出國報告（出國類別：會議）

「鄰區飛航服務單位間資料通信(AIDC)作業協調會議」

服務機關： 民用航空局飛航服務總臺

姓名職稱： 陳文德 主任管制員

派赴國家： 中國大陸　香港特別行政區

出國期間： 101年4月17日 至 101年04月20日

報告日期： 101年 06月23日

提要表

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<tr><td>報告內容摘要</td><td colspan="4">飛航管理系統自完成轉移啓用後，許多新功能陸續啓用，其中飛航服務單位間資料通信(AIDC)功能，大幅提高了臺北區域管制中心與相鄰飛航情報區間之航情交接管效率及減少臺北區域管制中心同仁之作業負苛，使席位上之管制員可將注意力集中在安全與隔離上。臺北飛航情報區與日本那霸飛航情報區及福岡飛航情報區間之 AIDC 功能經過雙方反覆測試及作業程序上之協調後，終於於 101 年 3 月 22 日正式開始使用，並緊接著將與香港、馬尼拉及其他飛航情報區展開 AIDC 作業之規畫及測試。本次藉著「非正式東亞飛航管制作業協調會 (East Asia ATM Coordination Group, EATMCG)」 有與我相鄰多方飛航情報區代表與會，於會議中提出 AIDC 相關之作業構想及初步洽談技術測試之合作性，以加速我國 AIDC 之推動。此次派員參與會議，除討論 AIDC 相關事務，並透過積極地參與國際會議並進行作業交流，如縮短前後隔離、增加流量、提高飛安，許多單一國家作業達不到的部分，都有機會在此項非官方會議到解決的契機，歷年來我方也在此會議獲得許多利益，除了管制的容量增加，也兼顧了安全及服務，是個多方皆贏的局面，我們樂見此成果，也希望繼續把握此機會，將臺北的空域變得更有效率及安全。</td></tr>
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目　　錄

壹、 目的

飛航管理系統自去(100)年6月28日完成轉移啓用後，許多新功能陸續啓用，其中飛航服務單位間資料通信(AIDC)功能，大幅提高了臺北區域管制中心與相鄰飛航情報區間之航情交接管效率及減少臺北區域管制中心同仁之作業負苛，使席位上之管制員可將注意力集中在安全與隔離上。臺北飛航情報區與日本那霸飛航情報區及福岡飛航情報區間之AIDC功能經過雙方反覆測試及作業程序上之協調後，終於於101年3月22日正式開始使用，並緊接著將與香港、馬尼拉及其他飛航情報區展開AIDC作業之規畫及測試。本次藉著「非正式東亞飛航管制作業協調會 (East Asia ATM Coordination Group, EATMCG)」 有與我相鄰多方飛航情報區代表與會，於會議中提出AIDC相關之作業構想及初步洽談技術測試之合作性，以加速我國AIDC之推動。

貳、 過程

一、 行程紀要

搭乘17日預計下午2點10分起飛的長榮855航機，因香港外圍天氣不佳實施流量管制，故於近一個小時的地面延誤後，終於離場前往香港；由於此次會議地點位於原香港啓德機場附近之香港飛行俱樂部會議室舉行，故住宿於主辦單位建議鄰近會議地點的香港8度海逸酒店。

2天半的會議議程結束後，透過香港管制員協會之安排，於離開香

港前，順道前往位於香港赤臘角機場的飛航管制大樓，參觀香港機場塔臺與香港區域管制中心。

行程整理如下表：

101年4月17日	搭乘長榮航空公司855班機直飛香港
101年4月18日 ~ 101年4月20日	鄰區飛航服務單位間資料通信(AIDC)作業協調會議
101年4月20日	參觀香港航管單位
101年4月20日	搭乘長榮航空公司872班機返國

二、 會議議程

AGENDA ITEM 1　Adoption of Provisional Agenda

AGENDA ITEM 2　Review of EATMCG/4 Meeting

AGENDA ITEM 3　Report on recent ICAO meetings and outcomes

AGENDA ITEM 4　Review of PBN implementation and reduction of en-route longitudinal spacing

AGENDA ITEM 5　Review of Daily Capacity Notification Scheme and associated ATFM matters

AGENDA ITEM 6　(Reserved for Japan presentations)

AGENDA ITEM 7　(Reserved for Taiwan presentations)

AGENDA ITEM 8　(Reserved for Philippine presentations)

AGENDA ITEM 9　(Reserved for Hong Kong presentations)

AGENDA ITEM 10 (Reserved for South Korea Presentations)

AGENDA ITEM 11 Any other business

AGENDA ITEM 12 Provisional arrangements for EATMCG/6

三、 會議出席人員

(一)會議主席 : John Wagstaff (IFATCA亞太代表)

(二)香港代表 :

1. 香港民航處 (CAD)
2. 香港管制協會 (HKATCA)

(三)日本代表 :

1. 日本民航局 (JCAB) :
2. 流量管理部門 (ATMC) :
3. 區域管制中心(ACC) :

(四)　南韓代表 :

仁川區域管制中心

(五)馬尼拉代表 :

1. 區域管制中心

2. 菲律賓航管協會（PATCA)

(六)我方代表：

1. 民航局航管組:

簡任技正：薛少怡

技正：陳文桂

技士：鄒慧蒂

2. 飛航業務室

主任管制員：陳文德

3. 區域管制中心

督導：林正宗

管制員：楊皖卿 、鄢夢凡、林雅婷、黃群堯

4. 高雄近場管制塔臺

協調員：游成俊

參、會議紀要

每日會議於上午 10 點開始至中午 12 點 30 分，下午 1 點 30 分至 5 點結束。

相關會議資料如附件，每日議程摘述如下：

一、第一天(4/18)

由主席開場介紹本次參與會議的單位，接著各國與會代表依次進行

自我介紹後，開始進入本次會議議題研討。

討論 1：Review of EATMCG 4。

討論 2：Report on recent ICAO meetings and outcomes。

討論 3：Review of Daily Capacity Notification Scheme and associated ATFM matters。

討論 4：Sharing the notifications in the early stage by planning officer。

討論 5：CNS/ATM flow control。

討論 6：Trial 20NM separation between NAHA and Taipei。

討論 7：HK proposal according to DOC4444, 8.7.4 cancel verbal identification before handing off。

二、第二天(4/19)

討論 1：HK proposal according to DOC4444, 8.7.4 cancel verbal identification before handing off。

討論 2：Review traffic level and relocation of ATS route J5, ATS route relocation。

討論 3：Flight Level Allocation Scheme concerning ATS route B462, B462 J5。

討論 4：Flight Level Restriction on G581。

討論 5：Review of application for radar separation on ATS route B576。

討論 6：REDESIGNATION OF ATS ROUTE B348 TO RNAV ROUTE M646。

討論 7：RNAV DESIGNATION OF PBN ROUTE M750.

討論 8：Incursions of unknown traffic and their conflicts with civilian aircraft in TPE FIR。

討論 9：Implementation of AIDC between Taipei ACC and Fukuoka/Naha ACC。

討論 10：Operational Trial of SCAS (Specifying CFDT (Calculated Fix Departure Time) for Arrival Spacing program)。

討論 11：Update of EATMCG/4 Task List For EATMCG/5 concerning TPE FIR。

三、第三天(4/20)

上午：

討論 1：CNS/ATM of Philippine。

討論 2：Discussion of Terms of Reference。

討論 3：Closing Address。

會議於中午結束，隨後藉由香港管制員協會引薦前往香港管制中心參觀。

肆、AIDC相關研討

本次會議中與 AIDC 相關討論如下：

一、 臺北飛航情報區與日本那霸飛航情報區及福岡飛航情報區間之 AIDC 資料連結線路經過雙方反覆測試及航管作業程序上之協調後已開始實際線上作業，我方與日本皆表示此項作業於測試階段遭遇問題時雙方尋找解決方法之努力爲一難得之合作經驗，雙方並希望後續能儘快在適當的時機將備忘錄列入雙方協議書，以完備作業流程。

二、 與香港 AIDC 線路測試目前遇到訊息無法正常收發之問題，經於此次會議中及會後與香港之機務交流相關技術，並將相關結論傳回資訊管理中心及航技室相關人員，相信後續將很快得到解決方法，預計 101 年 7 月份將與香港進行線路測試。

伍、其他與臺北飛航情報區相關之會議結論

本次共有十一個Working papers及8個Information papers，除去與AIDC相關之討論外，主要與我方有關的項目及討論的內容匯整如下：

一、 由香港提出有關 M750 使用 20 海浬隔離的狀況提到，雖然此隔離能給予管制員作業上的便利，但是由於下列緣故造成使用率偏低：

1. 使用此隔離必採取額外的口頭交管程序。
2. 20海浬的隔離使用的時機是在5分鐘隔離無法達到的情況下才使用，

導致管制員習於使用五分鐘隔離，以避免交管時的額外協調。

香港建議將此隔離列爲第一順位的隔離，並取消額外的口頭交管程序，以鼓勵此程序的使用率，以提高航路的容量，但我方對於取消口頭交管程序的部份有意見，會前已先行查閱飛航管理規則(ATMP) 5-4-9 inter-unit automated information transfer 及 ICAO DOC 4444 8.7.4 的相關規定，並與民航局航管組做過溝通協調，由於這兩份文獻的規定並非完全一致，而且我方與日本不管是否實施20海浬隔離，皆須做口頭的交管，唯與香港未做此動作，香港一直以來皆表示雙方整體環境上皆符合ICAO的相關規定，因此造成我方在作業上的不一致。

因此，藉此次會議我方提出此問題，並備妥ICAO DOC4444 8.7.4 給與會的各方，請大家共同討論此議題，如果各方皆認同此規定符合現行作業環境，如此將大大簡化管制作業的程序，減輕許多工作壓力，惟各方在研究此文件後並未得到一致的看法，且各國亦有自己的內部規定，我國 ATMP 的規定亦須由有總臺或大局制定的作業準則，臺北區域管制中心與鄰區簽署協議書之後，管制席位才有作業的依據，日本代表表示必須帶回研究，後續再與我方討論。

另，日本亦提及20海浬交管隔離試作成果良好，我方與福岡區域管制中心已正式納入協議書，唯與那霸區域管制中心仍僅簽署備忘錄階段，那霸區域管制中心藉此提出希望將備忘錄正式納入協議書。

二、 有關我方對日本在IGURU於1100至1300UTC間，限制使用飛航空層400事宜，日本要求我方取消限制，此議題已經討論三年，但未有結論，原因在於香港在KAPLI於0600至1300UTC間，限制我方使用飛航空層400，我方只好對日方作此限制，而且並未在SALMI及BULAN作任何的限制，相關航情的壓力是由我方自行吸收，如果香港無法取消此限制，我方亦無力單獨承受此壓力。

香港亦表示雖然於上次EATMCG4會議中承諾會有改進措施，但此措施實施後亦無法完全確定能全面取消此限制，希望能於今年十二月前安全評估出來後再作出答覆，日方與我方皆表示希望有持續的追蹤，並儘快讓此議題落幕。

三、 另外一個充分討論的議題 Trial for the Operational Procedures to Share the Notification，是針對日本要求香港製作每日寄發給鄰區的Notification Scheme，此程序已實施一段時間，日本方面希望將寄發的時間改爲0600UTC 及2200UTC，香港作了正面的回覆，我方則針對近日香港的流管強度過大，而且與航行量水準不符的狀況希望香港能給予解釋，香港表示他們的工具能有效的消除不必要的流管，而且臺北由ELATO進管至香港落地的航機佔香港整體到場的比例，已下降至30%左右，因此會感受到較強的流管壓力，但我方認爲應有機制將航行量水準與流管條件作成比例的結合，增加資訊的透明度。

另一方面，我國希望ATMC對於臺北轉達香港流管條件後，能盡快給予回覆，目前臺北遇到的問題是香港於流管實施前一小時告知臺北流管條件，當臺北將狀況轉達時，ATMC卻需要將近30分鐘的時間才能回覆，甚至回覆時仍要求臺北更改流管條件，如此情形讓臺北在作業上遇到很大的困擾，如果香港在流管條件上能更透明及公式化，將使大家的作業更順暢。

四、 在此次會議中討論最熱烈的是有關夜間1730UTC 至2100UTC間經過我飛航情報區的這一波航情，這一波航情是一整天中密度最大的，另一個特色是幾乎純粹爲東北向，且大部分是前往韓國的航機，最高密度每小時可達到40架次。

由於我方於EATMCG 4會議中報告我方於夜間作業的困難後，香港同意修改其AIP 原先規定在1900UTC 前由香港進入臺北的航機不可使用ENVAR 出管，必須由KAPLI 進入臺北的空域，結果造成下列問題:

1. 每一架航機必須多飛79海浬。
2. 這些航機由KAPLI 進入臺北後，又重新加入同一批原先由IKELA來的航機，造成臺北管制上沒有必要的壓力。

臺北的限制是要求由KAPLI 進管的航機必須是至臺北落地或KAPLI 之後航路爲G86 HCN G581 IGURU 出管的航機，形成的結果是符合預期的，絕大部分的航機是由ENVAR 進管，管制的壓力大幅減少，

同仁的反應極爲良好，但香港反應雖是一條線的航情，無衝突問題，但管制員反映在視覺上及無線電上的密度較高，他們採取的方法是以高度切割來減輕壓力，但想利用此次會議提出另一種分流的構想，這一構想也在我方預期內，想法如下:

1. 往韓國的航機一律由ENVAR 進管
2. 往日本的航機一律由KAPLI 進管

以上的構想我方在航管組開會時已提出一份備案，唯此方案會對我空域造成額外的衝突，而且會中成員亦體認此時段的高航行量不是臺北單獨可以解決,應該以區域航行整體規劃的角度去尋求解決之道，因此我方在EATMCG 5會議中提出一份規劃藍圖，將香港、臺北、菲律賓、日本及韓國一起納入此藍圖內，適逢韓國亦以Operational Status on B576 Airway in Korea 報告此夜間時段作業的瓶頸，表示大家應該一起努力尋求解決方案，這的確是個千載難逢的機會，表示香港、臺北及韓國都有共同的意願去解決問題，情勢上就看日本及菲律賓的態度了。

於是在會議第一天晚宴結束後，與日本先進行溝通一直到凌晨二點，除了把此藍圖在我境內的航路作報告，並在考慮日本久米島雷達涵蓋後，針對日方境內的航路及出管點提出建議，當晚日方已領知我方的想法。

至於菲律賓方面，亦已於晚宴上向其代表溝通此方案及需菲方協助之處，菲方與我方有多年的合作經驗，態度上傾向於配合。

我方的想法是允許香港的要求必須有前提，下列整體的藍圖要完成才能給臺北一個安全又能增加空域容量的作業環境:

1. 由KAPLI 進管往日本的航機必須走G581 HCN G86由IGURU。
2. 但以上走法在HCN 會形成部分衝突，即FL290、330、370及410，其中以FL370最爲大宗，因此如果馬尼拉在此時段能暫停使用FL370，問題將大致解決，且參考實際此時段由馬尼拉進管的航機數量僅23架次左右(三小時)，且可以使用的高度達7個，不致於造成困擾。
3. 另外，此波由馬尼拉進管的航機又會再次於ANLOT 與由ENVAR 進管的航機衝突，更有甚者，此兩道航機流皆是前往韓國且由SALMI 出管，管制員要必須在此高密度的航情下建立足夠的邊境隔離，困難度是相當高的，如果航行量如香港表示每一年以10%左右增長的話，臺北作爲此區域樞紐的角色，所面臨的壓力將會越來越大，最簡單的方法就是消除此衝突，另建一條航路並由另一個點出管，一來消除衝突點，二來容量倍增，建議航機由POTIB 進管之後不走西線，改走B348 HCN B591 TH LEKOS M750 MOLKA 出管。
4. MOLKA 出管的航機進入福岡FIR 後，定向MIKES 再定向POTET，再定向仁川FIR 的境內點，夜間東北向平行航路就形成了。

在第二天的會議中各方都體認到此議題的重要性，在關鍵位置上的日本表示因關係到較大的技術層面且與韓方要再作協調，願意帶回再深入研究;韓國雖未發言，但在態度上及溝通中皆表示肯定，與會成員最後達成協議將此議題列入EATMCG 6的列管事項，此議題關係重大，影響的國家較多，相信需要更多的時間去完成，能列入會議列管事項，成功的機率就較大了，後續還要再持續追蹤努力。

五、 另一項日本提出WP 4.2 Sharing the Notification in the Early Stage Among Planning Officers，希望臺北能在我方計畫早期就能與ATMC 聯繫，不要等 NOTAM 來再通知日方，以便利日方預劃，其立意良好，但就區管中心的立場來看，我們僅能在接收到的合法有效的資訊後才能通知鄰區，NOTAM 是主要的資訊管道，如果資訊未確定且未經公告，本單位無權限作出通知，但表示會去思考哪些方向可以加強，符合此日方的期望。

六、 我方此次提出 Incursions of Unknown Traffic and their Conflicts with Civilian Aircraft in TPE FIR，希望向與會國家說明不明機在臺北空域的危害及可能造成的災難，並期待達成兩項目標:

1. 與鄰區建立不明機point-out 的程序。
2. 希望透過 ICAO、JCAB 及IATA 向美軍等可能的不明機來源表達關切。

在point-out 程序部分，香港及馬尼拉對此程序表示支持配合之意，唯日本認爲此議題較敏感，表示只能將報告帶回反應給JCAB，我方認爲point-out 僅是航管的正常程序之一，並無需提供不明機的資料，僅在該機進入臺北FIR 時提醒我方管制員注意而已，但日方表示無法配合。

至於將此議題反應至ICAO 及IATA 部分，IFATCA 代表表示ICAO與軍方的溝通事實上並不暢通，ICAO 曾舉辦過軍民會議，但軍方的代表出席並不踴躍，倒是IATA 一直都是比較有力的聲音，財力雄厚及管道較爲暢通，IFATCA 代表將循管道反應此議題至IATA。

七、 最後IFATCA 代表報告了Review of Recent ICAO Meetings and Outcomes及Review of ICAO Aviation System Block Upgrades，讓與會所有代表了解ICAO 對未來的規劃及目前的進展，相關資料已帶回，值得有關單位作後續研究。

陸、心得與建議

我國新一代飛航管理系統自啓用後，許多系統先進之功能提升了管制作業上之效率，飛航服務單位間資料通信(AIDC)更是大幅地增加了區域管制中心與鄰區間航機交接管之效率，能更有效地節省人力資源。尤其與日本那霸及福岡飛航情報區成功所帶來之經驗，更增加了了本區推展AIDC之動力，按飛航業務室與資訊管理中心所規劃之時程，下一個所欲推行之AIDC標的爲香港飛航情報區，

惟先前與香港之線路測試作業，遭遇到技術上之困難以致後續推行進度擱置，經由此次會議與香港方面機務之交流，釐清了部份規格及技術上之疑慮，雙方並協議將再於101年7月份再度重啓測試，以加快AIDC推行之腳步。

我國由於受政治環境的影響，目前尚無直接在國際民航組織發聲的管道，即使有飛航管制協會(ROCATCA)進行非官方之活動，但仍屬民間組織，對於國際飛航管制相關作業或在政策面、趨勢面的研討上，僅靠民間組織實屬不足。而隨著時代變遷的腳步越來越快，如今的飛航管制，不論在科技上、作業上、政策上都已經邁入全球化且唇齒相依的時代，且本臺北飛航情報區地處東亞空中交通的匯集之處、必經之地，必無法獨善其身、亦不可能置身事外，臺北飛航情報區對於相關國際會議的參與可謂是責無旁貸。有鑒於此派員參與此次會議，期待透過積極地參與國際會議並進行作業交流，能使臺北飛航情報區的飛航服務更上一層樓，甚至將來能在國際會議的平臺上處於領導地位，爲我國謀取最大權益。

EATMCG 會議已進入第六個年頭，業已舉辦過五次會議，各方在此已完成許多合作方案，對區域的整體作業有極大的助益，例如縮短前後隔離、增加流量、提高飛安，許多單一國家作業達不到的部分，都有機會在此項非官方會議到解決的契機，歷年來我方也在此會議獲得許多利益，除了管制的容量增加，也兼顧了安全及服務，是個多方皆贏的局面，我們樂見此成果，也希望繼續把握此舞臺，將臺北的空域變得更有效率及安全。

附件

WP 1
EATMCG/5
18 – 20 April 2012

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

PROVISIONAL AGENDA

AGENDA ITEM 1	Adoption of Provisional Agenda
AGENDA ITEM 2	Review of EATMCG/4 Meeting
AGENDA ITEM 3	Report on recent ICAO meetings and outcomes
AGENDA ITEM 4	Review of Daily Capacity Notification Scheme and associated ATFM matters
AGENDA ITEM 5	Japan presentations
AGENDA ITEM 6	Taiwan presentations
AGENDA ITEM 7	Philippine presentations
AGENDA ITEM 8	Hong Kong presentations
AGENDA ITEM 9	Republic of Korea presentation
AGENDA ITEM 10	Any other business
AGENDA ITEM 11	Provisional arrangements for EATMCG/6

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

REVIEW OF EATMCG/4 MEETING

(Presented by IFATCA)

Summary

This Paper gives a review of EATMCG/4 and highlights the action items for EATMGC/5 to address.

1. Introduction

1.1 EATMCG/4 was hosted by the Hong Kong Air Traffic Control Association in Hong Kong from 1 to 3 December 2010. The meeting was attended by 26 delegates representing the aviation authorities and ATC Associations of Hong Kong, Japan, the Philippines and Taiwan, together with the IFATCA Asia Pacific Representative.

2. Details of the Meeting

2.1 The trial of the reduction of en-route longitudinal spacing on A1/M750 was reviewed and it was agreed to extend the trial period until the LOAs were revised to include the new procedures. There was discussion on expanding the trial to include G581, R595 and R583 and it was agreed that a trial could commence once the nem MOU between Taipei ACC and Naha ACC was concluded.

2.2 The restrictions on level availability on G581 was raised by Japan. Hong Kong advised that they planned to restructure their sector boundaries and introduce a new sector which should permit a relaxation of the current restrictions imposed on the use of FL400 on G581.

2.3 There was discussion on overnight traffic capacity on B576 which has seen a significant growth in recent years.

2.4 The Philippines proposed establishing a second route between Manila and Taipei, but Taipei advised the suggested route would increase traffic problems at KABAM.

2.5 Japan provided information on their experiences of implementing AIDC with adjacent ACCs. They advised of a significant reduction of LHDs even though there had been an increase in traffic.

2.6 Taiwan gave details of Taoyuan Airport runway upgrade works and the consequent traffic restrictions that will have to be implemented.

2.7 Taiwan presented a proposal to classify M750 as an RNAV5 route. Japan supported the proposal as it was in line with their airspace plan and the ICAO Regional PBN Plan.

2.8 The meeting agreed that the initial trial of a Flow Management Daily Notification Scheme had been successful and the second phase should proceed.

2.9 The realignment of J5 at the Naha/Taipei FIR boundary was discussed and it was agreed that further consultation with the airline operators and military was necessary before a conclusion could be finalised.

2.10 Taipei updated the meeting on their plans for implementing the new flight plan procedures in November 2012.

2.11 Japan provided a draft of the EATMCG Terms of Reference and this generated much discussion. As there was no conclusion, the item was carried over to the next meeting.

3. Task List

3.1 The EATMCG Task List was updated and the following are to be reviewed by EATMCG/5:

3-2 Coordination with Shanghai ACC in terms of level allocation on B591 by Taipei ACC. (Taiwan)

3-3 Review implementing ATS Route M750 as RNAV5. (Hong Kong, Japan, Taiwan)

3-4 Review the trial operational procedures to share notification. (Hong Kong, Japan, Taiwan)

3-5 Collect data based on new Common Report Form for Air Traffic Flow Management in East Asia. (Hong Kong, Japan ,Philippines, Taiwan)

4-1 Review use of 20 NM longitudinal spacing among Fukuoka, Taipei and Hong Kong FIRs. (Hong Kong, Japan, Taiwan)

4-2 Review flight level restrictions on G581. (Hong Kong, Japan, Taiwan)

4-3 Review longitudinal spacing on B576. (Hong Kong, Japan, Taiwan)

4-4 Review traffic level and relocation of ATS Route J5. (Hong Kong, Japan, Taiwan)

4. Discussion

4.1 The meeting is invited to note the Task List items and provide updates and information concerning these matters.

- End -

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

REPORT OF RECENT ICAO MEETINGS AND OUTCOMES

(Presented by IFATCA)

Summary

This Paper gives a resume of recent ICAO Asia Pacific Region meetings and the conclusions and decisions of the meetings that are relevant to EATMCG.

1. Introduction

1.1 In recent months there have been a number of changes to the personnel in the ATM Section of the ICAO Asia Pacific Regional Office. It is noteworthy that the Section is now fully staffed following a long period of serious under-manning. Mr Len Wicks (New Zealand) is the Regional Officer with Mr Shane Sumner (Australia) as the second Regional Officer. They are assisted by ATM Experts Mr Soon Boon Hai (Singapore) and Mr John Richardson (Australia).

1.2 Even though the Regional Office continues to organise a full and comprehensive schedule of meetings, seminars and workshops, the ATM Section is unable to arrange as many meetings as it would like and acknowledges the work carried out by a number of Informal groups and meetings in undertaking tasks and resolving issues that ICAO is unable to directly address. A report on this meeting will be submitted to the ATM/AIS/SAR Sub Group of APANPIRG in June.

2. Details of Meetings

2.1 APANPIRG 22 (September 2011)

2.1.1 The meeting produced 56 Conclusions and Decisions, the relevant items were:

i) Flight Plan 2012 – ICAO will strengthen and facilitate inter-regional coordination.

ii) ATFM Study Group – this group will produce high level guidance material and policies for the region.

iii) ATFM Regional Concept of Operations – ICAO will produce guidance material.

iv) ADS-B Airspace Mandate – States to issue notice of implementation and provide priority service to approved operators.

v) Japan Airspace Safety Monitoring Agency (JASMA) – ICAO endorsement as Regional Monitoring Agency.

vi) Regional PBN Plan – States to adopt Version 3.0.

vii) Development of ADS-B Guidance Material – ICAO to publish on website.

viii) Expedite Implementation of ADS-B in South China Sea – States requested to coordinate actions.

ix) Establishment of Asia Pacific Seamless ATM Planning Group – Group to develop plan and implementation strategy for regional coordinated airspace.

2.2 ASIA/PACIFIC SEAMLESS ATM PLANNING GROUP MEETING 1 (January 2012)

2.2.1 With many States in the region either developing or planning upgrades to their ATM systems, ICAO established the Seamless ATM Planning Group to coordinate these activities and to ensure common procedures and similar practices were in place to provide a 'seamless' service to aircraft throughout the region.

2.2.2 Whilst the SESAR and NextGen projects within Europe and the USA respectively are recognised as leading programmes with many new plans, and Japan is developing their CARATS project for their own airspace, the Planning Group suggested that the overall region needed an 'Asian' solution to the task and highlighted the basic requirement for States to retain control of their own airspace with no plans for a unification of airspace or changes to FIR boundaries. With the absence of a single entity or authority to oversee the Asia Pacific region, it was proposed that the Planning Group develop a strategy taking into account the ICAO Aviation System Block Upgrade (ASBU) programme and other regional and global ATM initiatives. The Planning Group will provide an interim report at the 2013 APANPIRG Meeting and present the Seamless ATM Plan at the 2014 APANPIRG Meeting.

2.2.3 The Asia Pacific Seamless ATM Planning Group's proposal for a 'seamless airspace' concept is based on the development of a network of ATM systems with common standards and harmonised procedures linked to enable the pilot to utilise the on-board capabilities of the aircraft to achieve the most efficient and environmentally responsible flight and also permit the ATM units to rapidly exchange data so that the controller can deliver a safe and efficient service. It was noted that the ICAO ASBU programme details many of the projected tasks that are were envisaged in the initial plans presented for consideration by the Planning Group. Therefore, as a first step a gap analysis of current and planned ATM facilities and procedures will be conducted.

2.2.4 The Group recognised that any airspace plan must involve coordination and cooperation with the military as in many States 50% or more of the airspace is not available to civil operators because of military restrictions.

2.2.5 ICAO noted that any plan should be developed by the States and promoted the concept of sub-Regional groups coordinating common procedures in local areas and then using this to developing a Region-wide plan as the ICAO Regional Office lacked the resources to organise

a number of planning meetings for the entire area. IATA is actively pursuing a number of initiatives with some States.

2.2.6 The next meeting of the Asia Pacific Seamless ATM Planning Group will be in June.

2.3 REGIONAL AIRSPACE MONITORING ADVISORY GROUP MEETING 16 (February 2012)

2.3.1 The Target Level of Safety (TLS) for the various areas were reviewed, including:

i) Fukuoka FIR 2011 - risk estimation 4.85×10^{-9} below TLS 5.0×10^{-9}, a considerable improvement over last year mainly due to the introduction of AIDC.

ii) Western Pacific/South China 2011 (including Hong Kong and Philippines) - risk estimation 5.28×10^{-9} exceeding TLS 5.0×10^{-9} due to a number of LHDs involving aircraft at the incorrect flight level for the direction of flight.

iii) Incheon FIR 2011 - risk estimation 1.628×10^{-9} below TLS 5.0×10^{-9}.

2.3.2 The use of RVSM cruising levels by non-approved aircraft was highlighted by ICAO and they requested States to regularly update their monitoring agency of newly approved aircraft.

2.3.3 It was noted that the monitoring of approved aircraft is proving difficult. Japan is due to start using new Setouchi Height Monitoring Unit in March 2012. Australia and USA are using ADS-B derived information, and they are requesting ICAO to adopt this as a standard form of monitoring.

2.3.4 Satellite systems serviceability continues to be a matter of concern and with the increasing reliance on satellite based information for providing separation between aircraft further cooperation with the service suppliers is essential. New Zealand reported a 15 hour outage of an Inmarsat satellite in October 2011 that disrupted communications and surveillance over the South Pacific.

2.4 AERONAUTICAL INFORMATION MANAGEMENT IMPLEMENTATION TASK FORCE MEETING 7 (March 2012)

2.4.1 This meeting included a seminar on the ICAO ICARD 5 Letter Name Code (5LNC) system. The naming of reporting points and way-points has become an important safety issue due to the recent proliferation of new PBN procedures and ATS routes with numerous reporting points. In accordance with Annex 11 each 5LNC is to be unique within the area, but many States have duplication of names within their own country.

2.4.2 ICAO has produced a list of duplicate 5LNCs within the Asia Pacific region and a list of each 5LNC used by each State. All States were urged to utilise the services of the ICAO ICARD organisation when allocating names for new reporting points to avoid any further duplication.

2.5 CIVIL / MILITARY COORDINATION SEMINAR (March 2012)

2.5.1 ICAO noted that there have been many agreements between civil and military organisations on coordination and cooperation over the years, but barring a few exceptions, there has been very little progress in the overall improvement in combined civil/military airspace use.

2.5.2 Japan gave a presentation on JCAB/JSDF and US military coordination and the flexible use of airspace, but none of the other States present had any arrangement for joint or flexible use of airspace.

2.5.3 At APANPIRG/9 in 1998 produced a Conclusion on the need for a number of steps for the improvement of civil/military coordination, including airspace planning, management and design of the airspace, and a regular review of civil and military users needs.

2.5.4 There is a need for the development at national levels of a process that considers both civil and military priorities and needs. In addition there should be regular communication between the high levels of civil and military organisations to improve the understanding of each other priorities and constraints.

2.6 PERFORMANCE BASED NAVIGATION TASK FORCE MEETING (March 2012)

2.6.1 A review by the PBN Plan Regional Team showed that there has been a slight improvement in the overall planning and implementation of PBN procedures by the States – in 2011 50% of the States had presented plans and in the first three months of 2012, a further 3 States have presented plans. Unfortunately a large number of States still have either incomplete plans or no formal plan at all – however many of these States are small island States in the Pacific.

2.6.2 The PBN Flight Procedures Planning Office has held a number of seminars and workshops to assist States in planning PBN procedures during 2011 and a 'Go Team' will visit India next month to assist in their development and implementation of PBN Procedures. In addition, ICAO will be holding a PBN Symposium in October 2012 on Advanced RNP procedures.

2.6.3 The ICAO Regional Office Seamless ATM Plan will require a significant number of PBN procedures to be in place for the Plan to be effective. These include:

a) the continued transition from ground-based aids to satellite-based PBN procedures, while maintaining a necessary redundancy and contingency network;
b) support for a GNSS-based, integrated regional PBN approval standard;
c) regional cooperation for SBAS in terms of interoperability and increased service areas;
d) support for PBN specifications that include GNSS 'low end' aircraft;
e) implementation of CDO and CCO unless restricted by factors such as terrain, SUA, and noise constraints;
f) early implementation of AIM (including SWIM) for advanced States; and
g) regulation of aeronautical data and its quality, to ensure interoperable operations.

2.6.4 The process of PBN flight procedure validation and approval was raised together with the need for State Regualtors to mandate aircraft equipage and certification was highlighted.

2.6.5 The abbreviation GLS is now accepted for Global Navigation Satellite System Landing System. GLS has been introduced at Sydney where a single system provides ILS CAT 1-type guidance to all six runways. Other airports are showing an interest in such systems either to replace ILS equipment or where ILS cannot be installed due to technical or physical reasons.

3. Discussion

3.1 The meeting is invited to note the work items of the various meetings and discuss the proposals and suggestions concerning this area.

- End -

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 4-1

TRIAL FOR THE OPERATIONAL PROCEDURES TO SHARE THE NOTIFICATION, HONG KONG ATCC / TAIPEI ACC / ATMC

(Presented by Air Traffic Management Center, Japan)

SUMMARY

This working paper presents trial to embody the operational procedures to share the notification, among HONG KONG ATCC / TAIPEI ACC / ATMC

1 Introduction

1.1 Through our preceding discussions, we are aware of the necessity to share the notification among related parties including Hong Kong ATCC, Taipei ACC, and Japan ATMC. We agreed to take a step-by-step trial to the establishment of the operational procedures to share the notification. We have been in the process of improving the trial contents since we carried out, as the first step, the paper trial where the notification of runway capacities at Hong Kong Int. Airport was distributed by Hong Kong ATCC to Taipei ACC and Japan ATMC.

2 Discussion

2.1 A review of the latest trial operations is as follows;

a. The notification of capacities is distributed by Hong Kong ATCC to Taipei ACC and Japan ATMC.

b. The starting time of distribution of the notification is at around 2200UTC and 0600UTC daily.

c. The duration of time is eight hours.

d. The means of notification is email.

e. The formats are as the table below;

CAPACITY RELATED INFORMATION VHHH (FOR ARRIVALS)
VALID: 132200 to 140600 UTC
CAPACITY LEVEL: 1
AIRPORT ACCEPTANCE RATE: 32 flights per hour
EXPECTED DELAY: Up to 15 mins
REASON: -
REMARK:

2.2 We highly evaluate that thanks to Hong Kong's cooperation, the twice-a-day of notification concerning Hong Kong's capacities can cover most of their operation hours. Especially the notification at 2200Z is so effective that we can acquire the capacity notification earlier than most of the aircraft departing from Japan to Hong Kong in the morning.

2.3 Challenges to clear in the current stage are as follows;

a. Subdivision of capacity level into a time frame of hours
b. Move up the starting time of notification in the afternoon
c. Predict ATC constraints and provide the information
d. Evaluate the accuracy of the capacity notification

2.4 In order to develop the trial, the following methods should be examined.

a. Increase airports to be targeted
b, Provide the information to airline operators
c. Provide expected delays based on CAPACITY LEVEL and traffic volume

2.5 Continue "Trial Operations" aimed at the establishment of the operation procedures with the evaluation and verification of the subjects mentioned above.

3 ACTION BY THE MEETING

3.1 The meeting is invited to note and discuss the information in this paper.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 4-2

SHARING THE NOTIFICATION IN THE EARLY STAGE AMONG PLANNING OFFICERS

(Presented by Air Traffic Management Center, Japan)

SUMMARY

This working paper presents to establish the operational procedures to share the notification in the early stage, among planning officers.

1 Introduction

1.1 We have repeatedly confirmed the importance and effectiveness of sharing updated notification among related parties. We are still in a trial stage aiming at the establishment of operational procedures on the notification distribution framework. In the current trial, the provision of notification on a daily basis becomes the main purpose. If we acquire the medium to long term information on all sides beforehand, we can realize more efficient air traffic management.

2 Discussion

2.1 Although we find it difficult to predict the implementation of air traffic flow control derived from abrupt inclement weather or malfunctions of equipment, we can make it a feasible option to prepare in advance, to a certain extent, the predicted air traffic flow control based on scheduled construction, inspection of the equipment and notified airspace constrains caused by military activities. By sharing those notifications in the early stage among planning officers on all sides, the following items will be attainable.

・To predict the traffic volume and study how to manage
・To study measures to cope with the predicted traffic volume among related parties
・To notify the coordinated measures to all controllers in the operation room
・To make smooth daily coordination
・To realize efficient air traffic management with minimum required restrictions

2.2 In order to establish the notification sharing operational procedures among all related planning officers, the following items should be specified.

・POC
Planning officers in charge of ATFM
・Notifications to be shared
(e,g, Events requiring flow controls in adjoining countries, Runway construction, scheduled suspension of systems and NAVIADS, airspace constraints and so on)
・Measures of coordination
e-mail
・Time of notification
As soon as possible

2.3 As the first step, we would like to commence coordination with Taipei ACC to establish operational procedures for sharing the notifications.

2.4 We will search for a framework to expand partners to share the notifications in the future.

3 ACTION BY THE MEETING

3.1 The meeting is invited to note and discuss the information in this paper.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

JCAB's CURRENT INITIATIVES TOWARD SEAMLESS ATM

(Presented by JCAB)

SUMMARY

This paper presents some of the current initiatives, from JCAB perspective, highlighting particularly the initiatives for Seamless ATM relating to Fukuoka FIR along with the Major Traffic Flows (MTFs) identified in the ICAO GANP (Global Air Navigation Plan).

1 Introduction

1.1 1st Asia/Pacific (APAC) Seamless ATM Planning Group (APSAPG/1) was held in ICAO APAC Office from 31 Jan. to 2 Feb. 2012. The establishment of this new ICAO planning group was approved by APANPIRG/22 in 2011 through several discussions starting from "Seamless Sky" proposed at DGCA/46 held in Osaka, Japan, in 2009.

1.2 The objective of APSAPG is to determine the means for Seamless ATM development in the APAC Regions and submit a final report to APANPIRG/24 in 2013. It is summarized that three points were agreed at APSAPG/1. They are:

- Pursuing Seamless ATM operation along with 10 Major Traffic Flows (MTFs) in APAC region identified in GANP, which are considered as high density of air traffic flow;
- Working on gap analysis along with MTFs as the first step; and
- Determine such as minimum requirements, key issues, and priorities for Seamless ATM taking into account Aviation System Block Upgrades (ASBUs).

1.2.1 ASBU is a framework for global harmonization and interoperability of airspace which is under development by ICAO and will be discussed at 12th Air Navigation Conference (AN-Conf/12) in Nov. 2012. ASBU designates a set of improvements that can be implemented

globally to enhance the performance of the ATM system. ASBUs will be included in GANP in due course. ASBU working document is posted on the ICAO web-site at http://www.icao.int/Meetings/anconf12/Pages/asbus.aspx

1.3 APAC region could be characterized as "jigsaw puzzled" airspace consisting of about 50 FIRs. In addition, ANSPs which have diversities in culture, language and economy provide ATM operation. Therefore, considering the uniqueness of APAC region, close coordination and cooperation between ANSPs is the key for ATM harmonization which leads to Seamless ATM.

1.4 This paper introduces some of the current initiatives, from JCAB perspective, highlighting particularly the harmonization initiatives with neighboring ANSPs along with MTFs.

2 Discussion

2.1 There are 5 MTFs which are related to Fukuoka FIR. They are:

- "AR2": Asia (Indonesia north to China, Japan and ROK) and Australia/New Zealand;
- "AR3": Asia and Europe via north of the Himalayas;
- "AR5": Asia and North America via the Russian Far East and the Polar Tracks via the Arctic Ocean and Siberia;
- "AR6": Asia and North America (including Hawaii) via the Central and North Pacific; and
- "AR9": South-East Asia and China, ROK and Japan.

2.2 Regarding traffic flows within Fukuoka FIR, "AR2" is north from/to south traffic flow and most of the flight is spent in the oceanic airspace. "AR3" is southeast/east from/to northwest/west traffic flow and mainly flying over domestic airspace. "AR5" is north from/to south traffic flow and mainly flying over domestic airspace. "AR6" is east from/to west traffic flow and most of the flow covers oceanic airspace. "AR9" is northeast from/to southeast and has mixed environment of oceanic and domestic airspace with radar control and procedural control.

2.3 The following table describes current situation concerning neighboring FIRs, non-ICAO coordination framework, CNS environment and ATM operation along with each MTF.

	Neighboring FIRs	Coordination framework	CNS environment	ATM operation
AR2	Oakland FIR	IPACG ISPACG (Observer)	CPDLC RNP10/RNP4 ADS-C AIDC	50nm hand-off (H/O) (30/30 within RJJJ) UPRs
AR3	Khabarovsk FIR, Incheon FIR	RUS-JPN ATC meeting ROK-JPN CNS/ATM WG ROK-JPN ATC WG CHINA-JPN Future ATM System WG CHINA-JPN ATC WG	VHF RNAV5(above FL290) Radar AIDC (ROK-JPN) AIDC(China-JPN under development)	To/from Khabarovsk 20nm H/O To Incheon FIR 20 or 30nm H/O From Incheon FIR 20 or 30 or 60nm H/O
AR5	Khabarovsk FIR	RUS-JPN ATC meeting CPWG	VHF RNAV5(above FL290) Radar Procedural control	20nm H/O 10 minutes H/O
AR6	Anchorage FIR Oakland FIR	IPACG CPWG	CPDLC RNP10/RNP4 ADS-C AIDC	50nm H/O (30/30 within RJJJ) UPRs DARP
AR9	Manila FIR Taipei FIR Incheon FIR	SEACG ROK-JPN CNS/ATM WG ROK-JPN ATC WG	CPDLC RNP10/RNP4 ADS-C Procedural control VHF RNAV5(above FL290) Radar AIDC (Taipei -JPN) AIDC(ROK-JPN)	To/from Manila 10min with MNT H/O (30/30 within RJJJ) To/from Taipei FIR 20 or 30 or 60nm H/O To/from Incheon FIR 20 or 30nm H/O

IPACG: Informal Pacific ATC Coordinating Group (US-JPN)

ISPACG: Informal South Pacific ATS Coordinating Group (US, AUS, NZ, Fiji, etc.)

CPWG: Cross Polar Work Group (RUS, US, CAN, Iceland, Norway, JPN, China)

2.4 Considering the “jigsaw puzzled” airspace of APAC FIRs, it is particularly necessary for ANSPs to promote close coordination and cooperation by sharing common understanding of Seamless ATM in APAC region. In this sense, EATMCG could work as a platform to drive Seamless ATM in East Asia in line with the work of APSAPG.

3 Recommendation

3.1 The Meeting is invited to

a) note the information provided in this paper;

b) recognize the importance of Seamless ATM in APAC region; and

c) propose to follow the work of APSAPG and to share the information about each ANSP’s initiatives for Seamless ATM under EATMCG.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Review traffic level and relocation of ATS route J5

(Presented by JCAB)

SUMMARY

This paper provides the review of ATS route J5's relocation which was proposal of JCAB to improve the effectiveness of PACOTS/UPR in the Pacific Ocean.

1 Introduction

1.1 Former J5 was connecting HCN to BOGUS located on the boundary of Taipei FIR and Fukuoka FIR, but there were no ATS routes from BOGUS and eastward within the Naha ACC jurisdiction, and since the relevant fix was located out of radar coverage, there were situations in which an altitude was reserved for a long period of time to provide separation and situations in which inefficient altitude changes were unavoidable between (among) aircraft bound for Hong Kong/Taipei FIR entering from Oceanic airspace of ATM Center jurisdiction and aircraft passing through three airways extending over Manila FIR.

1.2 This issue was proposed at the IPACG31, and IATA also declared that an improvement is necessary to improve the efficiency of Hong Kong/Taiwan bound aircraft. At the EATMCG4, JCAB requested for an improvement to establish a safe and efficient routing network and received a reply from Taiwan CAA that they will consider relocating.

1.3 By April of 2011, Taiwan CAA and the military made coordination, and the new fix was established at the location which the JCAB proposed, leading to the relocation of J5 and JCAB appreciates the swift correspondence of Taiwan CAA.

1.4 For a route connecting J5, JCAB established the direct route between TUNTO of A590 and GUMBO (new fix on the boundary of FIRs) of J5, and since August 25, 2011, the relocated J5 has been in application and it can be connected to PACOTS/UPR in the Pacific Ocean.

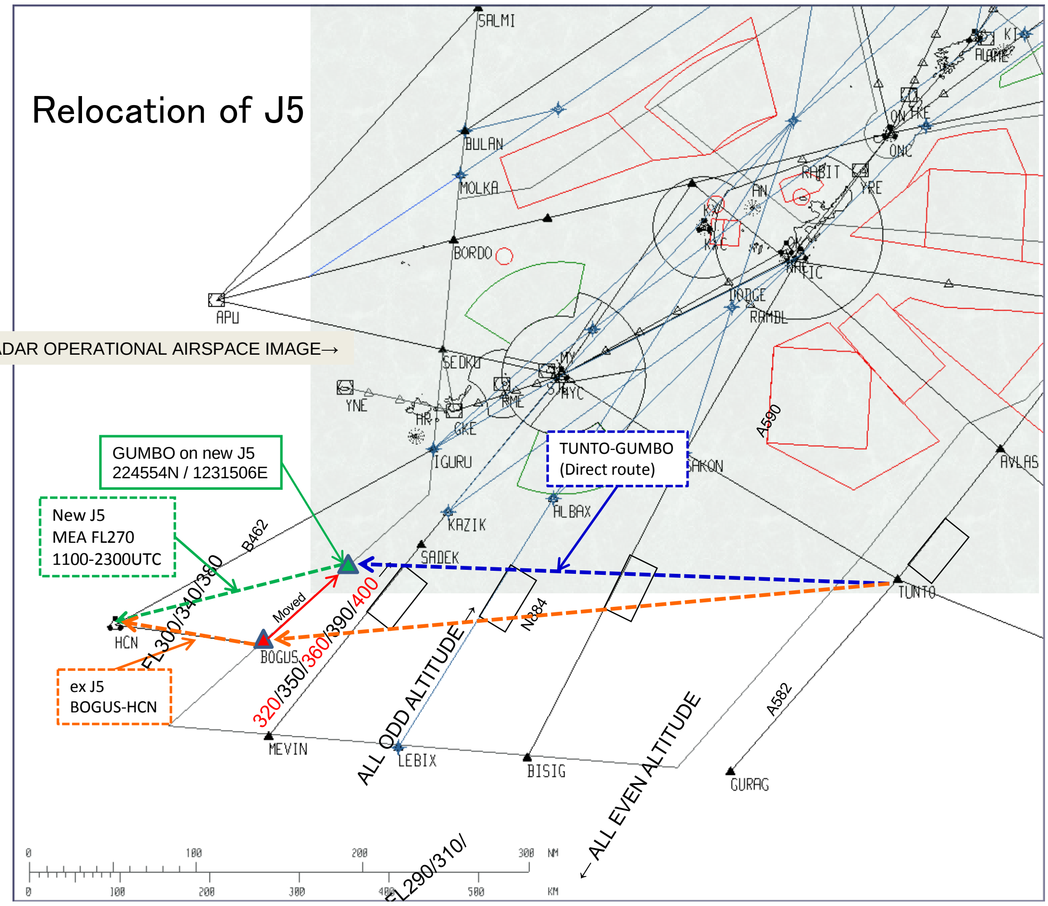
2 Current Status in Naha's jurisdiction

2.1 The J5 is in use during 1100~2300UTC, limiting its use to night flights. There are not many aircraft flying via J5, but there are days in which several aircraft fly consecutively via J5. Since the direct route between TUNTO-GUMBO and B462 are intersecting near the Taipei FIR, aircraft flying via J5 is affected by Flight Level Allocation Scheme (FLAS) of the relevant airway.

3 Action by the Meeting

3.1 The confirmation of any plans to revise the time restriction of J5 in the near future.

3.2 The confirmation of Taiwan's prospect of the future traffic volume.


Relocation of J5
RADAR OPERATIONAL AIRSPACE IMAGE→
GUMBO on new J5
224554N / 1231506E
New J5
MEA FL270
1100-2300UTC
ex J5
BOGUS-HCN
TUNTO-GUMBO
(Direct route)
Moved
FL300/340/380
320/350/360/390/400
ALL ODD ALTITUDE
ALL EVEN ALTITUDE
FL290/310/
B462
N884
A590
A582
SALMI
BULAN
MOLKA
BORDO
APU
SEDKU
YNE
IGURU
KAZIK
SADEK
ALBAX
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TUNTO
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BOGUS
MEVIN
LEBIX
BISIG
GURAG
RABIT
YRE
ONC
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THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Flight Level Allocation Scheme concerning ATS route B462

(Presented by JCAB)

SUMMARY

This paper provides the current status of Flight Level Allocation Scheme (FLAS) concerning ATS route B462 in Naha ACC jurisdiction.

1 Introduction

1.1 As a result of EATMCG/1 (August 27-29, 2007, Fukuoka), an agreement has been settled to assign FL290,310,320,350,360,390,400 to north bound flights and FL300,340,380 to south bound flights regarding Flight Level Allocation Scheme (FLAS) of B462. This has been included in the LOA between Naha ACC and Manila ACC.

2 Current Status

2.1 Although there are not many south bound flights on B462, most of them are U.S. military aircraft that request FL360 frequently. But this altitude cannot be assigned because of the FLAS and LOA.

2.2 As for the north bound flights, most of the traffics are civil aircraft (Narita arrival etc.) on night flights, and many of them move northward on even number altitudes. Since traffic volume increases during the night, assigning altitude of opposite direction could confuse the air traffic controllers. At Naha ACC, there has been an instance in which FL360 was assigned to a south bound aircraft without confirming the north bound aircraft on the even number altitude.

2.3 Furthermore, since there are cases in which west bound flights via J5 on even number altitude coming from the ATMC Oceanic airspace and the north bound flights via B462 on even

number altitude intersect near the Taipei FIR boundary, non-radar separation is necessary until the north bound flights are under radar coverage. If west bound traffic on J5 increases, increase in workload during this timeframe can be expected.

2.4 For that reason, Naha ACC does not recommend B462 by AIC. (For a route from Southeast Asia, N884 for north bound flights and A582 for south bound flights are recommended.)

3 Requirement

3.1 As for Naha ACC, we request the prohibition of assigning even number altitudes to north bound flights and allow only the odd number altitudes to be assigned on B462. If that is too complicating, we would like to be able to assign FL360 to the south bound flights.

3.2 Naha ACC would like to confirm that Manila ACC has any plan on revising the FLAS regarding B462 for Manila FIR.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Review of application for radar separation on ATS route B576

(Presented by JCAB)

SUMMARY

This paper provides the review of application for radar separation on airway B576 among Incheon, Fukuoka and Taipei FIR started the regular operation on 25 May 2011.

1 Introduction

1.1 Okino-Nishi sector was transferred from Naha ACC to Fukuoka ACC in Feb, 2010. Since then, Fukuoka ACC has provided ATC services for aircraft on both B576 and AKARA corridor, and it has contributed to further improvement in safety and efficiency around AKARA corridor.

1.2 JCAB installed KUMEJIMA radar to cover the area of airway B576 between ATOTI and SALMI for handling the increasing air traffic on the airway. JCAB proposed that Taipei ACC and Incheon ACC conduct a trial operation of radar service on airway B576. That was aimed at both enhancing safe and efficient operation on B576 and expanding its capacity of airway.

1.3 Taipei, Incheon and Fukuoka ACC all agreed with the MOU of "Trial for radar handoff procedures on airway B576," including the longitudinal separation of 30NM and 60NM. Since July 15th 2010, the radar separation (trial operation) has been implemented instead of the non-radar separation.

1.4 Since there were no complications during the trial operation of approximately 10 months, the LOA regarding the implementation of official operation between Taipei ACC and Incheon ACC has been agreed, implementing the radar service official operation on May 25, 2011.

2 Review of radar operation on airway B576
(The outcome of comprehensive verification in ATC operations)

As of March 2012, ten months have passed since the beginning of radar service official operation on airway B576.

The verification outcomes on the current operation are as follows;

2.1 Advantage

a) Workload reduced in selecting optimum altitudes.
b) It expanded the capacity of airspace.
c) It would enhance the efficiency of aircraft operation to increase the opportunity for taking optimum altitudes.
d) It has become easier to respond to aircraft requests for deviation or altitude changes in bad weather.

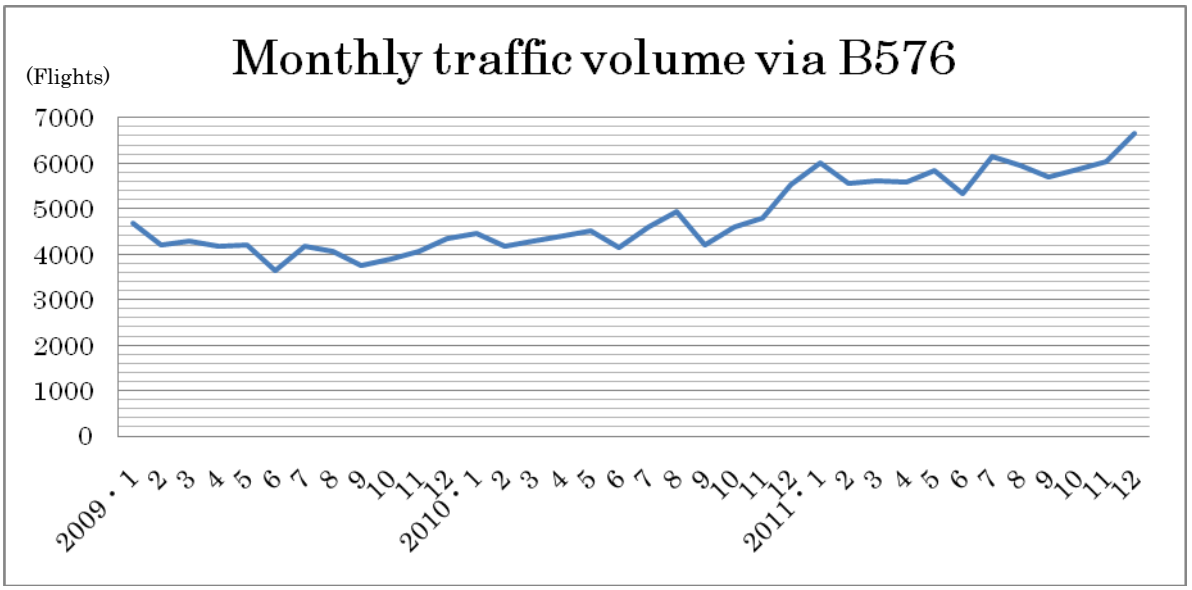
2.2 Possible to congest

The controller's workload can be increased unexpectedly because of the temporary congestion of air traffic caused by applying the radar separation.

3 Issues

3.1 By the introduction of AIDC between Taipei ACC and Fukuoka ACC since 22 March 2012 , JCAB attempted to reduce transfer errors, which contributes to the improvement of safety of flight. JCAB recognizes that the introduction of the automated radar handoff is one of the effective measures in order to lessen the workload caused by the temporary congestion of air traffic in the near future.

3.2 Due to increasing the number of traffic on airway B591(Cross Strait route) during Chinese New Year holidays, Taipei ACC requested Fukuoka ACC to impose altitude restrictions on the related traffic at FL300 and FL320 for all day long. As a result, changing route led increase in flying distance of concerned aircraft and in workload of Fukuoka ACC in point of making separation-adjustments with other related airways.



4. JCAB's proposal

4.1 JCAB recognizes well that there are some problems in radar hand-over for B576, such as deviation to West-side, traffic congestion. But no significant problems are reported in ATC operations. There are many benefits have been produced after introducing AIDC, radar hand-over and reducing transferring separation. JCAB propose to consider further improvements for capacity and safety operation on airway B576 based on close collaboration among ACCs continuously.

5. ACTION BY THE MEETING

5.1 The meeting is invited to consider JCAB's proposal stated in paragraph 4 above.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Review of trial on 20NM intervals on G581/R583/R595 in Naha Area Control Center

(Presented by JCAB)

SUMMARY

This paper provides the review of trial on 20NM intervals of G581/R583/R595 in Naha Area Control Center, which has started the operation on 25 August 2011.

1 Introduction

1.1 At EATMCG/3, JCAB proposed the trial of in-trail radar separation and it was agreed. The trial to shorten longitudinal separation under RADAR environment was started on 28 July, 2010, and 20 NM separations has been applied to the flight at the same altitude on A1/M750.

1.2 The trial was reviewed at EATMCG/4, and it had the approval to be implemented officially. In addition, spreading the trial to G581 was also approved.

1.3 Through the coordination between parties concerned, the trial to shortened longitudinal separation not only for G581, but also for R595 and R583 has been conducted between Naha ACC and Taipei ACC since August 25, 2011.

2 Status of trial

Through this trial operation, the workload at Naha ACC has decreased during the timeframe when traffic volume usually increases, and the shorten longitudinal separation has been effective. Moreover, there are no problems reported regarding this trial.

3 Proposal

After obtaining Taipei ACC's consent, we would like to proceed into the official implementation of this operation.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Flight Level Restriction on G581

(Presented by JCAB)

SUMMARY

This paper provides the information about altitude block at IGURU (G581) which has been imposed since 2008 when current flight level allocation scheme was implemented. This restriction originated from Hong Kong. JCAB considers the necessity of a negotiated settlement.

1 Introduction

1.1 As mentioned at EATMCG/4, FL400 has been restricted to aircraft overflying Taipei FIR and entering Hong Kong FIR at IGURU between 1100UTC and 1300UTC in accordance with NOTAM issued by Taipei ACC.

1.2 Since the timeframe of limitation has been shortened drastically, the limitation is 2 hours per day, and Naha ACC has a small number of concerning traffic during this timeframe, controllers' workload has been reduced compared with the last few years.

2 Current Status

2.1 According to the NOTAM, Naha ACC will not assign FL400 to aircraft entering Taipei FIR via G581 between 1100～1300UTC until December 31, 2012.

2.2 Since the applied timeframe is short and limited to the route from G581 through G86, there are few concerning aircraft and substantially little effect on the traffic. In most cases, Taipei ACC accepts coordination when there are concerning aircraft.

3 Discussion

3.1 Taking the above-mentioned 2 2.2 facts into consideration, this limitation may not be necessary.

3.2 Although there are no big hindrances, we question this flight level restriction by NOTAM.

3.3 We need to conduct a detailed investigation on the necessity of continuing this limitation, and abolish this limitation as soon as possible.

3.4 At least, abolishing the limitation by issued NOTAM is required.

4 Action by the meeting

The meeting is invited to note and discuss the information in this paper.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

The proposal to make rules of submitting common report form for Air Traffic Flow Management in East Asia

(Presented by JCAB)

SUMMARY

This paper presents the new rules to make common report form for Air Traffic Flow Management more effective and sustainable for every member of EATMCG.

1 Introduction

1.1 At the EATMCG/3 , Air Traffic Management Center made the proposal to commence the common report form with which ATSUs could report statistics traffic data to EATMCG ATFMSG.

1.2 All delegates agreed that the updated data of traffic flow should be submitted to the EATMCG/4 meeting.

1.3 JCAB would like to continue to share traffic data with members of EATMCG for realizing more efficient traffic flow.

2 Discussion

2.1 JCAB recognizes that it is very useful for us to collect the traffic data of every member by using the common report form because these data could be used to make us better understanding the situations of neighboring FIRs, such as the congested airway, the changes of traffic volume ,which will lead to effective coordination of ATFM between ACCs.

2.2 To make this common report form more useful and enhance the mutual understanding among every member, JCAB would like to make a proposal as follows.

- The traffic data that should be collected is from January to December each year.
- JCAB will send the common report form to all members when the timing to hold the meeting is decided.
- The members are not requested to fulfill all the blanks, but to input your data where the "□"mark is depicted as much as you can.

- After completing the form, you are asked to send them to JCAB by the attachment of e-mail.
- JCAB will compile these data to share them with the members of EATMCG.
- The data that are asked to submit should be reconsidered in the meeting, reflecting the members' needs.

3 Action by the meeting

3.1 This meeting is invited to note and discuss the information provided in this paper.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)
(Hong Kong 18 – 20 April 2012)

Incursions of unknown traffic and their conflicts with civilian aircraft in TPE FIR

(PRESENTED BY TAIPEI)

SUMMARY
This paper is to reveal the severity of the incursion of unknown traffic in Taipei FIR and seeking a common procedure to share information of unknown traffic and consensus to have the circumstance known by ICAO and JCAB etc.

1. INTRODUCTION

1.1 Unknown traffic is no stranger to ATC in Taipei. They frequently manoeuvre in our space and become an existing risk to air safety. After some discussions with concerned parties in Taipei, we believe that those unknown traffic are military aircraft of international powers that is based in Japan or operate combat carriers in Far East.

1.2 This paper proposes discussions to relay the severity of the situation to influential bodies, namely ICAO and JCAB, to have the circumstance known and fixed.

2. DISCUSSION:

2.1 In good weather condition, the figure of unknown traffic is in large number. Most of them are not harmful. But some of them penetrate several airways and stay in popular cruising levels of civilian aircraft during their operations. The duration of their operation may last more than one hour or two. And their intention is unpredictable. ATC are helpless to manage potential conflicts.

2.2 In recent months four TCAS RA incidents occurred and detailed information is as followed:

no.	date	time	callsign	altitude of civilian A/C	altitude of unknown A/C	location
1	6 Jan.	0242Z	KAL643	360	365	15 nm N of KABAM
2	12 Jan.	0003Z	CEB191	310	315	5 nm SE of SALMI
3	19 Jan.	0832Z	CPA870	310	315	5nm E of ENVAR
4	24 Feb.	0442Z	CPA094	310	315	RENOT

2.3 Observations show that unknown traffic enters Taipei FIR from 3 major boundary areas:

(1) ENVAR (between Hong Kong and Taipei)
(2) POTIB (between Manila and Taipei)
(3) Along 123°E (the ADIZ between Taiwan and Japan)

It indicates the requirement to share information of unknown traffic, so that may make it known to each other between concerned ACC. We urge all parties to build a common procedure to cope with the situation.

2.4 In anticipation of accidents or tragedies that are likely to happen if the situation continues. Taipei would like to urge all members to collaborate on this issue through your well knowledge and networking to help to manage the situation.

3. ACTION BY THE MEETING

3.1 The meeting is invited to build a procedure to share information of unknown traffic and a common consensus to be relayed to ICAO, JCAB and other viable channels.

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

REVIEW USE OF 20NM LONGITUDINAL SPACING

(Presented by Hong Kong)

Summary

This paper reports the progress in the application of 20NM minimum longitudinal spacing on A1, M750 and G581 between Hong Kong and Taipei FIRs. Hong Kong proposes that the procedure be refined to further enhance operational efficiency in order to allow operators to gain full benefits of the improved airspace capacity.

1. Introduction

1.1 The application of 20NM minimum longitudinal spacing on A1, M750 and G581 has been implemented since May 2011 between Hong Kong and Taipei FIRs. The airspace capacity gained as a result of this reduction of longitudinal spacing was well accepted by Hong Kong controllers.

1.2 However, despite the advantages, the actual occasions of application of this procedure were less than expected. The reason for such infrequent application was due to the conditions attached to the procedures which could generate additional workload. One of these conditions stated that a radar handoff between the controllers was required when applying the 20NM spacing. The controllers were required to use a direct line to communicate information and acceptance of the traffic with 20NM spacing.

1.3 Another condition for this procedure stated that this distance-based spacing should be applied when the 5-minute time-based spacing could not be achieved. This condition was also not inline with the goal of airspace capacity enhancement. For example, 5 minutes spacing is equivalent to 40NM between 2 aircraft flying at 480kt ground speed which is a double of the 20NM distance-based spacing requirement).

1.4 These conditions in the procedure are considered to be holding back the airspace capacity enhancement from achieving the expected results.

2. Details

2.1 The above-mentioned conditions were included in the procedure to reduce operational risks as it was the first time such a short distance was applied between aircraft when they cross FIR boundaries. It was a reasonable arrangement during the introduction of reduction in spacing/separation between aircraft.

2.2 However, during the review of the procedure, it was found that in the ICAO Document 4444 PANS-ATM Chapter 8 Paragraph 8.7.4 there were criteria for Transfer of Control of aircraft when surveillance service was being provided. The review confirmed that the operation between Hong Kong and Taipei FIRs for ATS Routes A1, G581 and RNAV 5 Route M750 complied with the criteria laid down in PANS-ATM which would allow the radar handoff procedure for traffic on these routes to be dispensed with.

2.3 As the example in paragraph 1.3, it is clear that distance – based spacing is more efficient than time – based spacing. Distance – based spacing would be the preferred format in daily operation to increase the capacity to accommodate traffic growth.

2.4 Historical data shows that the surveillance and communication tools between Hong Kong ATCC and Taipei ACC, and perhaps, within the East Asia region have been very reliable and there is sufficient redundancy to cater for any equipment un-serviceability. The risk of losing surveillance service is extremely low.

2.5 Based on the reliability of the surveillance and communication tools and the well – established procedures laid down in the Letter of Agreement, Hong Kong, suggests that the above – mentioned conditions in the application of 20NM minimum longitudinal spacing to be removed to streamline the procedure.

2.6 Distance – based spacing shall have precedence over time – based spacing to maximize airspace utilisation to accommodate traffic growth. Hong Kong, also suggests that time – based spacing shall only be used when distance – based spacing cannot be applied due to weather deviation or when communication and/or surveillance capabilities is not available for whatever reasons.

3. Discussion

3.1 The meeting is invited to note the progress made on the application of 20NM minimum longitudinal spacing and discuss the suggestions in paragraphs 2.5 and 2.6.

- End -

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

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(Presented by Hong Kong)

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- End -

THE FIFTH MEETING OF THE EAST ASIA TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)

(Hong Kong, China 18 – 20 April 2012)

REVIEW OF ICAO AVIATION SYSTEM BLOCK UPGRADES

(Presented by IFATCA)

Summary

This Paper gives a review of the ICAO Aviation System Block Upgrade (ASBU) Programme. ICAO is proposing ASBUs as the master plan for coordinating the world-wide development of ATM systems to handle the projected increase in traffic safely, efficiently and environmentally compliant.

1. Introduction

1.1 "Over the next 10 years, some USD 120 billion will be spent worldwide on upgrading the global aviation system to enhance safety, efficiency and overall sustainability. We have to ensure that it is done in a timely, coordinated and harmonised manner around the world," Raymond Benjamin, Secretary General of ICAO.

1.2 The Aviation System Block Upgrades (ABSU) is ICAO's framework for global harmonisation of future ATM systems. To permit operators to benefit from any changes as soon as possible, ICAO believes that near and mid-term ATM improvements should be introduced progressively without waiting for a single major improvement package.

1.3 ICAO recognises that in the past development and modernisation efforts were often fragmented in the sense that there was a lack of coordination between stakeholders and investment in air and ground systems were not always synchronised. The projects were also not always supported by robust business cases. With ASBU all partners will have the opportunity to work together to develop the means to sustain aviation as the safest and most efficient form of transport into the coming decades.

1.4 At the first ever Global Air Navigation Industry Symposium, held in Montreal in November 2011, ICAO gathered the major aviation equipment and systems manufacturers to discuss with ANSPs, Regulators and aircraft operators the ABSU concept as a common means of harmonising the development of all aspects of future ATM. They all agreed the need to work together to facilitate a synchronised modernisation programme encompassing air and ground systems within and between all regions to achieve high standards of global safety and interoperability at a reasonable cost and with commensurate benefits. States, aircraft operators and industry will benefit from the availability of SARPs with realistic lead times to permit the

development of action and implementation plans and the investment in new facilities and systems.

1.5 ICAO has stated that ASBU will influence ICAO's work programme in the coming years, specifically in the areas of standards development and performance improvements.

2. Details of ASBU

2.1 The ABSU is a four-step programme (or Block) that by 2028 will deliver the ICAO future air navigation system. It is based on a number of current and planned major ATM development programmes. Each Block addresses four key performance improvement areas with the Blocks consisting of a number of modules. States and ANSPs should plan their future development around the Blocks and modules to achieve compliance with the overall global plan and compatibility with other ANSPs.

2.2 The ASBU Blocks are:

i) Greener Airports (15 matrix items);

ii) Global Interoperable Systems and Data (8 matrix items);

iii) Optimum Capacity and Flexible Flights (12 matrix items); and

iv) Efficient Flight Paths (10 matrix items).

2.3 Each of the Block upgrades are defined by the same essential qualities during each stage of the process:

i) A clearly defined measurable operational improvement with appropriate metrics to measure success:
ii) Complementary air and ground systems upgrades with operational approval (or a certification plan);
iii) Standards and procedures for air and ground systems; and
iv) A positive business case over a clearly defined period of time.

2.4 Each module is designed as a flexible and scaleable step that can be implemented by a region or an individual ANSP depending on their level of readiness or need, within ther overall time line of the ASBU programme.

2.5 At the Air Navigation Conference in November 2012, ICAO will submit ASBU for acceptance by the meeting as the master plan for the future development of ATM systems throughout the world. It will not be necessary for every State to implement every item in the plan, but should adopt the relevant ones where appropriate.

3. Summary Table of ASBU Blocks and Modules

Block 0 **Available Now**	**Block 1** **Global Deployment by 2018**	**Block 2** **Global Deployment by 2023**	**Block 3** **Global Deployment from 2028**
Performance Improvement Area 1: Greener Airports			
Improved approach procedures	Optimised Airport Accessibility		
Increased Runway throughput through Wake Vortex Separation	Increased Runway throughput through Dynamic Wake Vortex Separation	Advanced Wake Vortex Separation (Time-based)	
Improved Runway Safety (A-SMGCS)	Enhanced Safety and Efficiency of Surface Operations (A-SMGCS/ ATSA-SURF)	Optimised Surface Routing and Safety Benefits (A-SMGCS Level 3-4, ATSA-SURFIA and SVS)	
Improved Airport Operations through A-CDM	Optimised Airport Operations through A-CDM		
	Remote Operated Aerodrome Control Tower		
Improved Traffic Flow through AMAN/DMAN	Improved Approach and Departure Management through Integration	Linked AMAN/DMAN	Integrated AMAN/DMAN/ SMAN
Performance Improvement Area 2: **Globally Interoperable Systems and Data – Through Global Interoperable SWIM**			
Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	Increased Interoperability, Efficiency and Capacity though FF-ICE/1 application before departure	Improved Coordination through multi-centre Ground-Ground Integration, trajectory based airborne operations (FF-ICE, SWIM)	Improved Operational Performance through the introduction of Full FF-ICE
Service Improvement through Digital Aeronautical Information Management	Service Improvement through Integration of all Digital ATM Information		
	Performance Improvement through the application of System Wide Information Management (SWIM)	Enabling Airborne Participation in collaborative ATM through SWIM	
Performance Improvement Area 3: **Optimum Capacity and Flexible Flights – Through Global Collaborative ATM**			
Improved Operations through Enhanced En-Route Trajectories	Improved Operations through Dynamic ATS and Free Routing	New Collision Avoidance System	Traffic Complexity Management Better Operational Decisions through Integrated Weather Information (Strategic and Tactical – near-term and intermediate forecasts)
Improved Flow Performance through Planning based on a Network-Wide view	Enhanced Flow Performance through Network Operational Planning	Increased user involvement in the dynamic utilisation of the network.	
Improved access to Optimum Flight Levels through Climb/ Descent Procedures using ADS-B	Better Operational Decisions through Integrated Weather Information (Strategic near-term forecasts)		
	Increased Capacity and Flexibility through Interval Management		Integrated weather information – near and intermediate forecasts
Air Traffic Situational Awareness (ATSA)		Airborne Separation (ASEP)	Self separation

-

Block 0 **Available Now**	**Block 1** **Global Deployment by 2018**	**Block 2** **Global Deployment by 2023**	**Block 3** **Global Deployment from 2028**
Performance Improvement Area 4: Efficient Flight Path – Through Trajectory-based Operations			
Improved Flexibility and Efficiency in Descent Profiles (CDOs)	Improved Flexibility and Efficiency in Descent Profiles – Optimised Profile Descents (OPDs)	Optimised arrivals in dense airspace	Full 4D Trajectory-based Operations
Improved Safety and Efficiency through the initial application of Data Link En-Route	Improved Traffic Synchronisation and Initial Trajectory-Based Operation		
Improved Flexibility and Efficiency in Departure Profiles			
	Initial integration of Unmanned Aircraft Systems (UAS) into non-segregated airspace	UAS integration in Traffic	UAS Transparent Management

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)

(Hong Kong, 18-20 April 2012)

Agenda Item 5

Implementation of AIDC between Taipei ACC and Fukuoka/Naha ACC

(Presented by JCAB)

SUMMARY

This paper presents the implementation of AIDC between Taipei ACC and Fukuoka/Naha ACCs started the trial operation on 22 March 2012.

1 Introduction

1.1 In 2008, JCAB and CAA agreed that each party introduce Japan- Republic of China AIDC by 2012 .

1.2 In response to this, Taipei ACC and Fukuoka/Naha ACCs agreed on the conclusion of MOU for the trial operation's beginning in March, 2012.

1.3 Taipei ACC and Fukuoka/Naha ACCs started AIDC Trial operation on 22 March 2012.

2 Conclusion of MOU

Two kinds of MOU have concluded for the trial operation, one provides trial duration, and the other provides the coordination procedures.

MOUs provided following items;

<Air Traffic Service Inter-facility Data Communications Trial Operation>

・Purpose
・Scope (This MOU supplements present each LOA)
・Duration
・Procedures (in accordance with each MOU which has been established between adjacent ACCs)

<Air Traffic Service Inter-facility Data Communications Coordination Procedures>

・Purpose
・Scope (This MOU supplements present each LOA)
・Revisions and Termination
・Procedures (about means of communication, coordination by AIDC and situations when verbal coordination is necessary)
・Special provision for a change of transfer point (about coordination procedures when transfer of

control point has been changed from SALMI to BULAN in Fukuoka ACC)

3 Applicable route

A1, B576, R583, R595, G581 (Applied for both direction)
M750 (Applied for northeast bound only)

4 Proposal concerning operation development in the future

The current situation on the operation side for about past one month is that the workload of the controllers which especially relates coordination procedures decreased compared with the verbal procedure. And it is recognized that the introduction of AIDC is highly efficient.

If JCAB and CAA agree that the trial operation has no problem so far, JCAB proposes the start of discussion amendment of LOA and regular operation as described in each MOU between adjacent ACCs.

THE FIFTH MEETING OF THE INFORMAL EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG/5)
(Hong Kong 18 – 20 April 2012)

Update of EATMCG/4 Task List For EATMCG/5 concerning TPE FIR

(PRESENTED BY TAIWAN)

SUMMARY

This paper reviews the progress of action items left from last EATMCG meeting concerning the part of Taiwan.

1. INTRODUCTION

1.1 At the conclusion of EATMCG/4, there are ten action items left to be followed up. Among them, one item of LOA amendment is confirmed as case closed, and the other one with regard to radar handoff on B576 is replaced instead by review longitudinal spacing on this route.

1.2 Eight items remaining are all concerned with Taipei FIR.

2. DETAILS:

2.1 Item No 3-2: The coordination with Shanghai ACC after EATMCG/3 to modify the allocation of FL340/FL300 into FL320/FL300 on B591 is effective on 20 April 2010. Since the revision of LOA, the ATC operation enables Fukuoka and Incheon FIR to assign the more popular altitude to aircraft. At this stage, traffic flow on B591 does not growth drastically. Most traffic is via R596.

2.2 Item No 3-3: After the coordination with Hong Kong, both sides agree to implement M750 as RNAV 5, taking effect on 12 January 2012. Taiwan publishes AIP on 1 December 2011 with the effective date as above, and Hong Kong publishes AIP Supplement on 12 January 2012 with the effective date of 9 February 2012.

2.3 Item No 3-4: Trial of operational procedures to share the “Daily Capacity Notification Scheme” takes the form of e-mail by Hong Kong to notify Taipei and Fukuoka of the runway capacity of HKIA since 26 October 2011. While this first-stage trial as an alternative to “paper trial” is commenced, the operation for actual air traffic flow management requirement remains the current practice of pre-coordinating between duty supervisors of Hong Kong and Taipei, and subsequently between those of Taipei and Fukuoka ATMC.

2.4 Item No 3-5: Upon the request of JCAB to submit the common report form for air traffic flow management in East Asia for this meeting, Taiwan provides the data of statistics for the year of 2011 accordingly.

2.5 Item No 4-1: Taiwan signs MOU for the trial of reduction to 20 NM longitudinal spacing on A1/M750 with Hong Kong and Fukuoka respectively, starting simultaneously from 28 July 2010 till 1 January 2011, with an extension further to June 2011. This operation has been adopted into LOA with Fukuoka, effective as of 25 May 2011; the one with Hong Kong is effective as from 15 June 2011.
For the south side of Japan, the trial of the same operation applies to ATS Routes of R583, R595 and G581 after coordination and signing of an MOU between Naha ACC and Taipei ACC, with effective from 25 August 2011. The MOU also covers the newly-established J5 transition, with the new common reference point of GUMBO, being effective the same date as that of MOU.

2.6 Item No 4-2: The progress of flight level restriction on G581/G86 will need further coordination at this meeting.

2.7 Item No 4-3: Taiwan signs MOU for the trial of radar handoff on B576 with Fukuoka, starting from 15 July till 15 October 2011, and is further extended to 25 May 2011, when the operation is formally adopted into LOA between Fukuoka and Taipei.
For the part with Hong Kong, both sides sign MOU for the trial application of five minutes minimum longitudinal spacing for flights from Hong Kong FIR and transiting Taipei FIR for B576, reducing the separation standard from ten minutes to five minutes, effective as of 1 July 2011. It should be noted that the MOU also applies to special traffic arrangement of KPALI between 1700 and 2200UTC, during that specific time frame traffic eastbound is confined solely to flights landing Taipei FIR or transiting to Fukuoka FIR onward via HCN G581 IGURU. Both operations facilitate controllers of more flexible and advantageous handling of traffic flow in their own airspace.

2.8 Item No 4-4: The offset to the north of original J5 transition is implemented on 25 August 2011, as mentioned above in 2.5. The data shows the westbound movement via GUMBO at the beginning stage is around two flights weekly during the summer schedule period.

3. DISCUSSION

3.1 The meeting is invited to note the progress made among FIRs for solving each concerning issue mutually.

The Fifth Meeting of the East Asia ATM Coordinating Group (EATMCG/5)
Hong Kong, China, 18-20 April 2012

REDESIGNATION OF ATS ROUTE B348 TO RNAV ROUTE M646

(Presented by the Philippines)

This paper provides details on the re-designation of ATS route B348 to RNAV route M646 in the Manila FIR..

1. INTRODUCTION.

1.1 On 27 August 2010, the South East Asia Route Review Task Force identified certain conventional routes that were retained without changes to the separation minima. Consequently, mixed separation minima existed between routes with similar alignment.

1.2 ATS service providers of the South China Sea; in particular Malaysia, Singapore and the Philippines agreed to re-designate the ATS route B348 to RNAV route M646 with a minimum navigation performance of RNP 10 so as to improve safety and efficiency, taking into consideration the evolving technologies in aviation.

2. RNP 10 NAVIGATION REQUIREMENTS

2.1 An aircraft that is unable to meet the minimum navigation requirements for RNP 10 may file flight plan on M646 but would have to be restricted to FL280 or below.

2.2 Pilots of aircraft meeting RNP 10 navigation requirements must indicate /R in Item 10 of the ICAO Flight Plan.

2.3 Pilots must advise ATC of any deterioration or failure of navigation systems below the navigation requirements for RNP 10. ATC shall then provide alternate separation and/or alternative routing.

3. MONITORING OF AIRCRAFT NAVIGATION PERFORMANCE

3.1 Monitoring of aircraft navigation performance is a joint responsibility between operators, States of Registry or States of Operators (as applicable), regulatory authorities and the ATS providers. The detection and reporting of non-

conformance with the navigation requirements against the following parameters will rely primarily on radar monitoring by ATC units:

Lateral deviations:

i. deviation of 15 NM or more from the track centreline based on radar observations.

Longitudinal deviations:

i. where time separation is applied by ATC – when the reported separation based on ATC verified pilot's estimates vary by 3 minutes or more from the expected separation at the reporting point; or

ii. where a distance based standard is applied by ATC based on ADS, radar observation or RNAV distance reports – when the distance varies by 10 NM or more from the expected distance.

3.2 ATC will advise the pilot-in-command when such deviations are observed and implement the required investigation procedures.

3.3 The ATC authorities will investigate the causes of such deviations in conjunction with the aircraft operator and the State of Registry, or the State of the Operator, as applicable.

4. SEPARATION MINIMA

4.1 Lateral Separation Minima:

i. lateral separation minima of 50 NM may only be applied between aircraft equipped in accordance with RNP 10 navigation requirements.

4.2 Longitudinal Separation Minima:

i. longitudinal separation of 80 NM RNAV or 10 minutes (or less) Mach Number Technique (MNT) separation minima may be applied between aircraft equipped in accordance with RNP 10 navigation requirements.

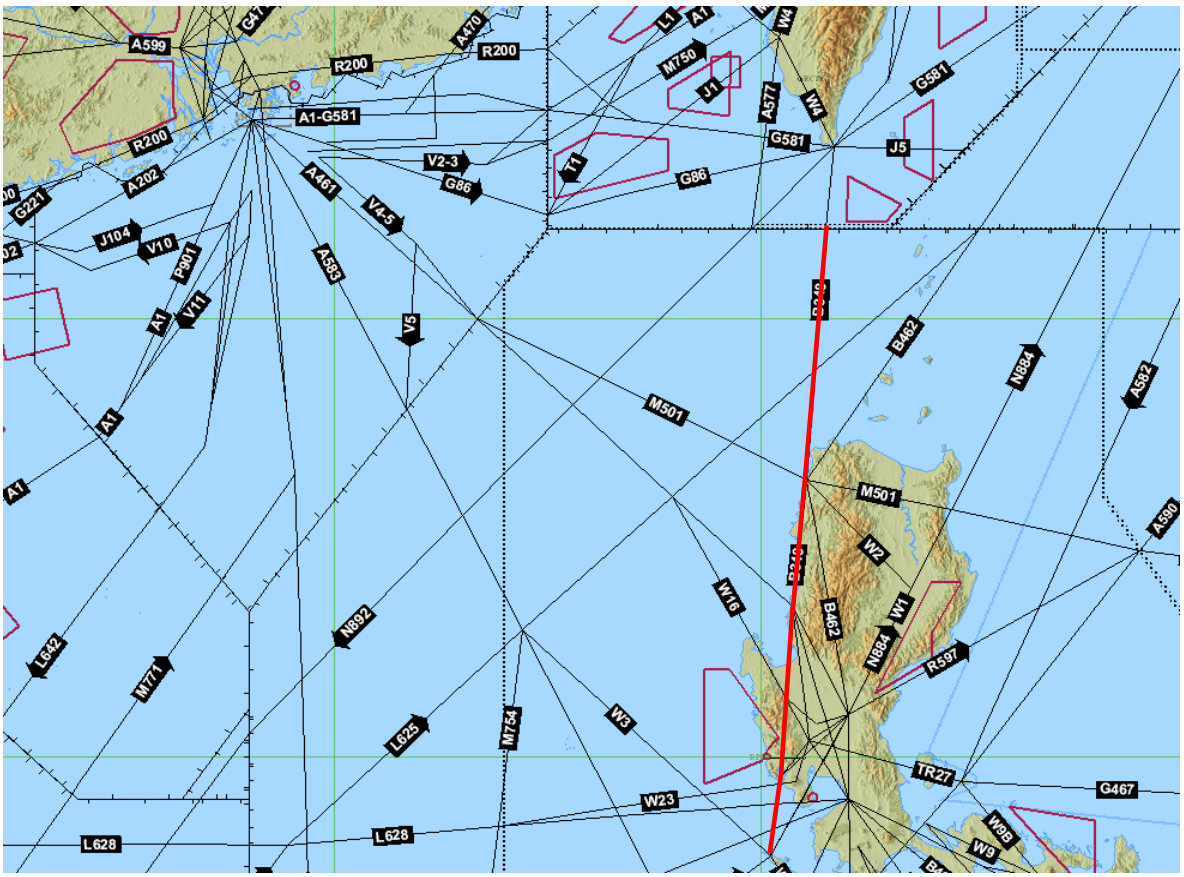
5. IMPLEMENTATION DATE

5.1 The above upgrading will occur on 03/05/2012 and in most cases only the route designator and RNP requirement will change. Transition and data management plan will be established in order to ensure that aircraft in flight during the change will continue to be processed based on the filed flight plan.

5.2 A trigger NOTAM will be issued to notify the effective date of implementation.

6. ACTION BY THE MEETING

The Meeting is invited to take note of the upgrade and the re-designation of ATS Route B348 to RNAV Route M646.



THE FIFTH MEETING OF THE EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)
(Hong Kong, China 18 – 20 April 2012)

RNAV DESIGNATION OF PBN ROUTE M750
(Prepared by Hong Kong)

SUMMARY

This paper provides the meeting with the information on the designation of Airway M750 as RNAV 5 Route between Hong Kong ATCC and Taipei ACC.

1. HISTORY

1.1 In the 4th meeting of the East Asia ATM Coordination Group, Hong Kong agreed to study feasibility of RNAV designation of the PBN Route M750 and would target to implement RNAV 5 on the portion of M750 in the Hong Kong FIR.

2. Discussions

2.1 Following the meeting, Hong Kong reviewed the requirements of the RNAV designation. It was found that the criteria were met. However, it was not possible to implement the designation in October or November 2011. After coordination with Taipei ACC, it was agreed to designate M750 as RNAV5 Route on 12 January 2012.

2.2 Due to internal work commitments, the PBN route M750 was officially designated as RNAV5 Route on 9 February 2012.

3. Recommendation

The meeting is invited to note the content of this paper.

-End-

THE FIFTH MEETING OF THE EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)
(Hong Kong, China 18 – 20 April 2012)

AIDC DEVELOPMENT
(Prepared by Hong Kong)

SUMMARY

This paper provides the meeting with the information on the development of AIDC operations between Hong Kong ATCC and Taipei ACC.

1. HISTORY

1.1 In the EATMCG/4 meeting, Japan reported safety benefits gained after introducing AIDC operations with Korea. Taipei also reported their planned commission of a new Air Traffic Management System which was AIDC ready. Hong Kong and Taipei showed interest in implementation of AIDC operation in EATMCG/4. Taipei also requested other ACCs to assist in testing the AIDC functions in their newly acquired ATMS.

2. Details

2.1 Subsequent to the commission of the Taipei new ATMS and testing of the AIDC systems between Hong Kong ATCC and Taipei ACC, a meeting between the two parties were held in November 2011. The meeting concluded that (i) some technical problems had been encountered during the tests between the two AIDC systems and solutions identified by Hong Kong and Taipei required some software changes in the Taipei system; (ii) tentative implementation schedule was drawn up with an aim to conduct AIDC trial operations in Q2 2012.

2.2 Hong Kong made a safety assessment which concluded that with certain limitations, the safety risk of AIDC operation between Hong Kong and Taipei was small. Hong Kong suggested and Taipei agreed that AIDC operation would be limited to 4 message types, i.e. EST, ACP, LAM, LRM, during initial operation, and would extend to more advance applications with the Hong Kong new ATMS, targeted for commissioning in 2013.

2.3 A Memorandum of Understanding (MOU) for AIDC operation between Hong Kong ATCC and Taipei ACC has been drafted. Currently the details in the MOU are being finalised.

3. Recommendation

The meeting is invited to note the information in this paper.

-End-

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THE FIFTH MEETING OF THE EAST ASIA AIR TRAFFIC MANAGEMENT COORDINATION GROUP (EATMCG)
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