPUR KOLKATA		DAWANGZHUANG TAIYUAN YINCHUAN YABRAI JIUQUAN HAM FUKANG URUMQI KUQA	

	SHACHE HONGQILAPU PURPA 3656.5N 07524.5E GILGIT ISLAMABAD	B331	NIDOR 5029.4N 09125.8E (LIKAR)
B218	KUNMING SIMAO 2243.1N 16058.2E SAGAG 2111.5N 10137.4E VIENTIANE LOEI CHUM PHAE	B332	CHEUNG CHAU KAPLI 2110.0N 11730.0E HENGCHUN
B219	PENANG KOTA BHARU	B333	SANKO 3814.2N 12228.4E TOMUK 3843.0N 12400.0E PYONGYANG SINSONGCHON SONDO 3947.0N 12713.6E KANSU 3838.0N 13228.5E
B220	BRISBANE PORT MORESBY	B334	BEIJIN TANGHEKOU FENGNING TONGLIAO
B221	NINAS 3100.0N 12215.0E PINOT 3125.2N 12214.2E SAGUT 3500.0N 12040.3E XUEJIADAO	B337	(TAKHTOYAMSK) ANIMO 4508.3N 14337.8E ASAHIKAWA
B222	VINIK 0838.6N 11613.8E KOTA KINABALU	B338	MERSING TEKONG ANITO 0017.0S 10452.0E
B223	(DABUR 5147.1N 14235.9E) LUMIN 4545.0N 14150.3E WAKKANAI	B339	ULAN BATOR POLHO 4447.0N 11315.0E FENGNING
B326	HONIARA CHOKO 2022.6N 16053.0W	B345	KATHMANDU BHARATPUR BHAIRAHAWA LUCKNOW
B328	EREN TAMURTAI TIANZHEN NANCHENGZI WEIXIAN	B346	LUANG PRABANG NOBER 1516.6N 10040.1E BANGKOK
B329	PHNOM PENH PAKSE VILAO 1722.0N 10605.0E NAM HA 2023.2N 10607.1E	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
B330	HONG KONG TAMOT PINGZHOU GAOYAO DOUJIANG QUIANXI FUJIACHANG JINGTAI YABRAI MORIT 4202.0N 10249.0E		

	TOMAN 0121.5N 10547.0E		MANDALAY LASHIO
B349	BALI POTIP 2141.6S 12508.0E	B465	KOLKATA CHITTAGONG MANDALAY LUANG PRABANG HANOI
B450	SYDNEY LORD HOWE IS NORFORK IS PAGO PAGO		
B451	HAILAR QIQIHAR HARBIN BISUN 4314.0N 13111.8E (VLADIVOSTOK) IGROD 4139.0N 13647.0E KADBO 3914.0N 13745.0E	B466	JOHOR BAHRU BATU ARANG CHENNAI MUMBAI
B452	TONIK 3200.0N 14600.0E HONIARA NADI	B467	KANGWON INTOS 3722.0N 13120.0E KANSU 3838.0N 13228.5E NULAR 4059.2N 13411.0E (TEKUK) 4241.0N 13527.4E
B453	MIDDLETON IS KATCH 5400.0N 13600.0W DAASH 4226.5N 12600.1W	B468	DIENBIEN LADON 2106.2N 10258.0E LUANG PRABANG
B454	PAGO PAGO RAROTONGA TONYS 3019.9N 12249.2W	B469	SINGAPORE JAKARTA CARNARVON GERALDTON PERTH
B455	VAVA'U NISEX 1547.3S 17136.4W		CAIGUNA WHYALLA GRIFFITH SYDNEY
B456	WEWAK JAYAPURA	B470	SINGAPORE PANGKALPINANG JAKARTA
B459	MUMBAI CLAVA 0134.0N 06000.0E (PRASLIN)	B472	LIPA ILO ILO COTABATO
B460	KHORAT SAVANNAKET		SELSO 0400.0N 12616.0E TOREX 0724.0N 13335.0E GOVE NORMANTON
B462	MACKAY HAMILTON IS. PORT MORESBY KADAB 0458.0S 14100.0E BIDOR 0400.0S 13130.0E	B473	LIPA ROXAS CAGAYAN-DE-ORO DAVAO SADAN 0400.0N 12805.0E CAIRNS
B463	TACLOBAN MANILA CABANATUAN LAOAG MIYAKO JIMA OKINAWA BAGO	B474	SYDNEY SANTO

	NANUMEA CHOKO 2022.6N 16053.0W	BIAK RENAN 0330.0N 13416.6E ENDAX 1415.0N 13000.0E ATVIP 2100.0N 12422.0E HUALIEN
B480	(RAZDOLITE) LETBI 5011.9N 10330.6E BULGAN MORIT 4202.0N 10249.0E	B589 PORT MORESBY KAPKI 1014.9S 14817.7E BUKA MAJURO
B575	AUCKLAND TONGA PAGO PAGO	B590 NOUMEA PORT VILA NAURU
B576	TAIBEI CHEJU SEOUL	B591 SHANGHAI TAIBEI HENCHUN
B577	NADI WALLIS IS APIA PAGO PAGO FICKY 3133.5N 12123.5W	(Partially implemented. See Chapter 2.)
B578	BRISBANE NOUMEA TAHITI	B592 KOTA KINABALU JAKART
B579	PHUKET LANGKAWI PENANG	B593 KOLKATA COMILLA AGARTALA GUWAHATI
B580	SYDNEY NOUMEA CHOKO 2022.6N 16053.0W	B595 TAHITI KONA
B581	NADI FICKY 3133.5N 12123.5W	B596 RAROTONGA DOVRR 1843.0N 15740.0W
B583	BRUNEI DARWIN	B597 ERABU TANEGASHIMA SHIMIZU
B584	DENPASAR ELANG 0056.0S 11449.5E KOTA KINABALU	B598 DARWIN THURSDAY ISLAND PORT MORESBY KAPKI 1014.9S 14817.7E
B586	NOUMEA SEKMO KAPKI PORT MORESBY GUAM OMLET 2100.0N 14259.2E TATEYAMA	HONIARA PORT VILA NADI NAUSORI TONGA RAROTONGA
B587	ST GEORGE KOWANYAMA OPABA 0851.5S 13804.0E TIMIKA	B599 NOUMEA NADI TAHITI
		B757 KATCH 5400.0N 13600.0W

	CAPE NEWENHAM NULUK	5822.9N 17706.1W	TAIYUAN YIJUN SANYUAN XIAOYANZHUANG NINGSHAN WUFENGXI FUJIACHANG
B932	BAMOK (NETRI ODERI MEMANBETSU	5625.5N 17249.3E 4739.3N 15000.0E) 4439.0N 14515.2E	
G200	CHRISTMAS IS. COCOS IS (PLAISANCE)		WEINING MAGUOHE KUNMING
G202	(KANDAHAR) ZHOB RAHIM YAR KHAN		G213 BIAK BEKUB 0350.0N 13845.0E GUAM
G203	MIHO PUSAN		G214 JIWANI PANJGUR RAHIM YAR KHAN MOLTA 3012.0N 07236.2E
G204	ELNEX SHENGXIAN METAN SHANGHAI		G215 DUTCH HARBOR OLCOT 5125.8N 16533.3E
G205	HAMILTON IS. GURNEY JUNIE		G216 (DORAB) ALPOR 2404.7N 06120.0E LATEM 2431.7N 06449.7E KARACHI
G206	DILARAM KABUL SABAR PURPA		G218 HOHHOT TUMURTAI POLHO 4447.0N 11315.0E SOLOK 4954.0N 11545.0E
G208	MUMBIAI PARTY 2414.6N 07052.0E KARACHI PANJGUR (ZAHEDAN)		G219 VIRUT 0230.8N 10402.7E TEKONG
G209	LAERMONT CHRISTMAS ISLAND PALEMBANG		G221 PHUCAT BUNTA 1650.0N 10923.7E BAOLONG HAIKOU SAMAS SIKOU
G210	PANJGUR KARACHI MUMBIAI		G222 SAPDA BROOME AYERS ROCK PARKES
G212	(KHABAROVSK) ARGUK 4753.5N 13439.4E HAIQING JIAMUSI HARBIN TONGLIAO GUBEIKOU QINBAIKOU NANCHENGZI		G223 TATEYAMA TONIK 3200.0N 14600.0E NAURU NADI NAUSORI NIUE AITUTAKI

	TAHITI (LIMA)	G337	PERTH CHRISTMAS IS PEKANBARU
G224	NORFORK IS NADI PAGO PAGO TAHITI ISLA DE PASCUA (SANTIAGO)	G338	CHOIBALSAN KAGAK
		G339	PUSAN FUKUOKA KAGOSHIMA
G325	COLOMBO TIRUCHCHIRAPPALLI		TANEGASHIMA PAKDO GUAM
G326	BALI TENNANT CREEK BRISBANE	G340	QINGBAIKOU HUAILAI
G327	NANHUI NINAS 3100.0N 12215.0E AKARA 3130.0N 12330.0E	G341	CHANGCHUN WANGQING
G329	BRISBANE NORFORK IS	G342	CAIRNS HONIARA
G330	SHANGHAI POMOK NANTONG GURNI 3209.2N 12058.5E PIMOL 3215.0N 11944.0E	G344	COMFE 3624.0N 14618.0E CUTEE 4624.9N 16218.6E CUDDA 5647.9N 16018.1W
G331	PHUKET PADET DAWEI	G345	UNTAN CHANGZHOU LISHUI
G332	TANGHEKOU CHAOYANG	G346	KIMCHAEK NULAR 4059.2N 13411.0E IGROD 4139.0N 13647.0E
G333	DELHI ESDEM TIGER 2828.8N 07214.9E	G347	AUCKLAND POPIR 2500.0S 17804.8W PADDI 1825.7N 15854.8W
G334	KUALA LUMPUR TIOMAM BUNTO 0242.0N 10600.0E DOTAS 0201.1N 10820.5E SIBU	G348	PARO BAGDOGRA MECHI KATHMANDU
G335	KATHMANDU JANAKPUR PATNA	G424	(DAR ES SALAAM) VUTAS 0912.0N 06000.0E ALATO 1340.7N 06344.0E
G336	DHANBAD PATNA SIMRA KATHMANDU	G450	(MOGADISHU) MUMBAI NAGPUR KOLKATA
		G451	AHMEDBAD SASRO 2404.3N 07100.0E PARTY 2414.6N 07052.0E

G452	(ZAHEDAN) RAHIM YAR KHAN TIGER 2828.8N 07214.9E DELHI	G467	LUBANG JOMALIG GUAM
G453	KUALA LUMPUR KOTA BHARU	G468	PENANG MEDAN
G454	(PLAISANCE) BOBOD 0600.0S 06941.1E PADLA 0446.1N 07800.0E COLOMBO	G469	PORT HEIDEN ST PAUL IS NYMPH 5324.5N 16814.4E
G455	SHANGHAI PINOT 3125.2N 12214.2E AKARA 3130.0N 12330.0E	G470	XIANYANG FENGHUO CHANGWU JINGNING JINGTAI QITAI
G457	DOVRR 1843.0N 15740.0W ELLMS 0500.0S 16704.1W PAGO PAGO FAROA 2500.0S 17502.3W DIVSO 3452.3S 17624.5E	G471	SHILONG LONGMEN GANGZHOU
G458	BANGKOK SURAT THANI PHUKET	G472	KARACHI AHMEDABAD NAGPUR BHUBANESHWAR PATHEIN BAGO
G459	CAIRNS TIMIKA	G473	BAGO MAKAS 1649.7N 09830.0E PHITSANULOK UBON
G460	KUCHING SIBU BINTULU BRUNEI	G474	BANGKOK MENAM 1357.3N 10247.7E SOURN 1345.5N 10600.0E ANINA 1359.0N 10725.0E PHUCAT
G463	RAJSHAHI DHAKA CHITTAGONG BAGO BETNO 1505.8N 09812.7E BANGKOK	G575	TAHITI RANGIROA FICKY 3133.5N 12123.5W
G464	PONTIANAK ROZAX 0245.0S 11140.0E BALI KARRATHA BALLIDU PERTH	G576	CHEER 5310.0N 14000.1W SPONJ 4992.0N 13005.1W
G465	(PRASLIN) MALE COLOMBO	G578	GURAG 2100.0N 12725.0E DILIS 1431.0N 12600.0E TACLOBAN MACTAN ZAMBOANGA
G466	HO CHI MINH PHUCAT HENGCHUN		DENPASAR PORT HEDLAND PARABURDOOD

	PERTH		BHOPAL
G579	JAKARTA PALEMBANG SINGAPORE JOHOR BAHRU	G591	INDORE BODAR 2236.3N 07413.3E
G580	TOMAN 0121.5N 10547.0E NIMIX 0124.9N 10759.2E ATETI 0125.7N 10830.1E KUCHING MIRI BRUNEI	G593	CAIRNS NOUMEA NORFORK IS AUCKLAND
G581	HONG KONG ELATO 2220.0N 11730.0E HENGCHUN MIYAKO JIMA BISIS 2647.0N 12633.0E ERABU MIYAKE JIMA	G594	FUNAFUTI NAUSORI NIUE RAROTONGA
G582	PUGER 0324.1N 10017.6E BATU ARANG PEKAN	G595	TIAMU TAHITI RAROTONGA AUCKLAND SOLIT 2355.0S 07500.0E (PLAISANCE)
G583	EMMONAK BESAT 5945.0N 17925.1W (UST-BOLSHERETSK) BISIV 4456.3N 14412.3E MONBETSU	G597	(TAHITI) SYDNEY MABAD 2648.4S 07500.0E (PLAISNACE)
G584	KUALA LUMPUR PEKAN KUCHING		DONVO 3734.0N 12320.0E AGAVO 3710.0N 12400.0E SEOUL KANGNUNG MIHO OTSU KOWA OSHIMA VENUS 3618.2N 14042.1E
G585	MIHO POHANG SEOUL	G598	LUCKNOW APIPU 2658.6N 08300.0E SIMARU
G586	YINGDE ERTANG	G599	AUCKLAND TAHITI
G587	TAIBEI PABSO 2538.0N 12252.0E BULAN 2704.0N 12400.0E	R200	PINGZHOU LIANSHENGWEI BIGRO
G588	MOOREN KHOVD TEBUS 4725.1N 09027.7E TESAN 4701.7N 08947.8E FUKANG	R201	ZHANJIANG BANGKOK UTAPAO
G590	SIMRA VARANASI KHAJURAHO	R203	SAPAM 0804.6N 09733.0E PHUKET
		R204	KEITH 2100.0N 13456.5E KALIN 0000.0N 14200.0E

	LIDIT HORN IS CAIRNS	0918.0S 14220.0E		NIPPI NODLE	4942.6N 15920.8E 6117.0N 15200.0W
R205	ANARAK BIRJAND		R221	MERSING PULAU TIOMAN	
R206	PORT HEDLAND CHRISTMAS IS JAKARTA		R222	AVGOK (YEDINKA)	4336.0N 13815.0E
R207	VIENTIANE NAN CHIANG MAI MANDALAY		R325	KATHMANDU JANAKPUR DUMKA KOLKATA PHUKET HAT YAI IPOH	2411.0N 08721.3E
R208	KUALA LUMPUR KUALA TRENGGANU KANTO 0649.9N 10348.3E		R326	JOHOR BAHRU NORFOLK IS CHRISTCHURCH	
R209	TATOX 0857.0N 09702.0E LANGKAWI		R327	GISBORNE FAROA	
R210	PORT MORESBY CAIRNS		R329	KAGLU MALE GAN (DIEGO GARCIA)	1231.2N 07200.0E
R211	KASMI 3601.3N 14040.3E DAIGO NIIGATA KADBO 3914.0N 13745.4E AVGOK 4336.0N 13815.0E VELTA 4529.0N 13710.0E		R330	SHEMYA POWAL 5024.3N 16530.8E	
R212	(DIEGO GARCIA) GUDUG 0704.6S 07500.0E PIBED 0520.2S 09044.0E		R332	MAJURO BONRIKI AKUMO 0614.9S 17535.5E ROTUMA NADI	
R215	CHIANG RAI NAN LUANG PRABANG		R334	RAYONG KOH KONG PHNOM PENH	
R216	UMUMQI (ALMA ATA) (ATM/AIS/SAR Deficiency on this matter deleted).		R336	ADAK CARTO 4840.5N 16847.0E	
R217	NODAN 4025.0N 14500.0E SENDAI NIIGATA		R337	TACLOBAN KOROR	
R218	DELHI DIPAS 2738.3N 07551.9E JAIPUR		R338	NOME NINNA 5455.7N 17158.8E	
R220	DAIGO IWAKI NANAC 3854.2N 14313.9E		R339	SIKOU 2050.6N 11130.0E HUGUANG NANNING BOSE	
			R340	AMBON	

	WALGETT	R452	SONDO	3947.0N 12713.6E
R341	KODIAK NINNA 5455.7N 17158.8E		HAMUN	3955.1N 12731.1E
R342	MANADO BONDA 0200.0N 12451.2E PEDNO 0400.0N 12521.0E GENERAL SANTOS DAVAO	R453	KIMCHAEK UAMRI 4217.6N 13041.8E (TEKUK) 4241.0N 13527.4E	
R343	NANXIANG WUXI LISHUI HEFEI WUHAN LONGKOU LAOLIANGCANG DARONGJIANG LAIBIN NANNING	R455	NADI APIA PONTIANAK KUCHING	
R344	KATHMANDU BIRATNAGAR KATIHAR RAJSHAH	R458	MUMBAI EPKOS 1653.0N 07407.2E BELGAUM	
R345	ROIET BIDEM SIEM REAP 142153.57N 1034750.07E	R457	CHENNAI TIRUCHCHIRAPPALLI MADUDAI TRIVANDRUM MALE	
R346	TOWNSVILLE PORT MORESBY		(R459 in Chapter 2)	
R347	NIIGATA SADO EKVIK 3944.7N 13636.5E IGROD 4139.0N 13647.0E (VELTA) 4529.0N 13710.0E	R460	DELHI ALIGARH LUCKNOW VARANASI GAYA KOLKATA	
R348	KADAP 0200.0S 08409.6E LATEP 0610.3S 07500.0E (DIEGO GARCIA)	R461	MUMBAI MABTA 1708.5N 07321.8E BELGAUM COIMBATORE COLOMBO MEDAN KUALA LUMPUR	
R349	LEMOK 1000.0N 10302.2E RASER 1000.0N 10506.0E HO CHI MINH	R462	(SEEB) DENDA 2442.5N 06054.8E JIWANI KARACHI UPAIPUR DELHI	
R450	KIETA HONIARA	R463	APACK ALCOA	2402.6N 15619.2W 3750.0N 12550.0W
R451	ADAK OGDEN 4929.2N 16102.3E	R464	BITTA BEBOP	2332.0N 15529.0W 3700.0N 12500.0W
		R465	CLUTS CLUKK	2300.0N 15439.0W 3605.0N 12450.0W
		R466	KUALA LUMPUR	

	GUNIP	0429.9N 09931.9E	R582	NORFOLK IS RAROTONGA
R468	BANGKOK BOKAK PHNOM PENH SAPEN HO CHI MINH	1257.5N 10230.0E 1102.2N 10611.0E	R583	TAIBEI BISIS 2647.1N 12633.1E OKINAWA MINAMIDAITO SABGU BUNGO
R469	PEKANBARU SINGAPORE			
R470	VIENTIANE UDON THANI KHON KAEN		R584	OKINAWA KEITH 2100.0N 13456.5E GUAM TRUK
R472	KOLKATA RAJSHAHI GUWAHATI			POHNPEI KWAJALEIN MAJURO
R473	LILING NANXIONG WONGYUANG ZHULIAO PINGZHOU TAMOT	2221.5N 11352.0E	R585	JOHNSTON IS CHOKO 2022.9N 16053.2W
			R587	CITTA 2818.9N 14507.2W GATES 3412.7N 12303.9W
R474	GAOYAO NANNING LONGZHOU HANOI VIENTIANE BANGKOK		R588	BRISBANE PORT VILA
R575	PAPRA 1546.0N 10711.0E KOH KONG UPNEP 0942.2N 10029.6E SURAT THANI		R590	PHUKET RELIP PHNOM PENH PLEIKU
			R591	AMBON COTABATO
R576	DENNS 2222.0N 15353.0W DINTY 3329.0N 12235.0W		R592	CAPE NEWENHAM AKISU 4734.3N 16119.3E ABETS 3605.0N 14425.0E
R577	EBBER 2143.0N 15309.0W ELKEY 3241.0N 12203.0W		R594	BALI ONSLOW PERTH
R578	FITES 2049.0N 15300.0W FICKY 3133.5N 12123.5W			LUCKNOW JALALABAD DELHI
(R579 in Chapter 2)			R595	ANPU MIYAKO JIMA
R580	OATIS 3800.0N 14345.0E OMOTO 4859.7N 16000.7E AMOTT 6053.9N 15121.8W			KEITH 2100.0N 13456.5E GUAM
R581	KOLKATA MONDA 2521.0N 08626.4E SIMARA		R597	CABANATUAN SARSI 1642.0N 12316.9E SKATE 1716.7N 12423.0E
			R598	KOLKATA

	RAJSHAHI SAIDPUR COOCH BEHAR BOGOP PARO	L509	GAYA ASARI	3048.3N 07509.5E
R599	KIETA GIZO HONIARA PORT VILA WHANGAREI AUCKLAND	L510	IBANI ELBAB LEKIR GIVAL	250000N 0764311E 201333N 0815954E 071632N 0965243E 070000N 0980000E
		L512	INTOS NIIGATA	3722.0N 13120.0E
		L513	PERTH HOBART AUCKLAND	
	RNAV ROUTES	L515	OBMOG IKULA PHUKET	1154.1N 09623.5E 1000.0N 09721.2E
L301	BANGKOK DAWEI VISHAKHAPATNAM BUSBO 1914.9N 07807.6E NOBAT 2109.0N 06800.0E RASKI 2303.5N 06352.0E (VAXIM 2319.0N 06111.0E)	L516	KITAL ELKEL (DIEGO GARCIA)	2003.0N 06018.0E 0149.0N 06911.0E
L333	KHAJURAHO JAIPUR TIGER 2828.8N 07214.9E	L517	MIRI GULIB TERIX	0409.3N 11028.1E 0415.4N 10934.9E
L500	(SANTIAGO) AUCKLAND	L521	SYDNEY AUCKLAND	
L501	(RIO GALLEGOS) AUCKLAND	L625	LUSMO AKMON ALDAS ANOKI ARESI AKOTA AVMUP POTIB	0333.7N 10655.7E 0812.8N 11013.4E 1056.9N 11212.3E 1222.0N 11315.0E 1358.4N 11427.0E 1706.6N 11651.6E 1843.3N 11808.3E 2100.0N 12045.5E
L502	ISLA DE PASCUA (LOS ANGELES)	L628	LUBANG IBOBI GUKUM ARESI MESOX DAMEL VEPAM PHUCAT	
L503	BRISBANE IGEVO 3636.5S 16300.0E CHRISTCHURCH	L629	PEKAN DOLOX	1354.4N 11832.6E 1356.8N 11637.2E 1358.4N 11427.0E 1358.4N 11427.0E 1358.7N 11130.6E 1358.0N 11000.0E
L504	SINGAPORE MANADO	L635	PEKAN MABLI	0448.7N 10522.9E 0417.3N 10612.9E
L505	BUSBO 1914.9N 07807.6E KAMOL 1938.1N 07340.0E NOBAT 2109.0N 06800.0E	L637	BITOD TANSONNHET	0715.3N 10612.9E
L507	KOLKATA BAGO BANGKOK			
L508	RAROTONGA CHRISTCHURCH MELBOURNE			

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	KETIV 0042.0S 09200.0E COLOMBO
L899		HANIMAADHOO TRIVANDRUM
M300		(EMURU 2215.6N 05849.8E) LOTAV 2037.0N 06057.0E CALICUT MADURAI SALAX 0212.4N 10133.7E
L643	TANSONNHET CONSON	M501 GUAM LIMLE 1639.7N 13000.0E
L644	CONSON JAKARTA	SKATE 1722.2N 12425.6E LAOAG NOMAN 2000.0N 11640.3E
L645	COLOMBO SULTO 0738.6N 08801.9E SAMAK 0758.7N 09425.0E SAPAM 0804.6N 09733.0E PHUKET	M502 BANGKOK AKATO 1337.3N 09910.3E LALIT 1252.4N 09225.1E
L626	KATHMANDU ONISA 2858.1N 08005.5E DELHI	M504 ALPOR 2404.7N 06120.0E NODER 2350.0N 06700.0E TELEM 2402.0N 06846.0E
L759	DELHI POSIG 2713.0N 07734.9E AGRA KHAJURAHO PHUKET	M512 COLOMBO ANIVE 0540.9N 07800.0E MALE
L760	AGRA GURTI 2743.8N 07747.8E DELHI	M520 SERNA 5018.5N 10628.1E POLHO 4447.0N 11315.0E
L774	(PLAISANCE) LELED 116.5S 07500.0E ELATI 0200.0S 08957.7E KETIV 0042.0S 09200.0E MEDAN	M522 VINIK 0838.5N 11613.8E KOTA KINABALU MAMOK 0405.1N 11547.2E DENPASAR
L894	KITAL 2003.0N 06018.0E MALE SUNAN 0028.7S 07800.0E DADAR 0200.0S 07927.1E PERTH	M625 MELBOURNE WELLINGTON
L896	SAPDA 1200.0S 11125.6E NISOK 0302.9N 09200.0E DUGOS 0853.1N 08447.9E CHENNAI	M626 KOTA BHARU DAWEI BAGO
L897	CHRISTMAS ISLAND	M635 SINGAPORE RAMPY 0615.0S 11320.8E CURTIN (M635 in Chapter 2)
		M636 SYDNEY WELLINGTON
		M638 DOSTI 2558.0N 06503.0E KARACHI

	MINAR	2350.0N 06800.0E	KOTA KINABALU
	SAPNA	2330.0N 06750.0E	
	NOBAT	2109.0N 06800.0E	M759 OLKIT 0450.1N 11149.1E
	MUMBAI		BRUNEI
M639	IGEVO	3636.5S 16300.0E	M761 PEKAN
	WELLINGTON		BOBOB 0222.1N 10706.1E
M641	MADURAI		SABIP 0209.7N 10750.5E
	BIKOK	0817.0N 07836.0E	AGOBA 0158.7N 10830.0E
	COLOMBO		KUCHING
	COCOS IS		M766 COLOMBO
	PERTH		JAKARTA
M643	HOBART		INDRAMAYU
	CHRISTCHURCH		MADIN 0617.9S 11023.0E
M644	RAYONG		CUCUT 0617.7S 11106.0E
	KOTA BHARU		SURABAYA
M750	KILOG	2152.5N 11441.6E	BALI
	ENVAR	2159.5N 11730.0E	DARWIN
	MOLKA	2639.5N 12400.0E	M765 KOTA BHARU
	MOMPA	3050.5N 12955.1E	IGARI 0656.2N 10335.2E
	MANEP	3242.9N 13340.0E	BITOD 0715.3N 10407.3E
	SOPHY	3327.2N 13721.9E	CONSON
	MIYAKE JIMA		DAGAG 0927.8N 10826.5E
M751	MERSING		MAPNO 1013.1N 11020.1E
	PEKAN		M767 JOMALIG
	KOTA BHARU		TOKON 1142.0N 11940.3E
	REGOS	1200.0N 10035.1E	TENON 0915.3N 11616.5E
	BANGKOK		TEGID 0857.2N 11551.6E
M753	ENREP	0452.4N 10414.8E	TODAM 0631.7N 11235.4E
	BITOD	0715.3N 10407.3E	M768 DARWIN
	PHUQUOC		BRUNEI
	PHNOM PENH		DOGOG 0525.3N 11407.5E
M754	BRUNEI		ASISU 0559.1N 11320.8E
	VINIK	0838.6N 11613.8E	TODAM 0631.6N 11235.6E
	TENON	0915.3N 11616.5E	LAGOT 0716.5N 11132.7E
	LULBU	1104.7N 11624.4E	AKMON 0812.9N 11013.1E
	NOBEN	1234.4N 11631.1E	MOXON 0849.5N 10921.3E
	GUKUM	1356.8N 11637.2E	DAGAG 0927.8N 10826.5E
	AKOTA	1706.6N 11651.6E	TANSONNHAT
M755	PHNOM PENH		M770 KOTA BHARU
	KISAN	1032.3N 10440.5E	RANONG
	BITOD	0415.4N 10407.1E	BUBKO 1911.1N 08839.8E
M758	PEKAN		KAKID 2038.6N 08659.9E
	LUSMO	0333.7N 10655.7E	JAMSHEDPUR
	TERIX	0415.4N 10934.7E	M771 MERSING
	OLKIT	0450.1N 11149.1E	DOLOX 0448.7N 10522.9E
			DUDIS 0700.0N 10648.6E
			DAGAG 0927.8N 10826.5E

	DOXAR	1222.0N 11022.7E		PEDPI	1316.6S 07500.0E
	DAMEL	1358.7N 11130.6E		(PLAISANCE)	
	DONDA	1442.2N 11201.3E	N640	TRIVANDRUM	
	DOSUT	1702.0N 11340.8E		BIKOK	0817.0N 07836.0E
	DULOP	1814.2N 11432.6E		COLOMBO	
	DUMOL	1900.0N 11426.8E		LEARMONTH	
	HONG KONG			MOUNT HOPE	
M773	BUBKO	1911.1N 08839.8E		ADELAIDE	
	LEGOS	2138.0N 08805.3E	N645	BRUNEI	
	KOLKATA			ELANG	
M774	SINGAPORE				005535.64S 1145003.10E
	KIKEM	0952.9S 12607.4E		SURABAYA	
M875	KAKID	2038.6N 08659.9E	N750	SYDNEY	
	BUTOP	2919.7N 07523.9E		CHRISTCHURCH	
	GUGAL	3014.5N 07358.0E	N759	MELBOURNE	
	DERA ISMAIL KHAN			AUCKLAND	
M890	LUCKNOW		N774	AUCKLAND	
	CHANDIGARH			SYDNEY	
	SAMAR	3120.8N 07434.0E			
N502	PARDI	0034.0S 10413.0E	N875	DENPASAR	
	BOBAG	0102.5N 10329.9E		PONTIANAK	
N509	ELATI	0200.0S 08957.7E		ARUPA	0031.7N 10848.8E
	PORT HEDLAND			NIMIX	0124.9N 10759.4E
N519	MUMBIAI			BOBOB	0222.1N 10706.0E
	SAPNA	2330.0N 06750.0E		ENREP	0452.4N 10414.7E
	MINAR	2350.0N 06800.0E	N877	LAGOG	0835.6N 09159.8E
	KARACHI			VISHAKHAPATNAM	
N563	(EMURU	2214.0N 05853.6E)		NAGPUR	
	REXOD	2112.5N 06138.5E		PRATAGRAPH	
	BANGALORE				
	MEDAN		N884	MERSING	
	SALAX	0212.4N 10133.7E		LUSMO	0333.7N 10655.7E
N564	DUGOS	0853.1N 08447.9E		LAGOT	0716.6N 11131.5E
	AKMIL	1151.6N 08006.9E		LAXOR	0949.6N 11448.5E
N571	(RAGMA	2306.0N 06105.7E)		LULBU	
	PARAR	2226.5N 06307.0E		110936.07N 1163217.70E	
	VAMPI	0610.9N 09735.1E		LEGED	
	GUNIP	0429.9N 09931.8E			130113.24N 1190006.94E
N628	PEKANBARU			LUBANG	
	BUSUX	0355.0S 06000.0E		CABANATUAN	
	(PRASLIN)			MIYAKOJIMA	
N633	KUALA LUMPUR		N891	PAPA UNIFORM	
	PEKANBARU			ENREP	0452.4N 10414.8E
	POSOD	0329.5S 09409.9E		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	PORT BLAIR RAHIM YAR KHAN
P646	BANGKOK JAMSHEDPUR PATHEIN VARANASI	
P648	KOTA KINABALU JAKARTA	
P751	(ADEN) ANGAL 1614N 06000E MUMBAI	
N893	TELEM 2407.0N 06846.0E AHMEDABAD	P756 MALE MEDAN
N895	BETNO 1505.8N 09812.7E PATHEIN BHUBANESWAR NAGPUR BODAR 2236.3N 07413.3E AHMEDABAD PARTY 2414.6N 07052.0E	P761 CHENNAI PORT BLAIR
P501	ARAMA 0136.9N 10307.2E BOBAG 0102.5N 10329.9E ANITO 0017.0S 10452.0E	P762 DAWEI PORT BLAIR COLOMBO
P518	NOBAT 2109.0N 06800.0E PARET 2527.2N 06451.5E PANJGUR	P880 IGEVO 03636.29S 16300.00E SLOPE HILL VOR 04459.03S 16846.57E
P570	(MIBSI 2341.7N 05755.4E) KITAL 2003.0N 06018.0E TRIVANDRUM KATUNAYAKE PEKANBARU	P901 IKELA 1839.7N 11214.7E CHEUNG CHAU
P574	(KUSRA) TOTOX 2150.5N 06222.5E BISET 1823.4N 06918.1E BELGAUM CHENNAI PUGER 0324.0N 10017.5E	UPPER ATS ROUTES
P627	PHUKET KADAP 0200.0S 08409.6E KALBI (PLAISANCE)	UB467 YEDINKA VELTA 4529N 13710E TEKUK 4241N 13527.4E NULAR 4059.2N 13411E (KANSU) 3838.0N 13228.5E
P628	LANGKAWI	UL425 (KUTVI) ASPUX 1744.00N 06000.00E DONSA 1434.14N 06511.32E VANVO 1043.00N 07200.00E
		UM551 DONSA 1435.3N 06511.6E ANGAL 1614.1N 06000.1E (AVAVO) 1646.3N 05526.1E

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
A218	HARBIN (HRB) (EKIMCHAN) (QA) (MYS SHMIDTA) BARROW	4537.4N 12615.6E	Shenyang	APAC 98/14
A469 (Implemented as L643, pending BANP amendment by Viet Nam)	HO CHI MINH (TSN) CONSON IS (CS)	1049.0N 10638.7E 0843.8N 10637.9E	Ho Chi Minh Ho Chi Minh	
A584 (Proposed amendment to be submitted to delete the segment not implemented from BANP)	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 the segment not implemented from BANP)	NIUE (NU) AUCKLAND (AA)	1904.4N 16955.0E 3700.3N 17448.8E	Fiji New Zealand	
R216*	URUMQI (ALMA-ATA)	4354.4N 08728.5E	Urumqi	
R459* (To be implemented as L504. Target implementation November 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
R579	PADANG (PDG) PEKANBARU (PKU) MALACCA (MC)	0052.3N 10021.2E 0025.5N 10126.5E	Jakarta Jakarta	
M635	SINGAPORE RAMPY CURTIN	0615.0S 11320.8E 1735.3S 12351.1E	Singapore Ujung Pandang Brisbane	

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

DETAILED DESCRIPTION OF ROUTES IN BANP – NOT IMPLEMENTED**ATS ROUTE NAME: A218**

Requested by :

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

Action Required	Russia implements a segment between SIMLI and Ekimchan.
-----------------	---

Benefit	
Cost	
Fuel Saving	
Emission	CO ₂
	NO _x

Remarks: At the Special ATS Coordination Meeting Cross Polar and Russian Federation Far East ATS Routes (November 2005), Russia agreed to implement the requirement by connecting Ekimchan and SIMLI which is further connected to Harbin via A588.

ATS ROUTE NAME: A469

Requested by :

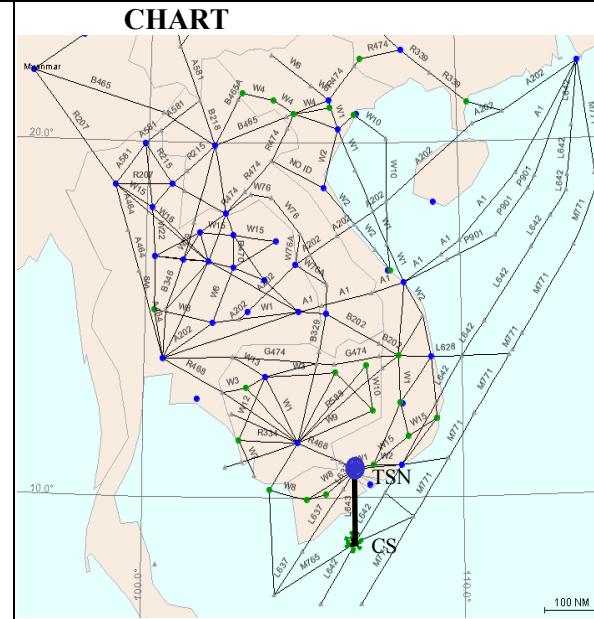
ENTRY/EXIT POINT

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 L643.

ATS ROUTE NAME: A584

Requested by :

ENTRY/EXIT POINT

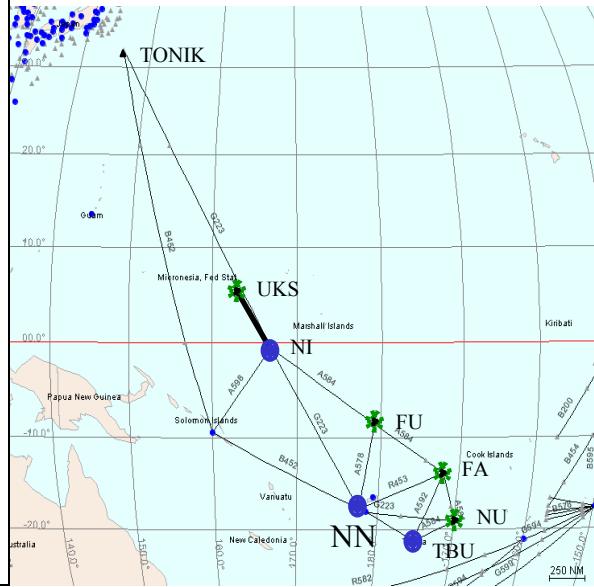
ROUTE DESCRIPTION

Tonga (TBU) .. Niue (NU) .. Paleolo (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 BANP.

ATS ROUTE NAME: B201

Requested by :

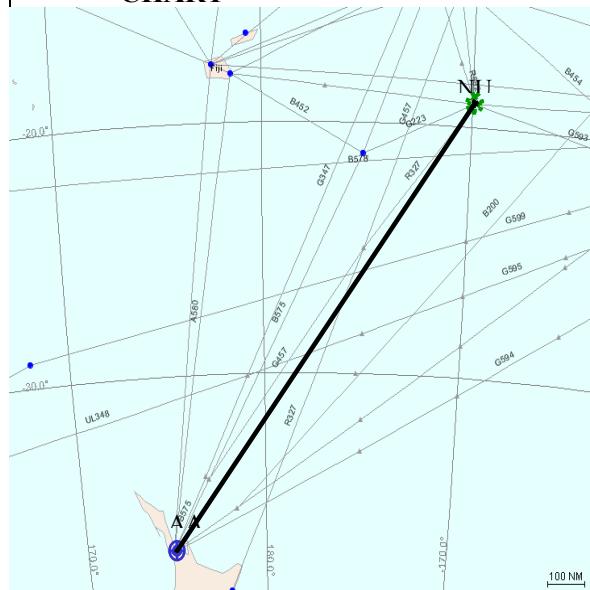
ENTRY/EXIT POINT

ROUTE DESCRIPTION
Niue (NU) .. Auckland (AA)

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 segment will be deleted after the States' proposals.

ATS ROUTE NAME: R459

Requested by :

ENTRY/EXIT POINT XXXXX	CHART
ROUTE DESCRIPTION Manado (MWB) .. Balikpapan (BPN) .. ELANG (0055.6N 11450.1E) .. Pontianak (PNK) .. MINOS (0000.0 10901.7E) .. Tanjung Pinang (PI)	
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: To be implemented as L504. Currently route largely served as W15 and W36

ATS ROUTE NAME: R579

Requested by :

ENTRY/EXIT POINT XXXXX	CHART
ROUTE DESCRIPTION Padang (PDG) .. Pekanbaru (PKU) .. Malacca (MC)	
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:

ATS ROUTE NAME: M635

Requested by : Indonesia

ENTRY/EXIT POINT

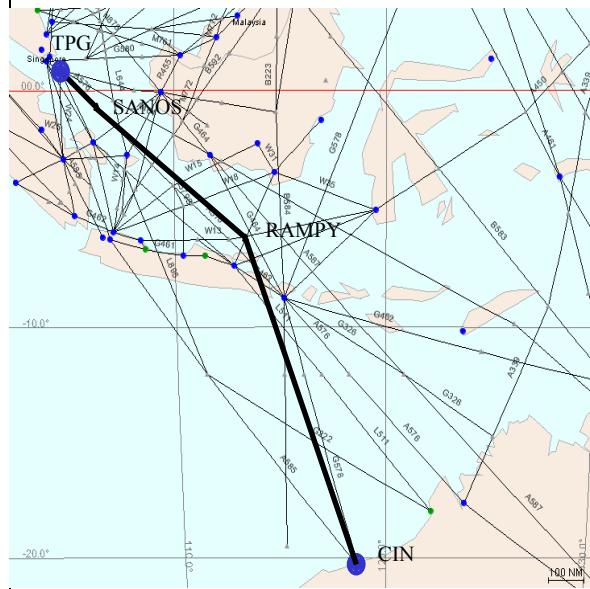
ROUTE DESCRIPTION

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:

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

ATS Routes	Route Description /Significant points	Coordinates	FIR	Remarks
A206	ASSAD VINH NONGT LPB	N1820.5 E10740.9 N1844.0 E 10540.1 N1930.0 E10359.0 N1954.0 E10209.6	HANOI HANOI VIENTIENE VIENTIENE	Implemented on 9 September 2005
L888	BIDRU SANLI KUQA	N2243.1 E10057.9 N3200.0 E10000.0 N4143.0 E08300.0	KUNMING KUNMING URUMUQI	Implemented around 2000. Awaiting clarification from China.

ATS ROUTE NAME: A206

REQUESTED BY: Viet Nam, Lao PDR and IATA

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

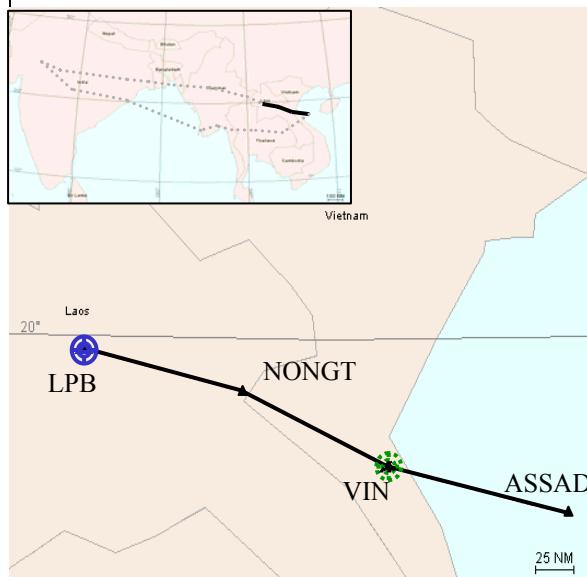
ROUTE DESCRIPTION

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: L888

REQUESTED BY:

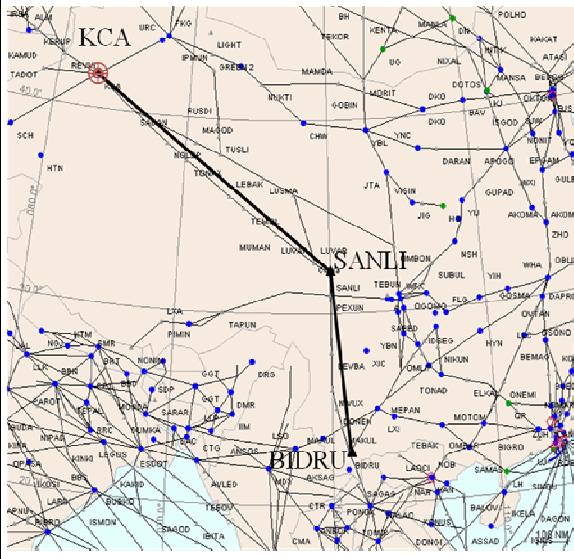
ENTRY/EXIT POINT

ROUTE DESCRIPTION
BIDRU (2243.1N 10057.9E) .. SANLI (3200.0N 10000.0E) .. KUQA (KCA) (4143.0N 08300.0E)

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



Action Required	China to response to clarification from ICAO ICAO to progress the BANP amendment.
-----------------	--

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: The Regional Office sought clarification from China with letters on 19 January 2000, 16 March 2000, 10 May 2000 and 4 July 2008, and verbally on 4 December 2007. There has been no response from China.

Potential City Pairs: Europe – SEA airports

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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
	NIL				

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Chapter 4: Part B: Future Route Requirements – States

(The routes in this section are 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. These routes are subject to coordination and agreement.)

PROPOSER	ATS ROUTE	SIGNIFICANT POINTS	COORDINATES	FIR	REMARKS
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	
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	
Vietnam		Noibai Kunming	2112.8N 10550.1E 2501.0N 10244.0E	Hanoi Kunming	
		Noibai Catbi SAMAS or Huguang	2112.8N 10550.1E 2049.1N 10642.5E 2030.3N 11029.7E 2107.9N 11020.2E	Hanoi Hanoi Guangzhou/ Sanya Gunagzhou	

ATS ROUTE NAME: Himalaya 1

Requested by : Nepal

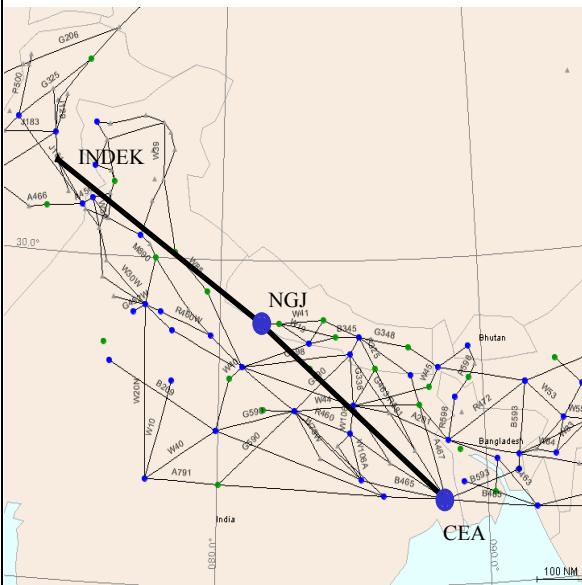
ENTRY/EXIT POINT
XXXXX

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: The route has been implemented except for Imphal to Kunming which China had undertaken to review (as per current remarks)

IATA Nth Asia Office approached China who have indicated this route will be considered as part of the overall China route review - no timeline was given.

The extension to L509 serves the purpose at present although is only available for

limited hours daily. The availability of another route to the north will provide extra capacity but will need to be amended to link with a new transit route through Kabul.

ATS ROUTE NAME: Himalaya 2

Requested by : Nepal

ENTRY/EXIT POINT
XXXXX

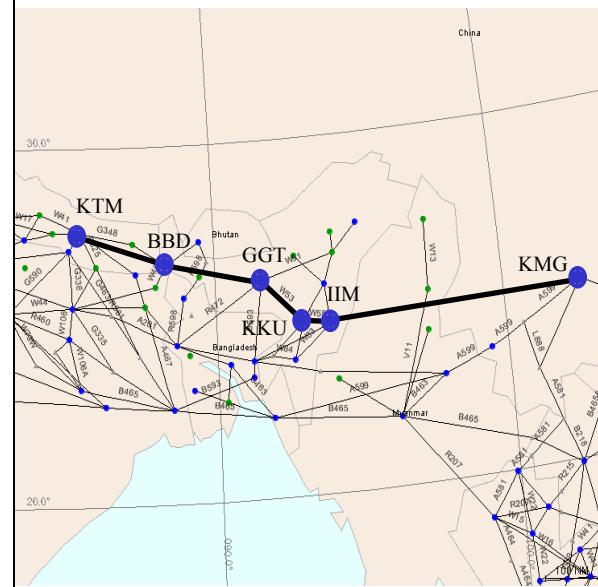
ROUTE DESCRIPTION

Kathmandu (KTM) .. Bagdogra (BBD) ..
Guwahati (GGT) .. Silchar (KKU) .. Imphal
(IIM) .. Kunming (KMG)

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



Action Required	States to coordinate implementation.
.	

Benefit	
Cost	
Fuel Saving	
Emission	CO ₂
	NO _X

Remarks: China advised that they would seriously look at the proposal and would coordinate with Nepal (ref. para 8.4 of the SEA-RR/TF/4 report). This was also presented at the 22nd Meeting of the BBACG.

ATS ROUTE NAME: R582

Requested by : Tahiti

ENTRY/EXIT POINT

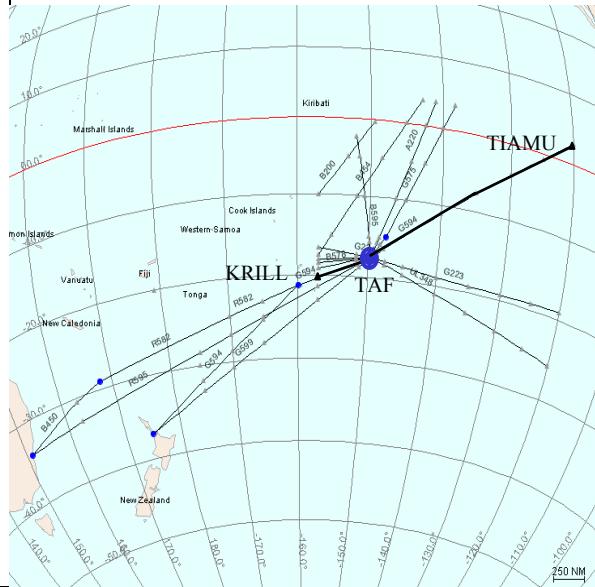
ROUTE DESCRIPTION

Decommissioned G594 and realigned R582
as KRILL .. MAITO .. Tahiti (TAF) ..
PAERE .. TOLAB .. TAMUR .. TIERE..
TARAO .. TUNBA .. TIAMU

FLIGHT LEVEL BAND

PRIORITY: HIGH/MED/LOW

CHART



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

Benefit	
Cost	
Fuel Saving	
Emission	CO ₂
	NO _x

Remarks:

ATS ROUTE NAME:

Requested by : Vietnam

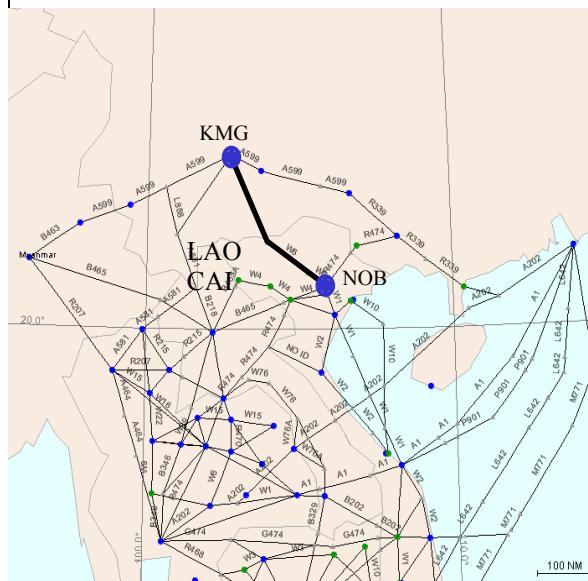
ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
Noibai (NOB) .. LAOCAI .. Kunming
(KMG)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



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

Benefit	
Cost	
Fuel Saving	
Emission	CO ₂
	NO _x

Remarks: Because of small traffic demand and cost/benefit considerations, this route is impossible and can not be implemented at present.

ATS ROUTE NAME:

Requested by : Vietnam

ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION

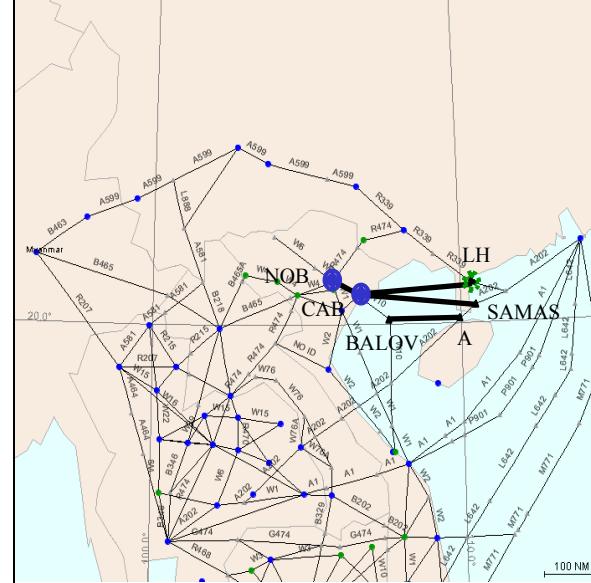
Three Options:

- 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: Because of small traffic demand and cost/benefit considerations, this route is impossible and can not be implemented at present.

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
SEA 3	BUT ENREP	N1240.0E10100.0 N0452.4 E10414.7	BANGKOK SINGAPORE	
SEA 5	STUNG TRENG DANANG	N1331.5 E10600.9 N1603.2 E10811.9	PNOMPENH HOCHIMINH	
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

ATS ROUTE NAME: SEA3

REQUESTED BY: IATA

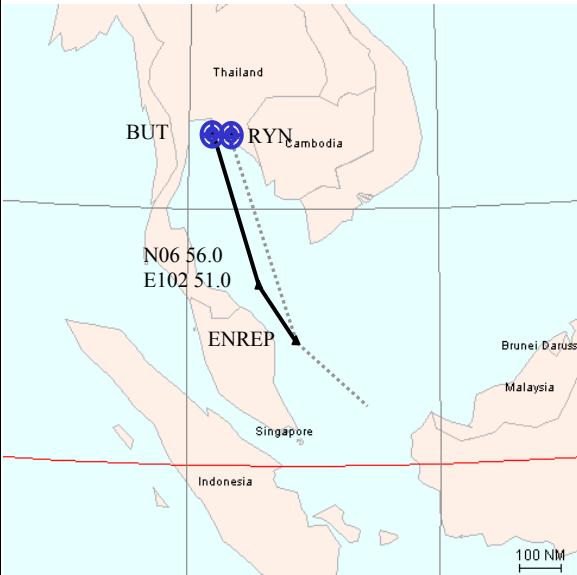
ENTRY/EXIT POINT
BUT / XXXXX / ENREP

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: Supports traffic between Thailand and Australia/Eastern Indonesia. Also presented by Thailand at the third meeting of the SEA-RR/TF. This route is being designated as M904 by Thailand by the end of 2011.

Potential City Pairs: Bangkok- Australia

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

ENTRY/EXIT POINT

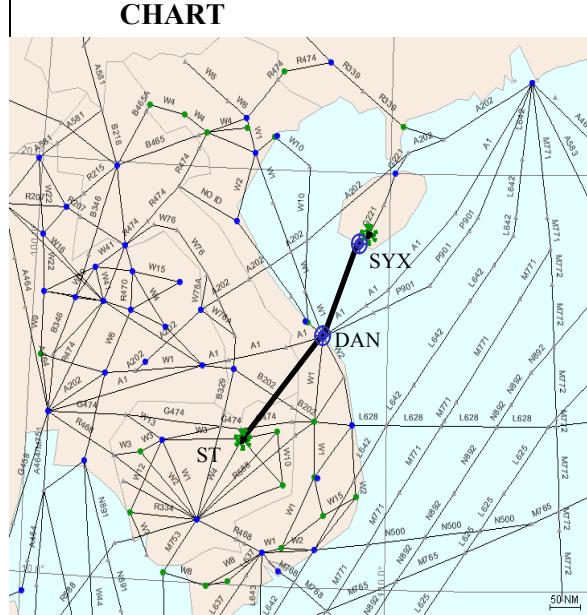
STUNG TRENG (ST) – DANANG (DAN)

ROUTE DESCRIPTION

Direct STUNG TRENG (ST) to DANANG (DAN)

**FLIGHT LEVEL BAND
29000 – 46000**

PRIORITY: HIGH/MED/LOW



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: Supports traffic Southeast Asia – Hainan Island. Link with SEA2.

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

ATS ROUTE NAME: SCS 9

REQUESTED BY: IATA

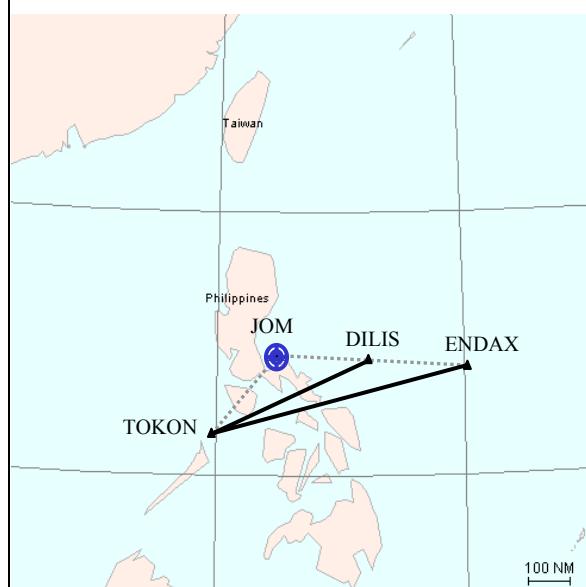
ENTRY/EXIT POINT
 1. ENDAX (FIR Boundary between Oakland and Manila FIRs) or DILIS on G467
 2. TOKON on M767 (Manila FIR)

ROUTE DESCRIPTION
 ENDAX .. TOKON or
 DILIS .. TOKON

FLIGHT LEVEL BAND
 28000 – 46000 feet

PRIORITY: HIGH/MED/LOW (Immediate request with DILIS – TOKON)

CHART



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

Chapter 5: Part B: Future Route Requirements – Users

(The routes in this section are intended to be used as a basis for developing the BANP amendment proposals, and to provide information on route planning developments which would form the basis for future proposals. These routes 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 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
SEA 2	DANANG SYX	N1603.2 E10811.9 N1818.4 E10910.4	HOCHIMINH SANYA AOR	
SEA 6	PAKSE ASSAD	N1511.8 E10544.5 N1820.5 E10740.9	VIENTIANE ASSAD	
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 E10910.4 N1650.0 E10923.7 N1616.8 EE108 42.5	SANYA AOR HOCHIMINH HOCHIMINH	NANSHAN TO BUNTA AND TO SAMBO
SEA 12	ROT HUGUANG	N1607.0 E10346.7 N2107.9 E11020.2	HOCHIMINH GUANGZHOU	
SCS1	DAMEL CH	N1358.7 E11136.4 N2213.2 E11401.8	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 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 ENVAR DULOP KAPLI	N1814.2E11432.6 N2220.0 E11730.0 N2159.5 E11730.0 N1814.2E11432.6 N2110.0 E11730.0	HONGKONG HONGKONG HONGKONG HONGKONG HONGKONG	EITHER DULOP/ KAPLI G86, OR DULOP/ ELATO& ENVAR
PHI 1	MIA CAB MEVIN	N1430.5 E12101.3 N1528.9 E12101.5 N2100.0 E12233.0	MANILA MANILA MANILA	
PHI 3	TKK MUMOT	N2308.1 E12012.4 N1901.7 E11747.4	TAIPEI MANILA	
PHI 4	HCN AKOTA	N2155.7 E12050.6 N1627.7 E11712.4	TAIPEI MANILA	
TPE 1	APU MIKES	N2510.6 E12131.3 N2935.2 E12544.9	TAIPEI 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	
CHA 12	UNWW WXI	N3621.8 E11455.0	SHANGHAI	

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 SIKOU	N2301.2 E11311.4 N2213.3 E11328.0 N2159.1 E11333.2 N2050.6 E11130.0	GUANGZHOU GUANGZHOU HONGKONG HONGKONG	
RUS 1	SESUR XXXXX KAE	N4217.5 E13041.5 N3838.0 E12924.7 N3742.0 E12845.2	VLADIVOSTOK INCHOEN	
RUS 2	TEKUK XXXXX KAE	N4241.0 E13527.0 N3838.0 E12924.7 N3742.0 E12845.2	VLADIVOSTOK INCHOEN	
RUS 3	BG TELOD XXXXX KAE	N 4353.0 E13315.0 N4219.6 E13211.8 N3838.0 E12924.7 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
- TPE - Taipei
- 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 an earlier route catalogue. They are renamed following consolidation of China routes and ARNR TF 3 meeting.

ATS ROUTE NAME: IND1

REQUESTED BY: IATA

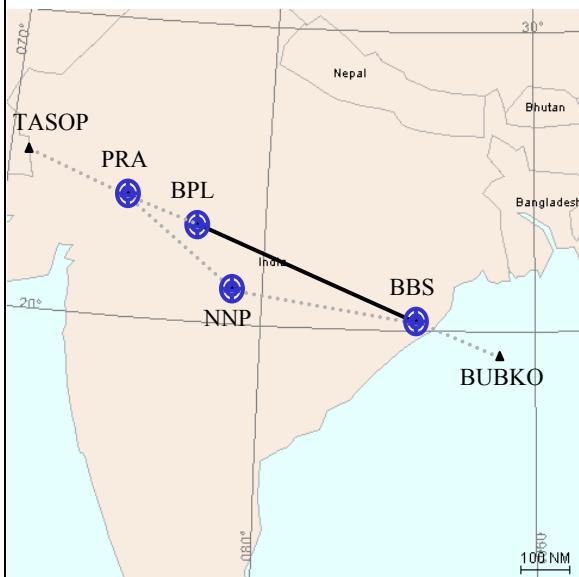
**ENTRY/EXIT POINT
BBS / BPL**

**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: Provides extension from N895 linking traffic from BKK and Northern Sub-continent and ME. Provides a 25nm reduction in track mileage

Potential City Pairs: Europe/South East Asia

ATS ROUTE NAME: IND 7 (N877 Extension)

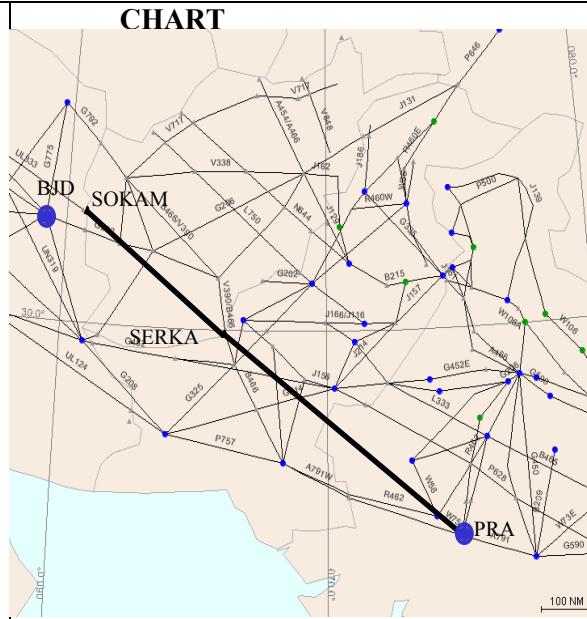
REQUESTED BY: IATA

**ENTRY/EXIT POINT
PRA - KAMAR**

**ROUTE DESCRIPTION
Direct Route Track from PRATAGARH
PRA – SERKA– SOKAM
FLIGHT LEVEL BAND**

28000-46000

**PRIORITY: HIGH/MED/LOW
HIGH**



Action Required	IATA.
	ICAO

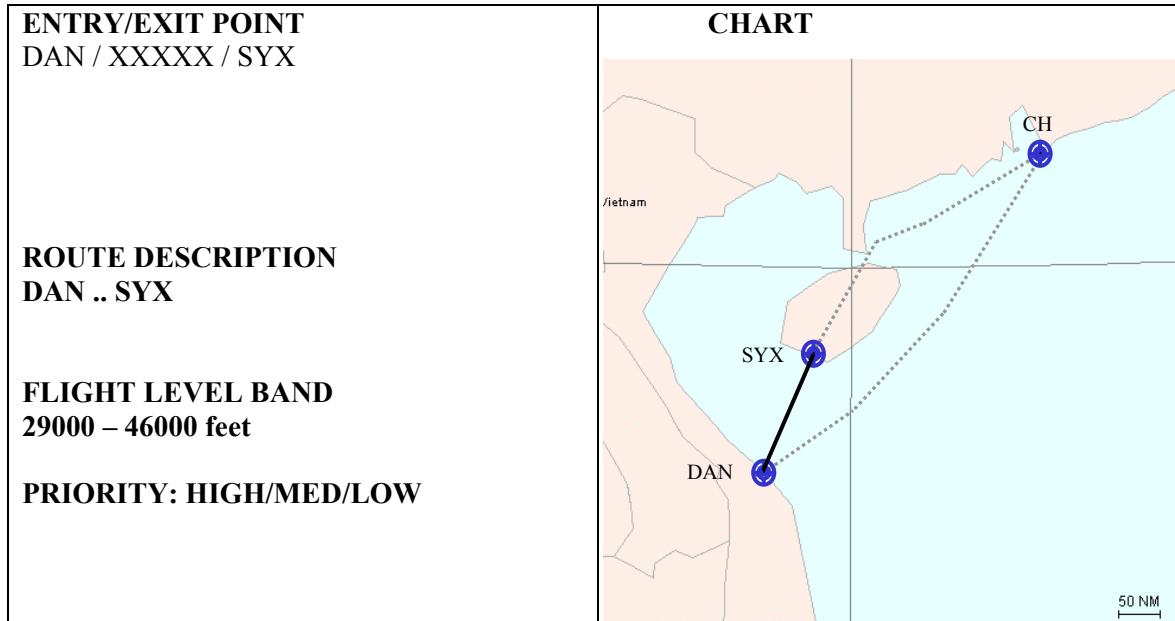
Saving	Per flight	Annual
Mileage / Time	294 nm/37 min.	
Fuel	4777kg	1,743 tonnes
CO ₂	147,000kg	5,365 tonnes
No _x		

Remarks: This proposal predates the extension of UL333 through Kabul FIR and has been under consideration for a number of years. The extension of UL333 is under utilised against other Kabul routes largely due the 45nm “penalty” in track mileage the current route structure requires. The routes primary benefit at this stage will be westbound and during BOBCAT traffic flow. As such a restricted route that accommodates this would be acceptable in the short term.

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

ATS ROUTE NAME: SEA2

REQUESTED BY: IATA



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: Supports traffic Southeast Asia – Haian Island and possible alternative routing for the Pearl River Delta area.

Potential City Pairs: South East Asia - Hainan

ATS ROUTE NAME: SEA 6

REQUESTED BY: IATA

ENTRY/EXIT POINT PAKSE - ASSAD

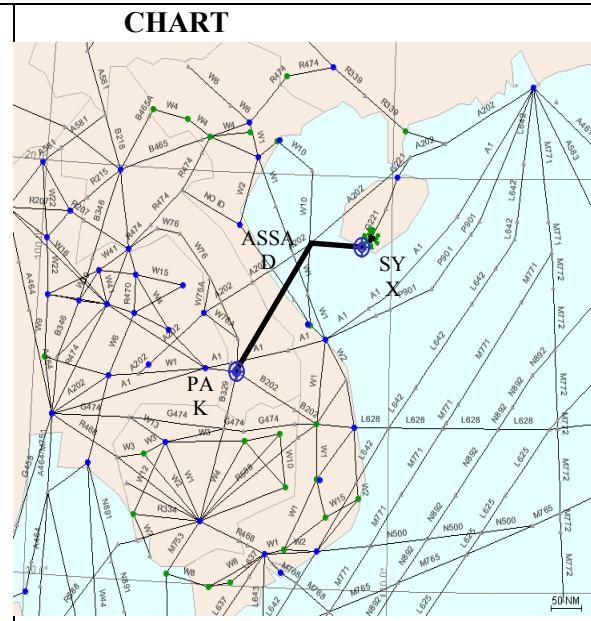
ROUTE DESCRIPTION

Direct PAKSE to ASSAD FLIGHT LEVEL BAND

29000 – 46000 feet

PRIORITY: HIGH/MED/LOW

MED



Action Required	IATA ICAO
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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: Supports traffic Southeast Asia – the Perl River Delta area/South China.

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

ATS ROUTE NAME: SEA 10

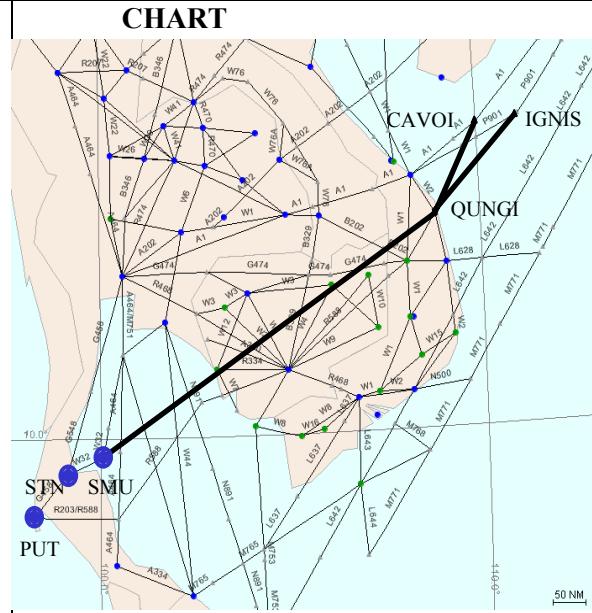
REQUESTED BY: IATA

ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
CAVOI and IGNIS .. Quangngai/QUNGI ..
SAMUI (SMU)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: Supports traffic from Northeast Asia to Phuket and beyond. Will require linkages to/from QUNGI as original proposed points CAVOI and IGNIS no longer exist.

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

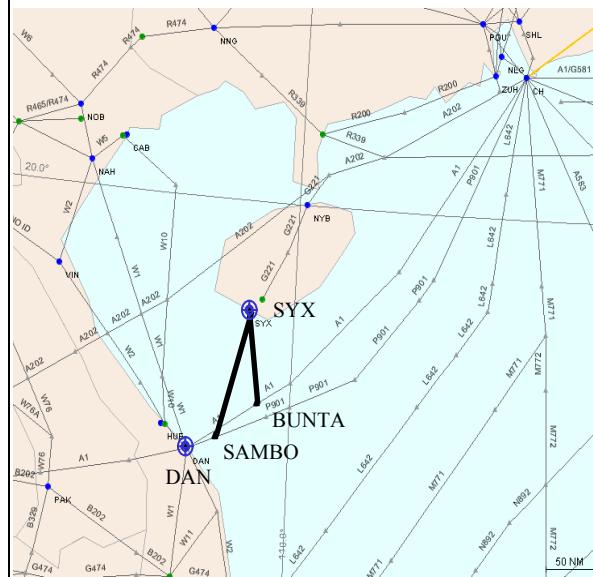
Danang (DAN) .. BUNTA .. Nanshan (SYX)

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: IATA will review proposal and advise.

Potential City Pairs: South East Asia -Hainan

ATS ROUTE NAME: SEA 12

REQUESTED BY: IATA

**ENTRY/EXIT POINT
ROT - HUGUANG**

ROUTE DESCRIPTION

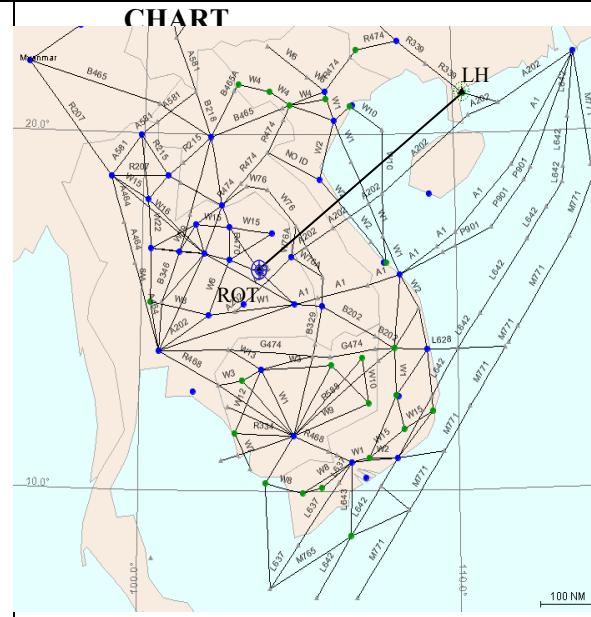
Direct ROT - HUGUANG

FLIGHT LEVEL BAND

29000 - 46000

PRIORITY: HIGH/MED/LOW

HIGH



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: Provide parallel to the A202 route similar to proposal for uni-directional routes proposed through Southeast Asia Route Review Task Force.

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

ATS ROUTE NAME: SCS1

REQUESTED BY: IATA

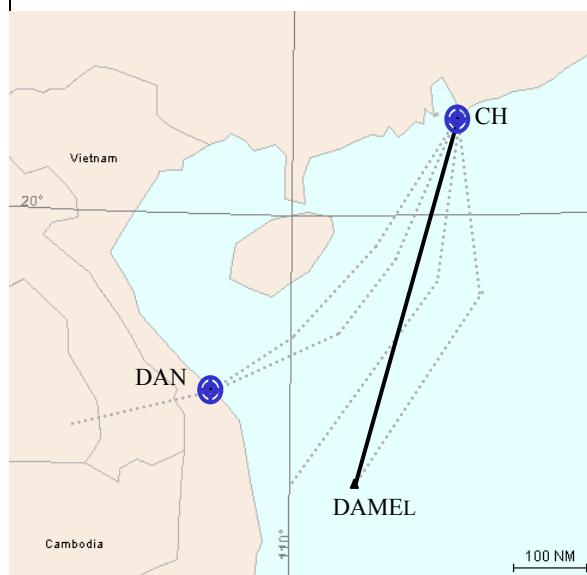
ENTRY/EXIT POINT
DAMEL / CH

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: Proposed route shortening for M770 into the Pearl River Delta area. Similar other proposals have been made through Southeast Asia Route Review Task Force.

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS2

REQUESTED BY: IATA

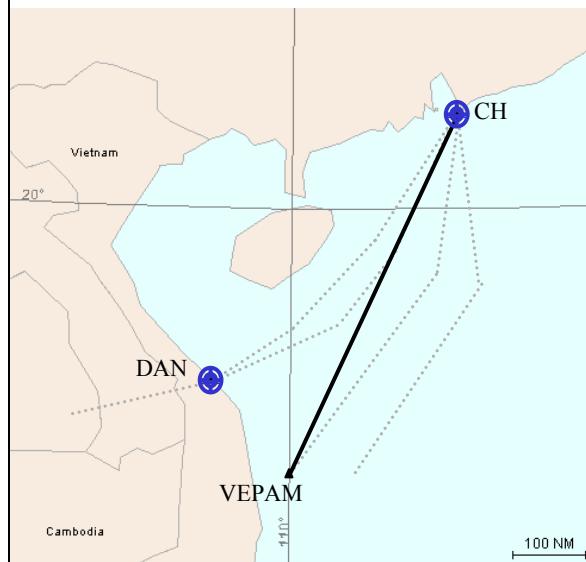
ENTRY/EXIT POINT
CH / VEPAM

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

CO₂

850kg

310,250kg

No_x

Remarks: Proposed route shortening for L642 out of the Pearl River Delta area. Similar other proposals have been made through Southeast Asia Route Review Task Force

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS3

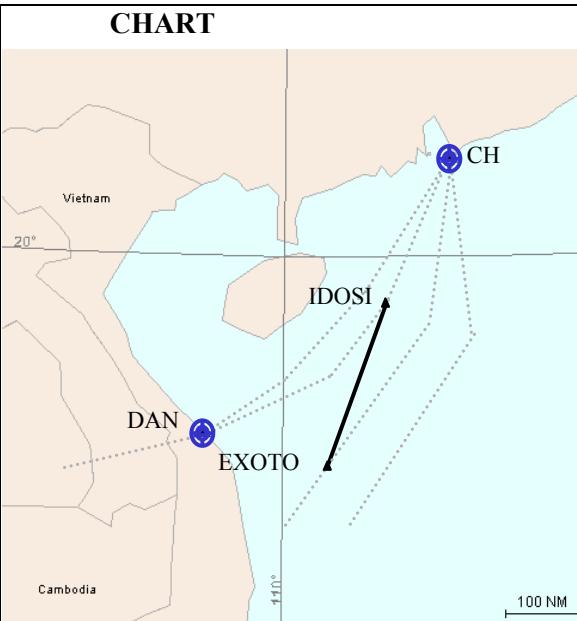
REQUESTED BY: IATA

**ENTRY/EXIT POINT
IDOSI / EXOTO**

**ROUTE DESCRIPTION
IDOSI .. EXOTO**

**FLIGHT LEVEL BAND
28000 – 46000 feet**

PRIORITY: HIGH/MED/LOW



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: May not be necessary depending on outcomes of Southeast Asia Route Review Task Force.

Potential City Pairs: Singapore-Pearl River Delta Airports

ATS ROUTE NAME: SCS4

REQUESTED BY: IATA

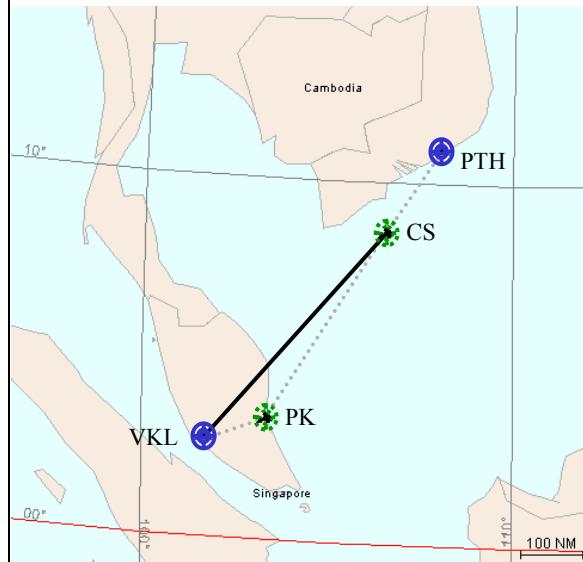
ENTRY/EXIT POINT
CS / VKL

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: Supports traffic to and from Kula Lupur from and to the northeast.

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: Need to be considered in conjunction with developments with L642/M771 and possibly South China Sea ADS-B project.

Potential City Pairs: Jakarta- Pearl River Delta Airports

ATS ROUTE NAME: SCS7

REQUESTED BY: IATA

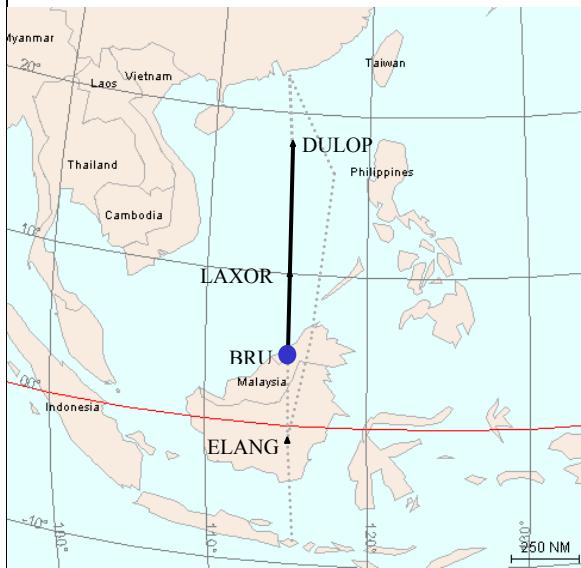
ENTRY/EXIT POINT
DULOP / M772 / LAXOR / XXXXX / BRU

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: Supports traffic from Perth, eastern Malaysia and eastern Indonesia to the Perl River Delta area, China. Segment DULOP and LAXOR exists as M772.

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

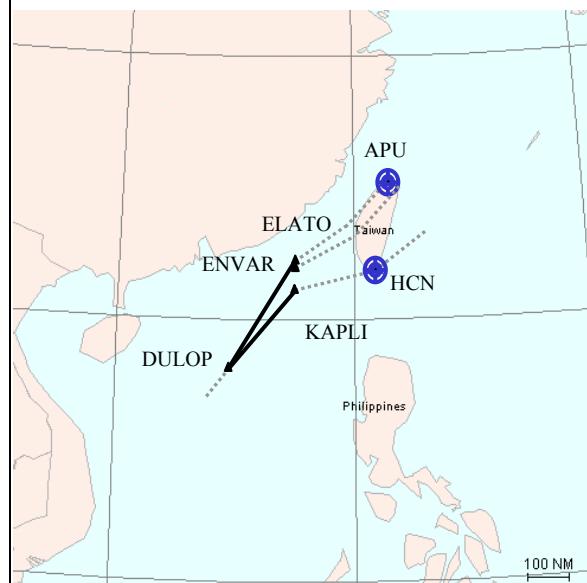
ROUTE DESCRIPTION

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: Supports traffic Northeast Asia/Southeast Asia. Potentially problematic as will impact South China Sea's traffic arrangements. IATA to review.

Potential City Pairs: SEAsia-North Asia Airports

ATS ROUTE NAME: PHI 1

REQUESTED BY: IATA

ENTRY/EXIT POINT

ROUTE DESCRIPTION

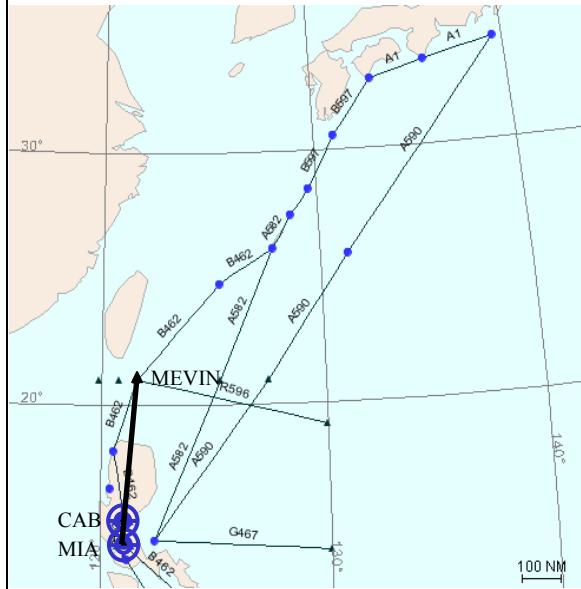
Manila (MIA) .. MEVIN or
Cabanatuan (CAB) .. MEVIN

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

CO₂

550kg

200,750kg

No_x

Remarks: Supports traffic between Manila and Japan/North America.

Potential City Pairs: Philippines-Japan/North America

ATS ROUTE NAME: PHI 3

REQUESTED BY: IATA

**ENTRY/EXIT POINT
XXXXX**

**ROUTE DESCRIPTION
Shikang (TNN) ... XXXXX ... MUMOT**

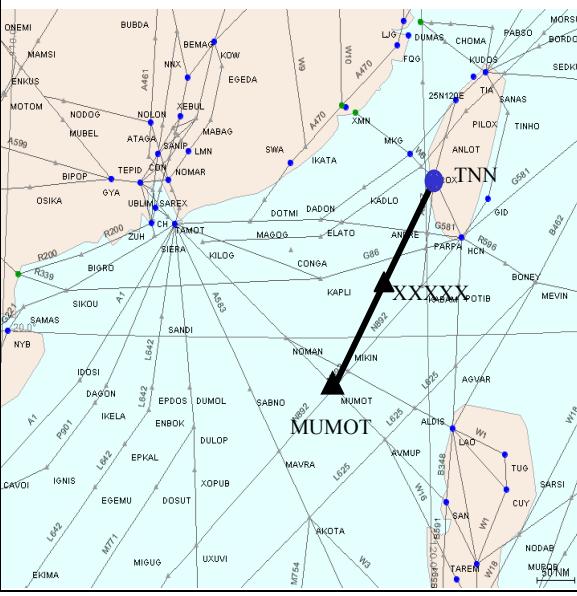
FLIGHT LEVEL BAND

29000 - 46000

PRIORITY: HIGH/MED/LOW

HIGH

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: Supports traffic from TNN to Southeast Asia

Potential City Pairs:

ATS ROUTE NAME: PHI 4

REQUESTED BY: IATA

**ENTRY/EXIT POINT
XXXXX**

**ROUTE DESCRIPTION
AKOTA... XXXXX ... Hengchun (HCN)**

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: Supports traffic from Southeast Asia to HCN

Potential City Pairs:

ATS ROUTE NAME: TPE 1

REQUESTED BY: IATA

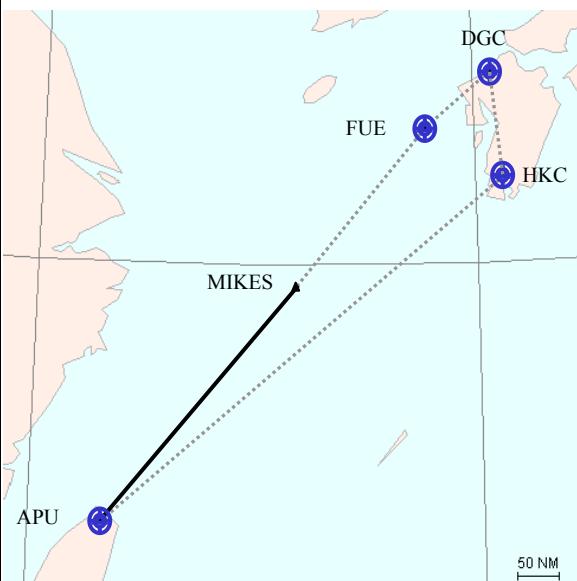
ENTRY/EXIT POINT
APU / XXXXX / MIKES

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: Supports traffic between APU and Japan.

Potential City Pairs: SEA/HKG/TPE-Fukuoka

ATS ROUTE NAME: THA1

REQUESTED BY: IATA

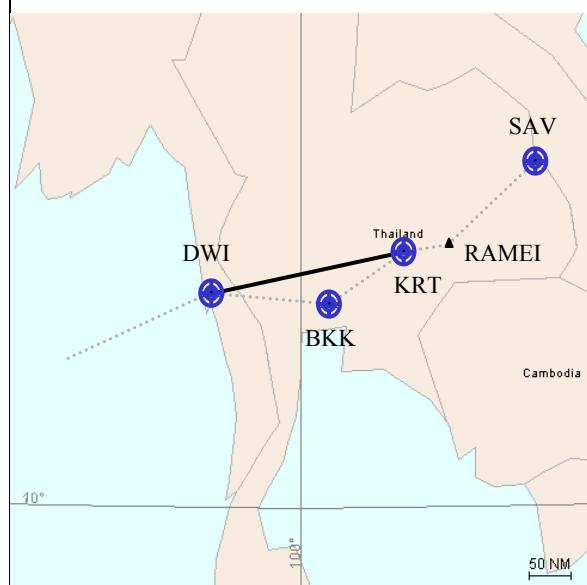
ENTRY/EXIT POINT
KRT / DWI

ROUTE DESCRIPTION
KRT .. DWI

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Remarks

Potential City Pairs:

ATS ROUTE NAME: ID01

REQUESTED BY: IATA

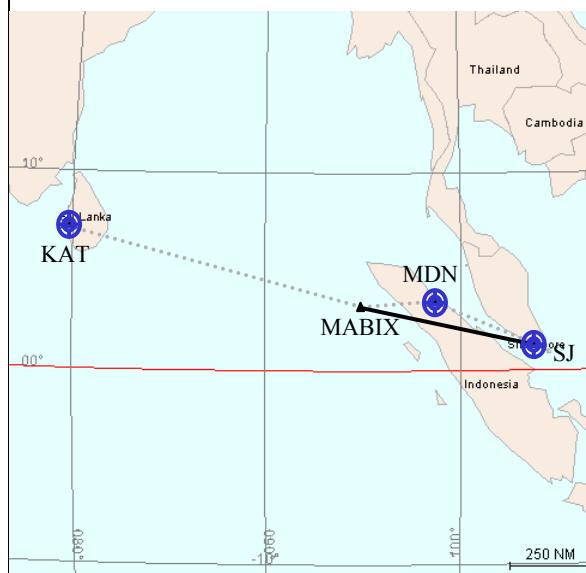
ENTRY/EXIT POINT
SJ / MABIX

ROUTE DESCRIPTION
SJ .. MABIX

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Remarks: This route supports traffic from SIN to CBI, TVM and an alternative to the Middle East. It provides a 10 nm reduction in track mileage (16nm if traffic route via MDN).

Potential City Pairs:

ATS ROUTE NAME: COL 1

REQUESTED BY: IATA

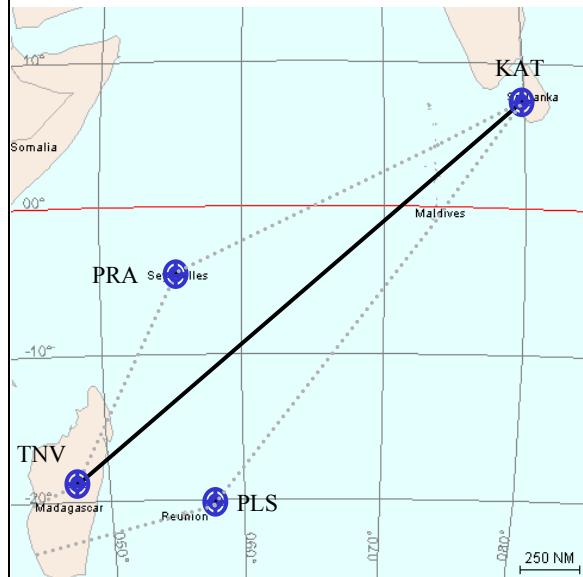
**ENTRY/EXIT POINT
KAT / TNV**

**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: This proposal supports traffic between THA/HKG/ South China and Southern Africa. A proposal already exists to establish a User Preferred Route (UPR) geographic area which will support the same traffic flow however this proposal needs to be retained in the short term.

Potential City Pairs:

ATS ROUTE NAME: KAB1

REQUESTED BY: IATA

**ENTRY/EXIT POINT
HANGU / XXXXX / GN**

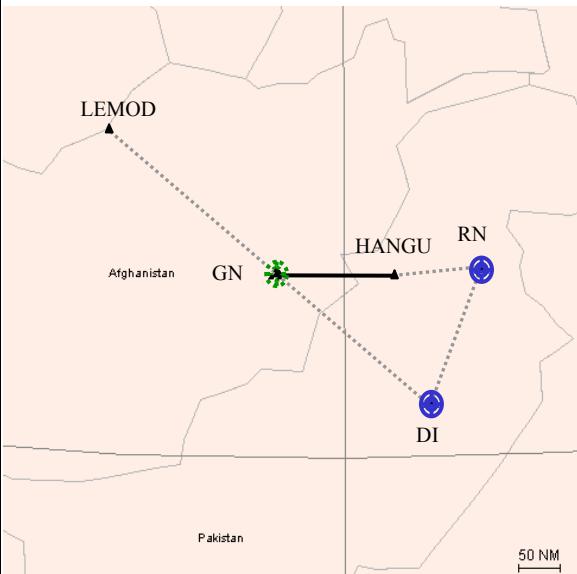
**ROUTE DESCRIPTION
HANGU -GN**

**FLIGHT LEVEL BAND
28000 – 46000 feet**

PRIORITY: HIGH/MED/LOW

HIGH

CHART



Action Required	IATA
	ICAO

Remarks: IATA intends to review this proposal as to whether it is still applicable.

Potential City Pairs:

ATS ROUTE NAME: WPC 1

Requested by : IATA

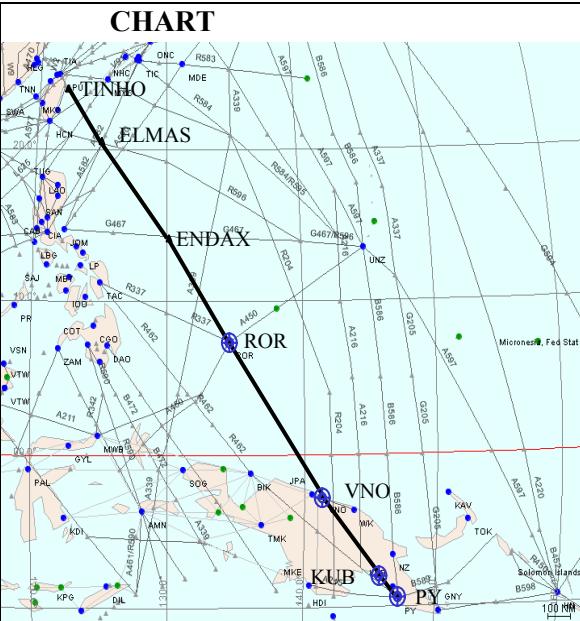
**ENTRY/EXIT POINT
PY-TINHO**

ROUTE DESCRIPTION

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

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW
HIGH



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

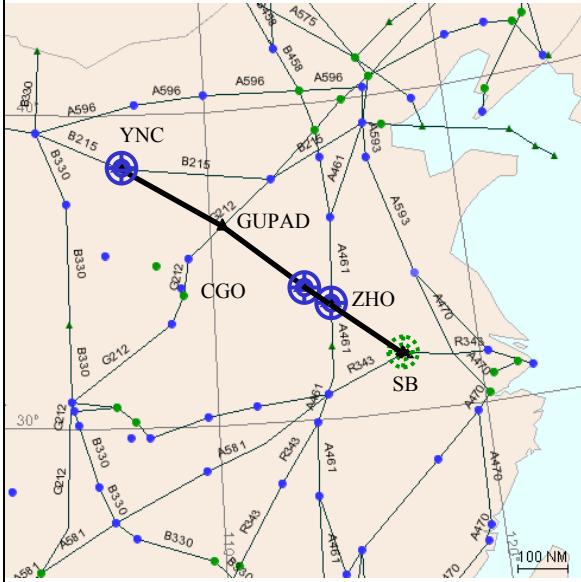
ROUTE DESCRIPTION

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

CO₂

No_x

Remarks

Potential City Pairs: Europe-Shanghai

ATS ROUTE NAME: CHA2 (Renumbered from CHA 7)

REQUESTED BY: IATA

ENTRY/EXIT POINT

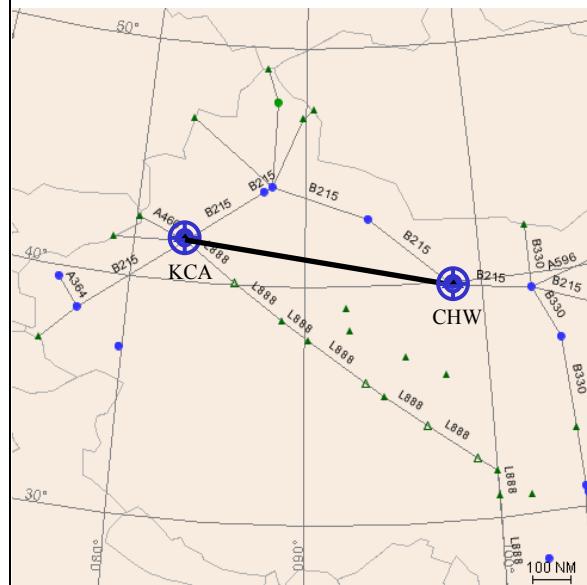
ROUTE DESCRIPTION

Kuqa (KCA) .. Jiayuguan (CHW)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	93nm/ 12min	
Fuel		
CO ₂		
No _x		

Remarks: There are exiting routes between KCA and CHW. Direct route is impossible.

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

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

REQUESTED BY: IATA

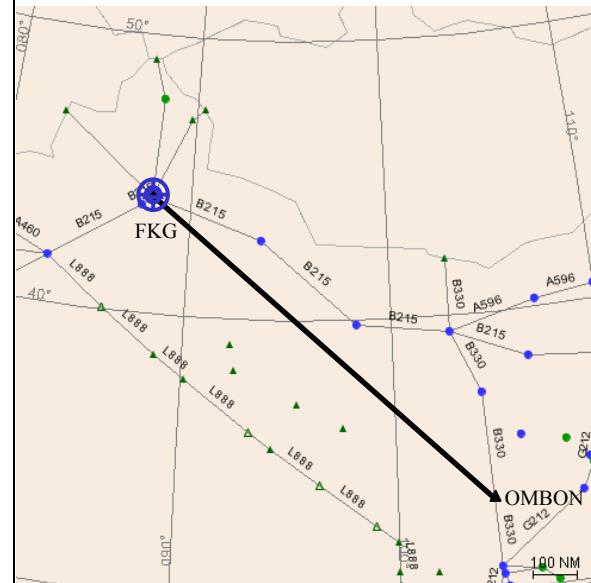
ENTRY/EXIT POINT

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: This direct route is impossible and can not be implemented at present.

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

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

REQUESTED BY: IATA

ENTRY/EXIT POINT

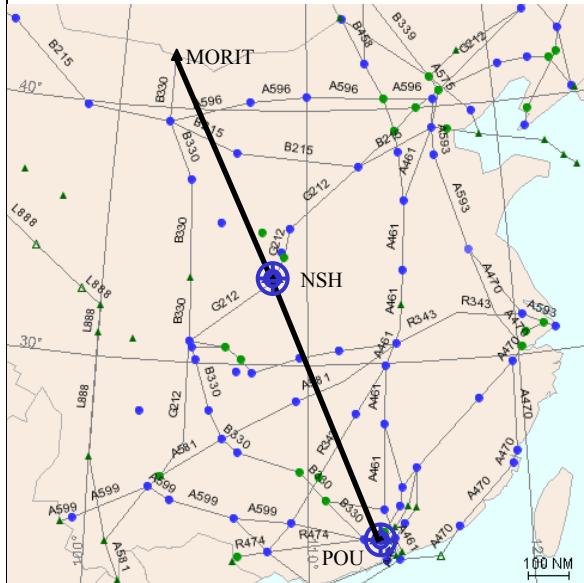
ROUTE DESCRIPTION

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: This direct route is impossible and can not be implemented.

Potential City Pairs: Europe Russia-Pearl River Delta Airports

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

REQUESTED BY: IATA

ENTRY/EXIT POINT

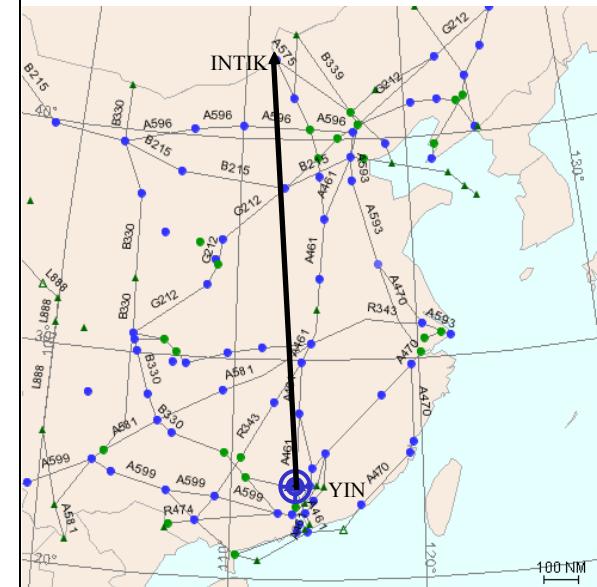
ROUTE DESCRIPTION

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: This direct route is impossible and can not be implemented.

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

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

REQUESTED BY: IATA

ENTRY/EXIT POINT

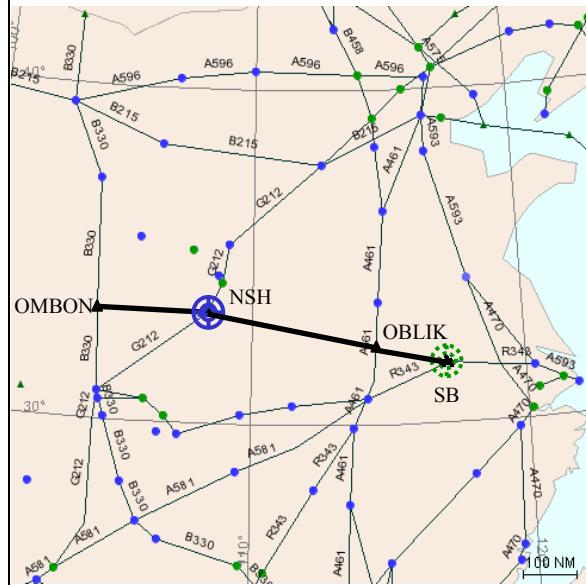
ROUTE DESCRIPTION

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

CO₂

No_x

Remarks: This route is impossible and can not be implemented at present.

Potential City Pairs: Europe-Shanghai

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

REQUESTED BY:IATA

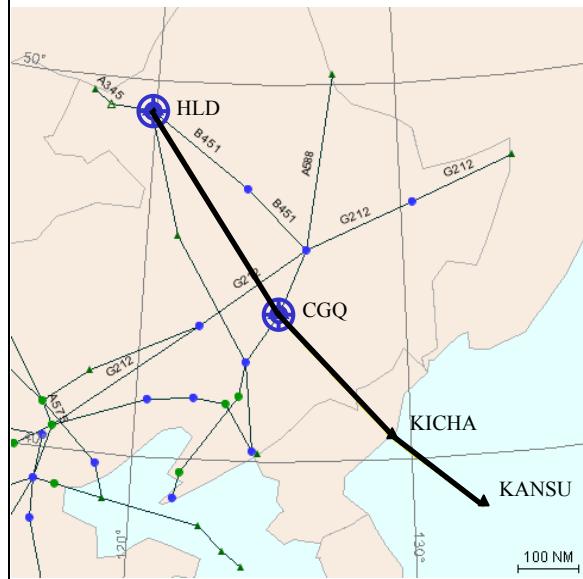
ENTRY/EXIT POINT
KANSU/XXXXX

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

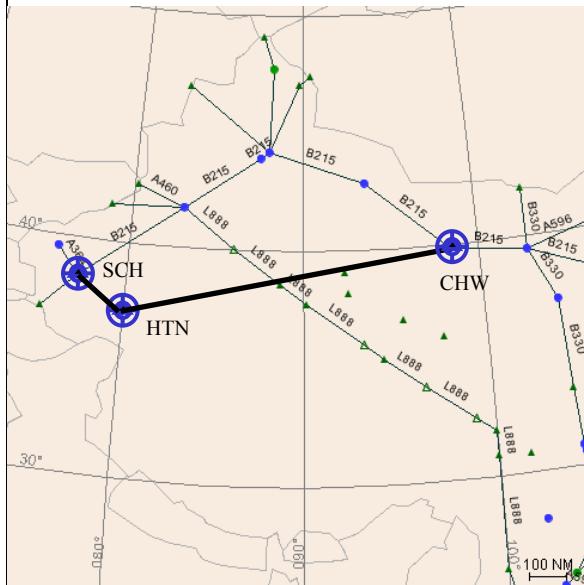
ROUTE DESCRIPTION

Shache (SCH) .. Hotan (HTN) .. Jiayuguan (CHW)

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



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: Direct route between HTN and CHW is impossible and can not be implemented at present.

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

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

REQUESTED BY: IATA

ENTRY/EXIT POINT

ROUTE DESCRIPTION

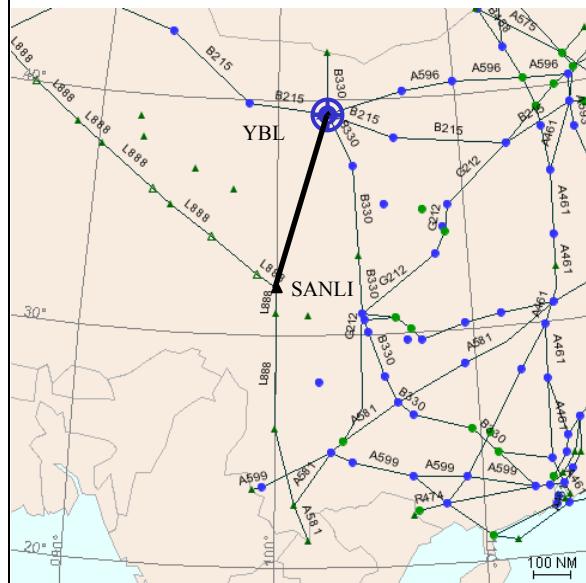
Yabrai (YBL) .. SANLI

FLIGHT LEVEL BAND

8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



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: This direct route is impossible and can not be implemented at present.

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

ARGUK/BEMAG

ROUTE DESCRIPTION

ARGUK/DALIAN/HEFEI/BEMAG

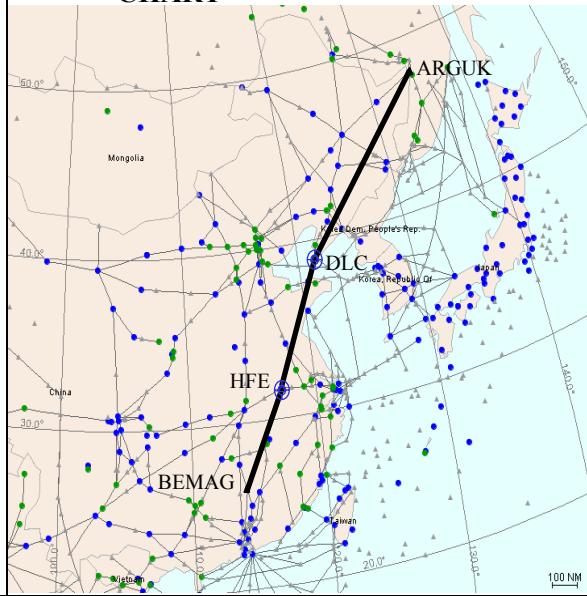
FLIGHT LEVEL BAND

8400-15000 metres

PRIORITY: HIGH/MED/LOW

HIGH

CHART



Action Required

IATA

ICAO

Saving

Per flight

Annual

Mileage / Time

Fuel

CO₂

No_x

Remarks: There are exiting routes between ARGUK-DLC-HFE-BEMAG. Direct route between ARGUK-DLC-HFE-BEMAG is impossible.

Potential City Pairs: North America- Pearl River Delta

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

REQUESTED BY:IATA

ENTRY/EXIT POINT

DALIAN/(DLC) to XJT/B221

ROUTE DESCRIPTION

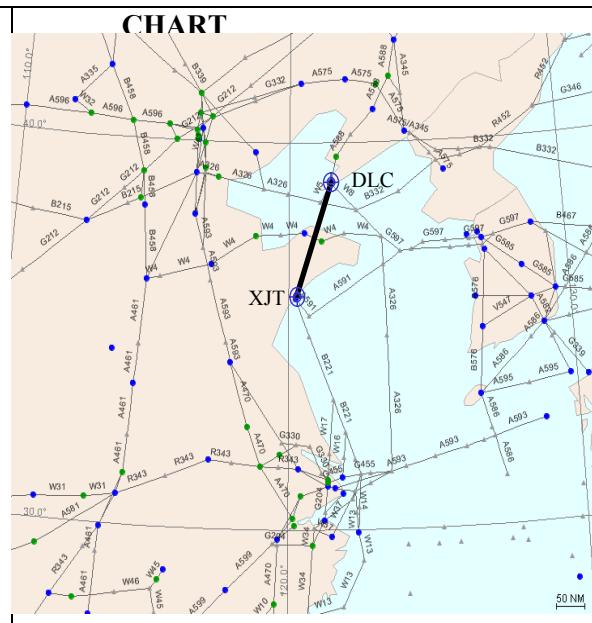
DALIAN/ XJT /B221

FLIGHT LEVEL BAND

8400-15000 metres

PRIORITY: HIGH/MED/LOW

HIGH



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: There are existing routes between DLC and XJT. Direct route is impossible.

Potential City Pairs: North America-Shanghai

ATS ROUTE NAME: CHA 12

Requested by : IATA

ENTRY/EXIT POINT

UNWW to WXI

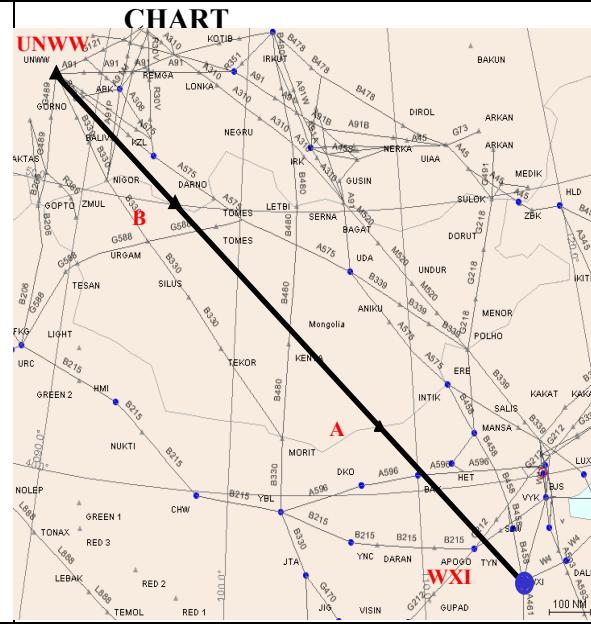
ROUTE DESCRIPTION

Weixian (WXI) .. A (ZBPE/ZMUB) .. B (ZMUB/UNKY) .. Novokuznetsk (UNWW)
Uni-directional

FLIGHT LEVEL BAND

28000 – 46000 feet

PRIORITY: HIGH/MED/LOW



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time	166nm/20min	
Fuel	2620kg	956,000kg
CO ₂	8070kg	2,944 tonnes
No _x		

Remarks: This would allow following city pair flights to avoid the congested airspace around the Beijing Capital Airport.

Potential City Pairs: Pearl River Delta – Europe and Shanghai – Europe.

ATS ROUTE NAME: IATA 2

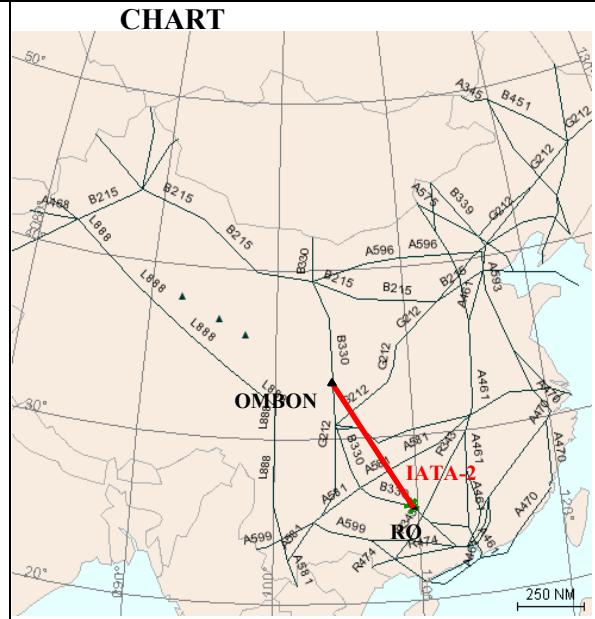
REQUESTED BY: IATA

ENTRY/EXIT POINT

ROUTE DESCRIPTION

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: There are exiting routes between OMBON and RO. Direct route is impossible at present.

Potential City Pairs: Europe –Pearl River Delta Airports

ATS ROUTE NAME: IATA 3

REQUESTED BY: IATA

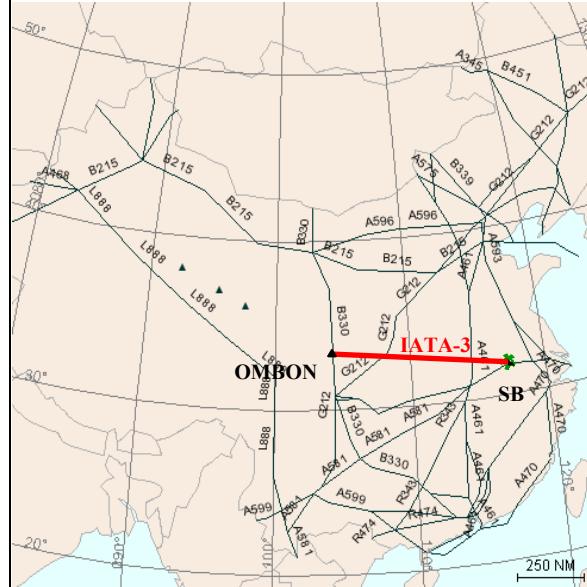
ENTRY/EXIT POINT

ROUTE DESCRIPTION

FLIGHT LEVEL BAND
8400 – 15000 meters

PRIORITY: HIGH/MED/LOW

CHART



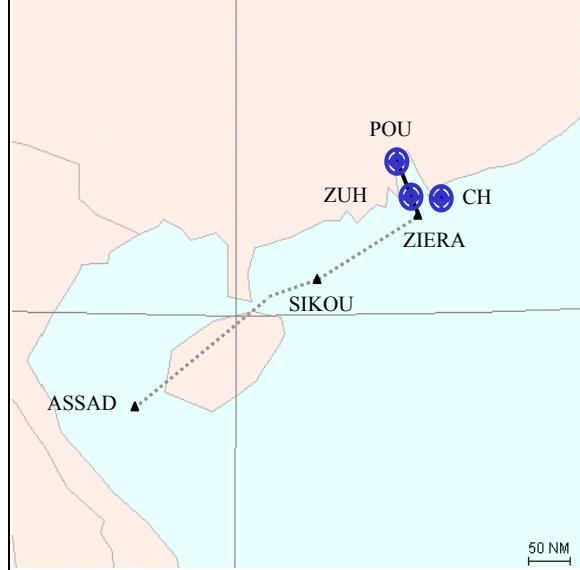
Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks: There are exiting routes between OMBON and SB; direct route is impossible at present.

Potential City Pairs: Europe-Shanghai

ATS ROUTE NAME: PRD 1

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

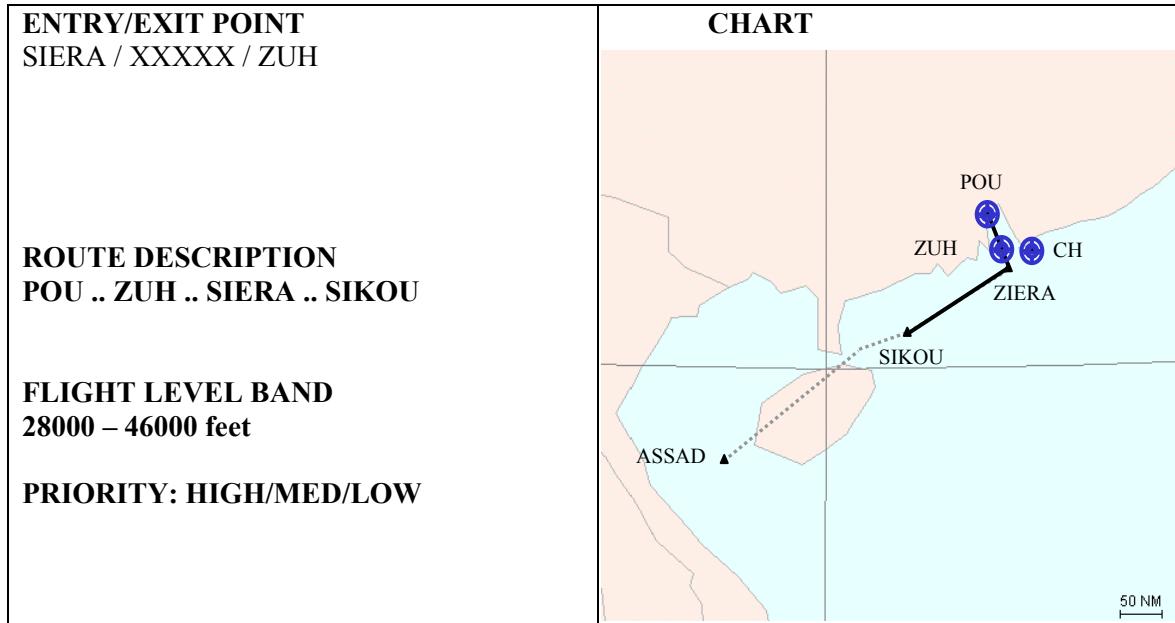
Action Required	IATA
	ICAO

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



Action Required	IATA	ICAO
Saving	Per flight	Annual

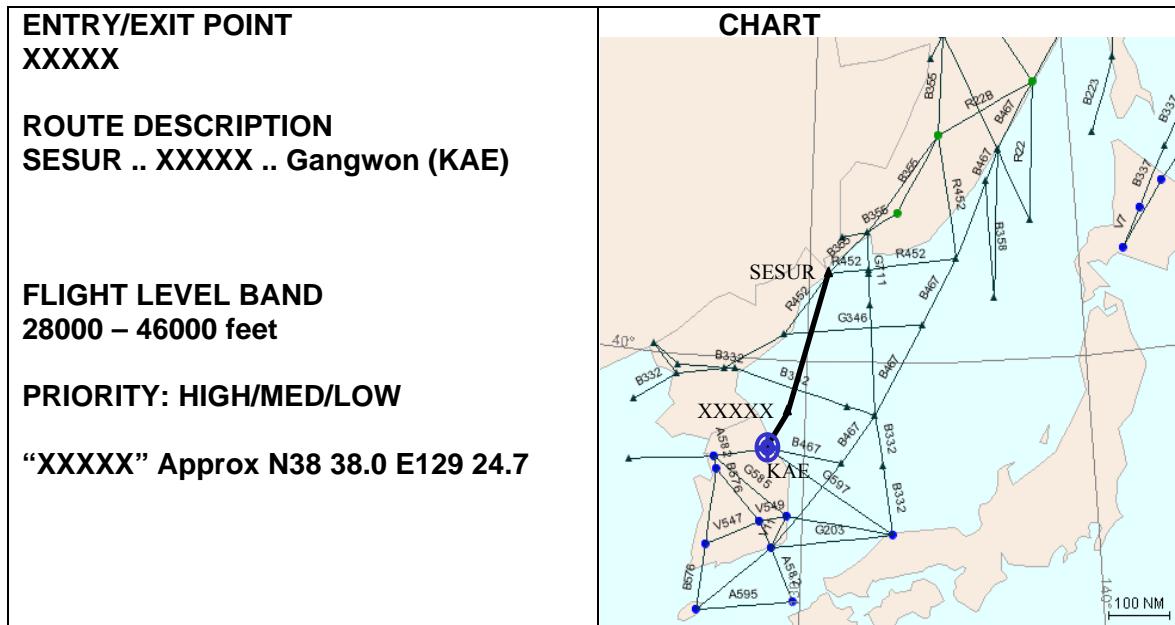
Saving	Per flight	Annual
Mileage / Time	80nm/10 mins	
Fuel	1,300kg	474,000kg
CO ₂	4,000kg	1,460 tonnes
No _x		

Remarks

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

ATS ROUTE NAME: RUS 1

Requested by : IATA



Action Required	IATA
	ICAO

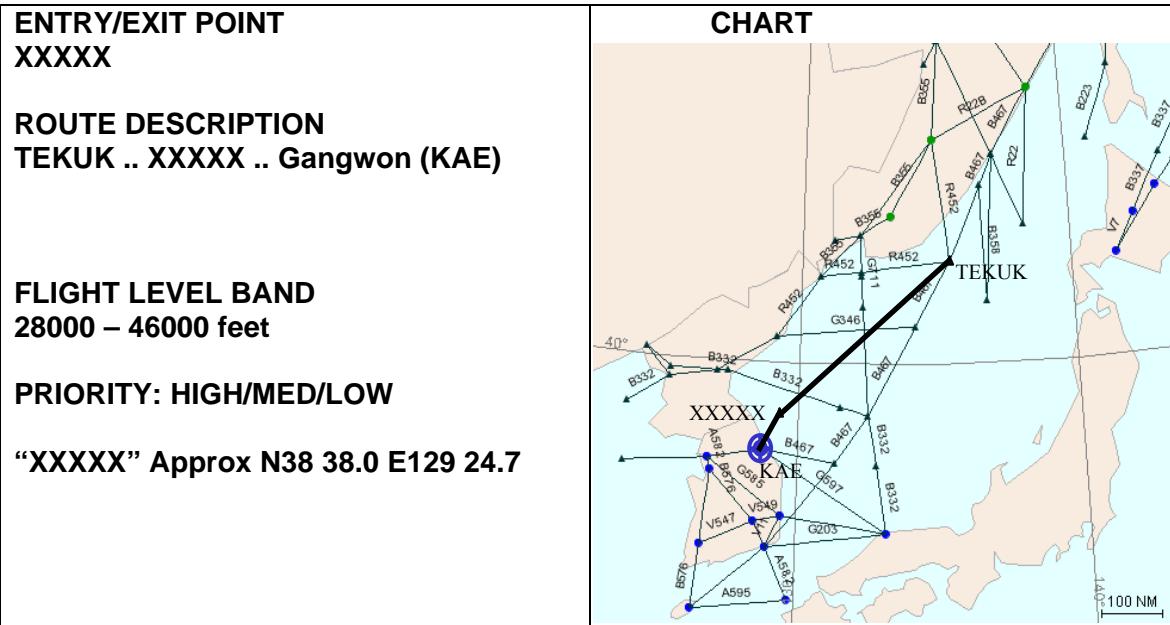
Saving	Per flight	Annual
Mileage / Time	121nm/15min	
Fuel	1966kg	717,000kg
CO ₂	6050kg	2,208 tonnes
No _x		

Remarks

Potential City Pairs: North America- Inchoen

ATS ROUTE NAME: RUS 2

Requested by : IATA



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

XXXXXX

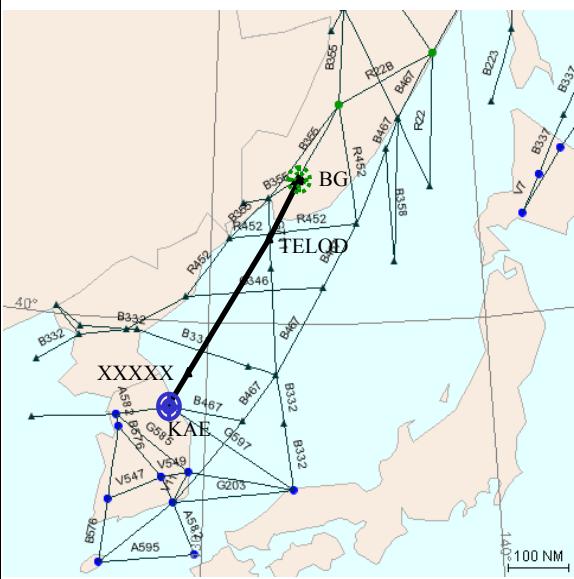
ROUTE DESCRIPTION
Muraveyka (BG) .. TELOD .. XXXXX ..
Gangwon (KAE)

**FLIGHT LEVEL BAND
28000 – 46000 feet**

PRIORITY: HIGH/MED/LOW

“XXXXX” Approx N38 38.0 E129 24.7

CHART



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

ATS ROUTE NAME:

Requested by :

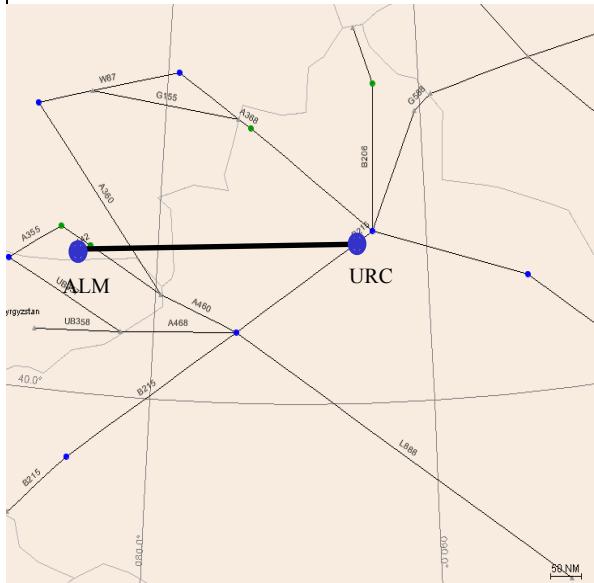
ENTRY/EXIT POINT
XXXXX

ROUTE DESCRIPTION
Urumqi (URC) .. Almaty (ALM)

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.
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Benefit	
Cost	
Fuel Saving	
Emission	CO ₂
	NO _x

Remarks: The route between URUMQI and ALMA ATA (Almaty) 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: RUS 1, 2, 3

Requested by : IATA

ENTRY/EXIT POINT
XXXXX (N38 38.0 E129 24.7)

ROUTE DESCRIPTION

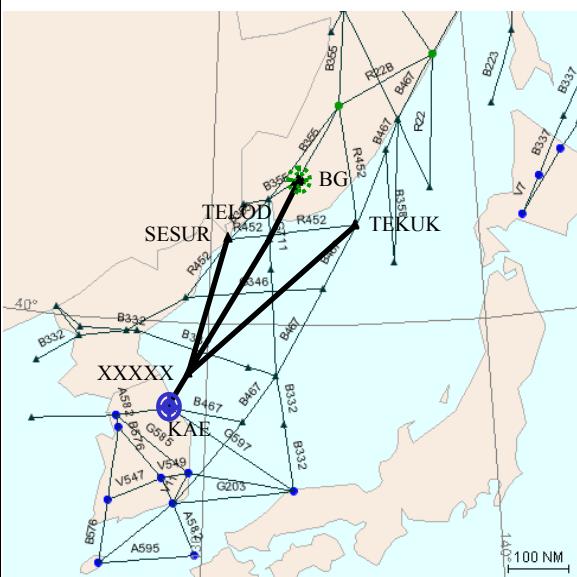
1. SESUR .. XXXXX .. Gangwon (KAE)
2. TEKUK .. XXXXX .. Gangwon (KAE)
3. Muraveyka (BG) .. TELOD .. XXXXX .. Gangwon (KAE)

FLIGHT LEVEL BAND
28000 – 46000 feet

PRIORITY: HIGH/MED/LOW

“XXXXX” Approx N38 38.0 E129 24.7

CHART



Action Required	IATA
	ICAO

Saving	Per flight	Annual
Mileage / Time		
Fuel		
CO ₂		
No _x		

Remarks

Potential City Pairs: North America- Inchoen

CONSOLIDATED CHART OF USERS REQUESTED ROUTES IN CHINA

