



International Civil Aviation Organization

**FIFTEENTH MEETING OF THE
ASIA/PACIFIC AIR NAVIGATION PLANNING AND
IMPLEMENTATION REGIONAL GROUP (APANPIRG/15)
Bangkok, Thailand, 23 to 27 August 2004**

Agenda Item 4: Deficiencies in the Air Navigation Fields

**AIRLINE REVIEW OF ATS ROUTES IN THE AIR NAVIGATION
PLAN**

(Presented by IATA)

SUMMARY

This paper provides airline review and feedback to the routes currently in the Asia Pacific Air Navigation Plan.

1. INTRODUCTION

1.1 The IATA Asia Pacific Route Review Working Group is tasked with reviewing airline route requirements for Asia Pacific. This group has formed recommendations for the implementation, amendments, deletions or additions to the routes found in the Air Navigation Plan. These recommendations were recently approved by the IATA Asia Pacific Regional Coordination Group, comprising 21 airlines that operate in Asia Pacific. The final recommendations are as follows.

2. DISCUSSION

2.1 The airline recommendations to the existing Asia Pacific Air Navigation Plan are found in Attachment A.

2.2 Attachment B contains routes recommended for inclusion into the Air Navigation Plan. For each route IATA has developed a systematic study into a route catalogue. A typical page can be found at Attachment C. IATA will propose these routes to the ATS Route Network Review Task Force that meets the week of 6 September.

3. ACTION BY APANPIRG

3.1 The meeting is invited to:

- a) note that the current Asia Pacific Basic Air Navigation Plan does not fully reflect airline requirements for Asia Pacific;
- b) note IATA's position regarding the routes presently recorded in the ANP; and
- c) note the new operational requirements for routes soon to be proposed to the ANP.

IATA's Position to Routes found in the Asia Pacific Air Navigation Plan

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
1	A202	HongKong Japan, China BANGKOK,DONGHOI, HONGKONG KAGOSHIMA, NIIGATA,CHITOSE	Partially implemented. Japan considering implementation as a conditional route. Hong Kong /Chitose segment implementation date TBD.	Hong Kong /Chitose segment should be implemented as soon as possible. It represents a significant flight distance savings of more than 60 nm.	62NM (47 hrs / 2,585,611 lbs CO ₂ savings per daily flight per year) saving for HKG-CTS.
2	A203	China/Hongkong, China HONGKONG, TAIBEI	Not implemented. China advises no international flight requirements. China requests deletion and amendment to ANP.	Airlines have indicated this as a requirement. Request implementation as per ANP.	25 NM (19 hrs / 1,045,247 lbs CO ₂ savings per daily flight per year) saving for HKG.
3	A211	Indonesia TARAKAN TAWAU	Partially implemented. ICAO to coordinate with Indonesia to implement missing segment.	Request implementation as per ANP.	
4	A218	China/Russian Federation BEIJING (EKIMCHAN), MYS SHMIDTA), BARROW	ICAO has taken action to coordinate with China/Russian Federation for implementation of Harbin-Ekimchan segment and to amend the ANP. APAC 99/1-ATS was approved on 26/1/00.CAAC subsequently advises (14 Apr 03) that current route G212 is no longer required. China requested deletion and amendment to ANP.	Airlines have indicated this as a requirement that offers considerable savings.	The original proposed rte from Harbin to Ekimchan to Balagannoye would reduce rte mileage by 60 NM (45.5 hrs / 2,503,091 lbs CO ₂ savings per daily flight per year).

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
5	A223	Japan RUSAR , 2951.7N 12750.4E, FUKUOKA	Not implemented. Japan has advised that a domestic route network covers the route. Japan considering implementation as a conditional route.	Request implementation.	<u>30NM</u> savings (22.8 hrs / 1,254,296 lbs CO ₂ savings per daily flight per year)
6	A335	China, Mongolia, Russian Federation HOHHOT, TUMURTAI, ULAN BATOR (IRKUTSK)	Not implemented. China and Mongolia advised that this segment is covered by other ATS routes, thus will propose its deletion from the ANP. Deletion of A335 notified on 9 OCT 01.	No objection to deletion.	
7	A341	Indonesia, Malaysia SURABAYA, KOTA KINABALU, SANDAKAN, ZAMBOANGA	Partially implemented. ICAO requested Indonesia to coordinate implementation with Malaysia. Malaysia has advised that existing rte B584 fulfils sufficiently the req't for Surabaya /Kota Kinabalu segment.	There is no designated away between Banjarmasin (BDM) and ELANG. B584 serves only DPS but not Surabaya. States concerned should implement route as per ANP.	<u>10NM</u> saving (7.6 hrs / 418,098 lbs CO ₂ savings per daily flight per year)
8	A450	Indonesia, US DENPASAR, HASANUDDIN, KOROR, YAP IS, GUAM, WAKE, KATHS, 2104.6N 16123.4W	Partially implemented. ICAO has requested Indonesia to coordinate implementation with US. US has agreed to the implementation and a response from Indonesia is awaited.	Has been implemented. Agree with published corrective action.	
9	A469	Vietnam HO CHI MINH CONSON IS	Implemented as W9 before. As of 1 Nov 2001 implemented as L643. Vietnam proposed deletion of req't. ICAO process ANP amendment.	Agree with action to delete.	
10	A473	India/Nepal JALALABAD NEPALGUNJ KATHMANDU	Not implemented . India and Nepal advised that realignment being coordinated and the rte to be implemented.	Agree with published corrective action.	

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
11	A581	Thailand BAGO, CHIANG MAI, CHIANG RAI, PONUK, 2018.8N 10023.0E SAGAG, 2111.5N 10137.4E, BIDRU, KUNMING, MAGUOHE, QIANXI, HUAYUAN, LINLI, WUHAN	Partially implemented. Thailand to implement accordingly.	Implemented.	
12	A584	US TONGA , NIUE, APIA, FUNAFUTI, NAURU, KOSRAE	ICAO has requested US to implement the missing segment. But US has proposed deletion of the missing segment and the proposal is under preparation	Agree with US position. Missing segment not required.	
13	B201	Fiji, New Zealand NIUE, AUCKLAND	Not implemented. Fiji and New Zealand have advised that they agreed to delete the requirement. ICAO will process ANP amendment as this was covered by routes B575, G457 and R327.	Agree with published corrective action.	
14	B204	Maldives NO RTE DESCRIPTION	Maldives will propose an amendment to ANP to add the route.	To wait for the ANP amendment before commenting as the rte description is unknown.	
15	B212	Japan/Rep of Korea KANGNUNG NIGITA	Japan considering partial implementation as a conditional rte and will coordinate with ROK. Implementation date 12/2005.	Agree with published corrective action	
16	B213	China LHASA CHENGDU	CAAC advises no international flight requirements. Rte H12 is available. China proposes deletion and amendment to ANP.	Airlines have indicated this is a requirement.	

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
17	B456	Papua New Guinea MADANG WEWAK VANIMO JAYAPURA	Partially implemented . Papua New Guinea has advised they will formally propose ANP amendment for deletion of the missing segment.	Full route has been implemented.	
18	B591	China SHANGHAI TAIPEH HENGCHUN	Partially implemented. Coordination in progress amongst states and ICAO.	Agree with published corrective action	
19	G211	Malaysia PENANG ANOKO 0708.2N 13439.4E	Not implemented. Malaysia has advised that rte is replaced by EMARSSH rtes, and propose deletion of req't.	Agree with proposal to delete.	
20	G461	Indonesia JAKARTA CIREBOB SEMARANG BLORA SURABAYA	Implemented with different route specification. ICAO coordinated with Indonesia to amend ANP req't. Indonesia to implement the req't accordingly.	Agree with the published corrective action.	
21	G473	Cambodia, Philippines, Thailand, Vietnam BAGO MAKAS 1649.7N 09830.0E PHITSANULOK DANANG LUBANG	Partially implemented. Coordination in progress among States and ICAO. ICAO – continue ongoing implementation coordination related to the revised South China Sea route structure with states.	Agree with published corrective action. This route crosses the SCS rte structure in the Ho Chi Minh and Manila FIRs.	

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
22	G589	DPR Korea, Rep of Korea AVGOK 4336.0N 13815.0E KANGNUNG	Not implemented. B467 established instead of G589 April 1998.	Agree with the published corrective action.	
23	R216	China, Kazakhstan URUMQI (ALMA ATA)	CAAC advises current routes B215, Kuqa, A460 REVKI to Alma ATA meets the req'ts for traffic from Urumqi to Alma Ata and requests the deletion of R216.	To be review in conjunction with overall airline route requirements.	
24	R221	Russian Federation MERSING PULAU TIOMAN	R221 was already implemented in Malaysia. Same rte designator is in use in Russia. ICAO has asked Russia to delete R221 and promulgate the route as R466.	Agree with published corrective action.	
25	R333	China DOTMI, 2243.1N 11610.1E, AKERO 2002.7N 11642.5E	Not implemented. China considering future implementation. China is coordinating with Hong Kong CAA.	Agree with published corrective action.	
26	R335	China/Hongkong, China MAGOG 2217.3N 11549.4E MAKUNG	CAAC advises no international flight requirements. Requests deletion from ANP (14 Apr 03). China will propose deletion and amendment to ANP.	Airlines have indicated this is an international flight requirement (see qualifying comment to right).	<u>9NM</u> savings (6.8 hrs / 374,088 lbs CO ₂ savings per daily flight per year). If A203 is implemented, this might not be necessary.
27	R345	Cambodia, Lao PDR/Thailand VIENTIANE TAKHAEK PAKSE STREUNG TRENG RUPED 1111.ON 10548.2E	Not implemented. Cambodia has advised that the requirement is no longer valid and will propose deletion of req't in consultation with LAOs and Thailand. ICAO to continue ongoing implementation coordination related to the SCS route structure with states. Cambodia to coordinate the deletion with IATA as well as LAOS and Thailand.	Agree with published corrective action.	

	Route	State and Route Description as in ANP	Action taken by States & current status	IATA's Position	Savings / Comments
28	R455	Indonesia PONTIANAK KUCHING	Partially implemented. Malaysia advised that R455 was implemented within Malaysia on 29 Nov 01. Indonesia to implement the req't.	This route has been implemented in full between Pontianak and Kuching already.	
29	R459	Indonesia MANADO BALIKPAPAN ELANG 0056.0S 11449.5E PONTIANAK MINOS 0000.0N 10901.7E TANJUNG PINANG	Implemented as W51 and W36. ICAO has asked Indonesia to implement as R459. Indonesia to consider promulgation of the route as R459 in AIP.	Agree with published corrective action	
30	R466	Russian Federation (YUZHNO-SAKHALINSK) ANIMO 4508.3N 14337.8E	Implemented as R221 in Russian Federation. ICAO has asked Russian Federation to delete R221 and redesignate the route as R466 .	Agree with published corrective action.	
31	R579	Indonesia, Malaysia PADANG PEKAN BARU MALACCA	Not implemented. ICAO has requested Malaysia to coordinate with Indonesia for implementation. Malaysia considers no longer req't due low traffic movement and proposes deletion.	Agree with published corrective action.	
32	R593	India, Oman MUMBAI (HAIMA)	No implemented. India and Oman considers the route no longer required in view of new routes under the EMARSSH project, which provide connectivity from Mumbai and Oman. India and Oman proposed deletion of req't.	Agree with published corrective action.	

IATA's DRAFT Route Proposals to ANP
Attachment B

Name	Route Description	Savings in NM
KAB1	HANGU – GN	66 NM
TWN1	APU - MIKES	40 NM
THA1	KRT - DWI	15 NM
SEA1	ASSAD – VIN – NONGT - LPB	100 NM
SEA2	DAN – SYX	739 NM
SEA3	BUT – ENREP	
IDO1	SJ – MABIX	16 NM
IDO2	KAT – TNV	130 NM
IND1	BBS – BPL	25 NM
IND2	GGC – ASARI	40 NM
SCS1	DAMEL – CH	35 NM
SCS2	CH – VEPAM	17 NM
SCS3	IDOSI – EXOTO	15 NM
SCS4	CS – VKL	18 NM
SCS5	EXOTO – DAMVO – MELAS - LUSMO	76 NM
SCS6	LUSMO – MELAS - DAMVO	85 NM
SCS7	DULOP – LAXOR - BRU	60 NM
SCS8	DULOP – ELATO – ENVAR or DULOP – KAPLI	140 NM / 238 NM
SCS9	ENDAX – TOKON OR DILIS - TOKON	45 TO 110 NM
CHA1	MORIT – YNC – YIJ –YIH – LLC - YIN	173 NM
CHA2	MORIT – YNC – YIJ – LKO	136 NM
CHA3	OMBON – CKG – RO	74 NM
CHA4	CHW – OMBON	100 NM
CHA5	YNC – GUPAD – CGO – ZHO – SB	
CHA6	KCA – HMI	47 NM
CHA7	KCA – CHW	93 NM
CHA8A	OMBON – POU	91 NM
CHA8B	OMBON – RO	72 NM
CHA9A	FKG – OMBON	123 NM
CHA9B	CHW – OMBON	102 NM
CHA10A	MORIT – NSH – POU	152 NM
CHA10B	MORIT – YNC – HO – NSH – ENH – YIN	166 NM
CHA10C	MORIT – YNC – SIA – LKO - YIN	128 NM
CHA11A	YIN – INTIK	140 NM
CHA11B	YIN – POLHO	140 NM
CHA12	SANLI – JTG	
CHA13	SANLI – WFX	
CHA14	OMBON – NSH – SB	
CHA15	KANSU – KICHA – CGQ – HLD	
CHA16	SCH – HTN – CHW	69 NM
CHA17	YBL – SANLI	48 NM
PRD1	POU – ZUH – ZIERA	80 NM
PRD2	POU – ZUH – ZIERA - SIKOU	80 NM
CHA IATA1	KCA – RED3 – RED2 – RED1 - OMBON	17 Minutes to Central Europe (approx 136 NM) ; 8 Min to Southern Europe
CHA IATA2	OMBON – Sanjiang (RO); or OMBON – 32N 106E – 30N 108E - RO	68 savings compared to OMBON - RO
CHA IATA 3	OMBON – Luogang (SB)	443 NM savings over B330/A581 or 251 NM over W31
SUBTOTAL SAVINGS IN NM		4486 NM

AIRLINE ROUTE REQUEST (one form for each route)

ATS ROUTE NAME: SEA2

ENTRY/EXIT POINT DAN / XXXXX / SYX ROUTE DESCRIPTION DAN .. SYX FLIGHT LEVEL BAND 29000 – 41000 feet PRIORITY: HIGH/MED/LOW	CHART
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FACILITIES	HOURS OF OPERATION	COMMS	NAVIGATION	SURVEILLANCE	ENGLISH LANGUAGE
Hochiminh (VVTG)	24 Hours	VHF/CPDLC	VOR	Radar	Yes
Guangzhou (ZGZU)	24 Hours	VHF/CPDLC	VOR	Radar	Yes

Potential City Pairs: BKK/HAN/KUL/PNH/SIN – SYX

Environment / Cost Benefits

Savings	Per flight	Annual
Mileage/time	739 nm	562 hours per daily flight
Fuel	20,322 lbs per flight (heavy)	7,417,530 lbs per daily flight
CO ₂	84,697 lbs per flight (heavy)	30,914,405 lbs per daily flight
NO _x	390 lbs per flight (heavy)	142,350 lbs per daily flight
SO ₂	22.5 lbs per flight (heavy)	8,212 lbs per daily flight