

出國報告（出國類別：其他）

參加國際空運協會
第 139 屆時間帶協調會議報告

服務機關：交通部民用航空局

姓名職稱：杜怡萱科員

派赴國家：美國亞特蘭大

出國期間：105.11.5 至 105.11.12

報告日期：106.2.12

目錄

壹、前言	2
貳、我國機場時間帶協調情形	3
一、2017 年夏季時間帶協調參數	3
二、會議期間洽我國協調時間帶之航空公司	4
三、時間帶協調情形	5
參、會議期間相關子會議	6
一、國際機場時間帶協調人團體第 26 次會議 (WWACG/26) ..	6
二、主管會議(HODM/21)	7
三、亞太地區機場協調人團體會議(APACA)	9
伍、心得與建議	12
附件	
附件一、第 139 屆時間帶協調會議備忘錄	
附件二、WWACG/26 會議議程	
附件三、HODM/21 會議簡報資料及會議紀錄	
附件四、HODM/21 會議表決結果	
附件五、APACA/13 會議議程與簡報資料	
附件六、APACA/13 會議紀錄	

壹、前言

鑒於亞太地區經濟大幅成長，全球航空客貨運量持續增加，致各國機場日見擁擠，又航空公司對航線、班表之安排，尚須考量目的機場之設施容量，且班表之安排及調整亦需考量其他機場所產生的連鎖效果，國際空運協會（International Air Transport Association, IATA）為改善航班延誤情況，爰透過協調方式將各航空公司之航班於各機場所需的到離時間予以適度隔離，並自 1974 年起每年召開兩次時間帶協調會議（Slot Conference, SC），航空公司代表就其所需之時間帶，與民航主管機關授權之機場時間帶協調人面對面協調溝通或交換，協調人均儘可能滿足各航空公司需求，並確保時間帶協調作業公正透明。

目前時間帶協調會議固定於每年 6 月及 11 月召開，其中 6 月的會議主要係協調冬季班表期間(每年 10 月最後一個週日至翌年 3 月最後一個週日之前一日)各機場之時間帶，11 月的會議則在協調次年夏季班表期間(每年 3 月最後一個週日至 10 月最後一個週日之前一日)各機場之時間帶。

本（第 139）屆時間帶協調會議於 2016 年 11 月 7 日至 11 日於美國亞特蘭大舉行，主要係協調 2017 年夏季（S17）班表期間（2017 年 3 月 26 日起至 2017 年 10 月 28 日止）之時間帶。（會議備忘錄如附件一）

目前桃園及高雄機場時間帶協調業務係由本局委託時間帶協調中立機構（台北市航空運輸商業同業公會國際機場時間帶協調中心）辦理，松山機場時間帶則由本局協調，透過實際參與國際時間帶協調事務，與參加各子會議研討 WSG(Worldwide Slot Guidelines, WSG)修訂提案，獲得最新修訂結果，並藉由會場中與各國代表交流機會，交換時間帶協調經驗。

以下就會議期間我國機場時間帶協調情形及相關子會議討論內容進行說明。

貳、我國機場時間帶協調情形

本次會議期間協調包括桃園、高雄及松山等 3 個機場(2017 年夏季班表(S17)之時間帶(S17 季班表自 2017 年 3 月 26 日起至 2017 年 10 月 28 日止)，以下依序說明我國桃園、高雄及松山等 3 個機場時間帶協調參數，其次介紹會議期間洽我國協調時間帶之航空公司，最後則分別說明 3 個機場之時間帶協調情形。

一、2017 年夏季時間帶協調參數

(一) 桃園國際機場

1. 跑道

S17 季採雙跑道作業，每小時起、降各 30 架次；起降合計每一小時不超過 50 架次，每二小時不超過 90 架次。

2. 停機坪

作業機坪於 20:00~05:59(LT)時段客機為 53 個、貨機 21 個，其餘時段則為客機 59 個、貨機 21 個。

(二) 高雄國際機場

1. 跑道：國際航線每小時起降合計 20 架次/時。

2. 旅客航廈：入境旅客 2,000 人次/時，出境旅客 1,800 人次/時；尖峰時段 06:30~08:00(LT)、13:00~15:00(LT) 為 1,700 人次/時。

(三) 松山國際機場

1. 每一出境航班之最小隔離時間為 20 分鐘，如 2 航班中含 1 架 E 類航空器，其最小隔離時間為 30 分鐘；如 2 架均屬 E 類航空器，則最小隔離時間為 60 分鐘。

2. 每一入境航班之最小隔離時間同出境航班。

3. 晚上 8 時以後不再增加 A330 型航空器起降。

三、時間帶協調情形

(一) 桃園機場

1. 桃園機場雖已經恢復雙跑道運作,但多數航空公司仍向協調人洽詢所需時間帶是否有剩餘,協調人先就需求再予檢視後,向航空公司說明,並提供目前時間帶使用分布狀況供航空公司攜回參考,協調人告知將紀錄航空公司需求並列入等候名單,如會議期間他航歸還時間帶,會依序通知。
2. 部分未獲原規劃時間帶航空公司,已向其說明我國高雄機場尚有剩餘時間帶以及機場宵禁時間之相關限制,建議可攜回參考。
3. 多家航空前來詢問機場起降尖峰分布狀況,協調人除詳細說明外並提供書面 Notice of Airport Capacity(NAC)資料供參。

(二) 高雄機場：部分航空公司瞭解桃園機場已無剩餘時間帶後,轉而詢問高雄機場尖峰時段時間帶使用狀況,協調人同樣進行檢視並詳細說明,另提供目前時間帶使用狀況書面資料供攜回參考。

(三) 松山機場:

1. 四川航空、日本航空公司及全日空詢問 S17 時間帶 SAL 分配結果,表達希望儘早收到回覆,以利班表排定,已答覆本局將於近日公布。
2. 部分航空公司詢問未來加入松山機場營運之可行性,本局告知目前松山機場尚無剩餘容量,若未來有機會,會依航權分配結果,供航空公司申請使用。

參、會議期間相關子會議

本次時間帶協調會議期間，安排 3 項子會議，包括：國際機場時間帶協調人團體 (Worldwide Airport Coordinators Group, WWACG) 會議、主管會議 (Heads of Delegation Meeting, HODM) 及亞太地區協調人會議 (Asia/Pacific Airport Coordinators Association, APACA)，邀集時間帶協調單位及航空公司代表參加，以了解時間帶相關業務之發展，會議內容摘述如下：

一、國際機場時間帶協調員團體第二十六次會議 (WWACG/26)

國際機場時間帶協調人團體 (Worldwide Airport Coordinators Group, WWACG) 會議於 11 月 7 日下午 15:30 舉行，由各國際機場協調單位之主管代表參加，會議議程及會議紀錄詳附件二及附件三，內容摘要如下。

(一) 介紹新會員及指派會議秘書 Ms. Petra Popovac。

(二) 前次會議紀錄無異議通過。

(三) 2017 年財務報告

Mr. Gallistl 報告 2017 年會費支用狀況，其中最大筆費用為網站維護。

(四) JSAG/51 及 JSAG/52 報告

1. SSIM 第 6 章工作小組已完成審查工作，SSIM 將於 2017 年 3 月發布。
2. 第 8 版 WSG 將於 2017 年 1 月 1 日發布。
3. SPWG 和 JSAG 表示發送 SAL 之後的活動(post SAL activity)是一項成功的改變，允許在 SC 前能有更多的互動。
4. SAL 截止日為當天發送時間帶的日期，而非截止日期。爰建議可在 SAL 處理完成後立即發送。

(五) WWACG 相關事項

1. 主席簡介新協會條款草案的大綱，說明第 3 條 (範圍)，第 4 條

(成員)，第 7 條 (成員費)，第 9 條 (大會)，第 11 條 (表決，法定人數) 和第 12 條 (董事會) 等條款草案的主要部分。

2. 目前計畫將新協會登記於加拿大蒙特婁。

3. 通過將協調參數納入 WWACG 文件。

(六)區域協調組織報告:均無特殊事項報告。

(七)其他報告:無。

(八)下次會議日期/時間和地點:2017 年 6 月 12 日起於吉隆坡舉辦。

二、 主管會議(HODM/21)

主管會議 (Heads of Delegation Meeting - HODM) 於 11 月 10 日下午 14:00 舉行，由航空公司及協調單位主管代表參加。會議簡報及會議紀錄詳附件四及五，主要內容摘述如下：

(一) 議程一:行政

Ms.Lara Maughan(IATA) 歡迎與會人員並邀請大家積極參與。

(二) 議程二:未來 SC 會議

1. SC140 於馬來西亞吉隆坡舉行，SC141 於西班牙馬德里舉行，SC142 於加拿大溫哥華舉行，SC143 於韓國仁川舉行。

2. IATA 建議 WSG 至少涵蓋 4 季的協調行事曆，即使 WSG 18 個月以上沒更新仍有此資訊可用。

3. 2017 年預算為每次每位代表 100 美元，但 IATA 會努力將費用盡可能降至每次每位代表 50 美元。

(三) 議程三: WSG 策略審查

1. Mr. Zahariev 說明 WSG 策略審查流程，並簡述在本次 SC 期間舉辦的研討會。

2. 航空產業發展趨勢：

(1) 2015 年全球 43%的乘客使用有協調的機場。

(2) 一年的國際乘客數為 15 億人次。

(3) 航空業提供旅客連通全球的服務。

3. IATA 指出雖然目前歐洲機場最為壅塞，惟全球航空需求將朝向東

邊移動，未來中國、印尼和印度將成為世界最佳航空市場之一。預測至 2030 年全球客運量將達 70 億人次。IATA 強調在制定相關政策和擬定程序時需考慮這項重要變化，以備未來成長。

4. 策略審查目標：
 - (1) 加強 WSG 的原則。
 - (2) 確保政策和程序之關連性。
 - (3) 加強全球單一處理過程之效益。
 - (4) 確保得到所有利益相關者的支持。
5. Mr. Zahariev 強調策略審查不是重寫 WSG，而是持續改進，使所有利益相關者在單一處理過程中受益。
6. 本次共 55 人參加為期兩天的研討會，有來自所有地區的協調人、航空公司和機場人員。

(四) 議程四: JSAG 報告

1. 歡迎 JSAG 新成員 Mr. Takayuki Asai (全日空)。
2. Mr. Petrykowycz 感謝 SSIM 第 6 章工作小組完成審查工作，特別是 Ms. Boyce 的領導能力，SSIM 將於 2017 年 3 月發布。
3. IATA 感謝 Ms. Krenzin (Fhkd) 和 Mr. Watt (AA) 對 WSG 第 8 版的貢獻。鼓勵各位將 WSG 的任何不明確處提交 slots@iata.org。
4. SPWG 和 JSAG 表示發送 SAL 之後的活動(post SAL activity)是一項成功的改變，允許在 SC 前能有更多的互動。
5. Petrykowycz 提出 SAL 截止日為當天發送時間帶的日期，建議可於 SAL 處理完成後立即發送。

(五) 議程五: 第 8 版 WSG

1. Ms. Maughan 建議微調第 8 版 WSG 草案; 8.1.1 (i) 包含 “and among” 文字引起混淆，因此 JSAG 同意刪除此更改。
2. 第 8 版 WSG 將於 2017 年 1 月 1 日發布。

(六) 議程六: 其他事項

1. SC 工作人員資料更新; OAS 通訊錄。
2. Ms. Raitssidis 介紹線上認證系統 (OAS)。該系統的好處是提供註冊和認證者的通訊資料庫。Ms. Raitssidis 鼓勵各位主管應清理其工作人員名單，以保持簡潔和最新的資料庫。

(七) 其他事項：

與會人員質疑會議場地篩選過程的透明度，Ms. Raitisidis 解釋 SC 會議場地的篩選過程及會費的使用範圍。

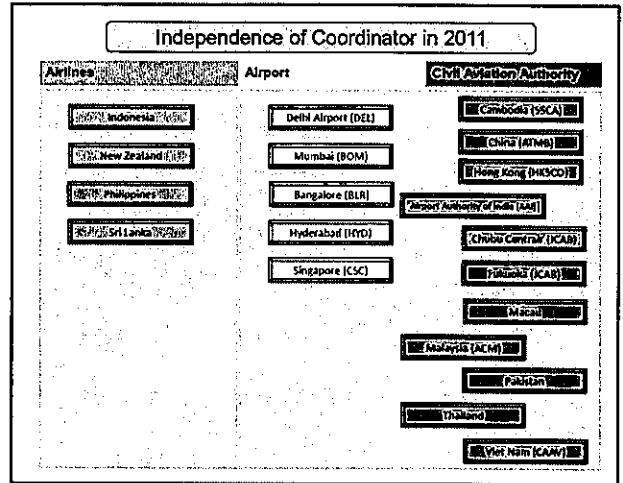
三、亞太地區機場協調人團體會議

亞太地區協調人第十三次會議 (Asia/Pacific Airport Coordinators Association, APACA) 於 11 月 8 日 17:00 舉行，由亞太地區機場協調人與時間帶調度員參加。會議議程及會議紀錄詳附件六、七。主要內容如下

- (一) 本次會議參與人員來自 10 個經濟體，13 個單位，共 27 名。
- (二) 議程一：第十二次會議會議紀錄無異議通過。
- (三) 議程二：國際民航組織(ICAO)第 39 次大會
 - 1. ACI 的 WP/231 號文件建議 ACI 參與製定 WSG 和審查 WSG 當前的時間帶定義，亦提及 80/20 (U/L 計算) 審查，將依航班準點率 (OTP) 執行歸還歷史時間帶。
 - 2. IATA 的 WP/340 號文件為現行計劃提出回應，以確保包含所有利益相關者如國家、機場、航空業者、時間帶協調人及航管之利益不受損。
 - 3. ACI 和 IATA 都向經濟委員會提出意見，並同意一起合作促進更有效之時間帶分配。委員會最後指出，ACI 和 IATA 將與各國及業內相關者合作，並於大會下屆會議報告。

(四) 議程三－協調人的獨立性

1. Mr. Takeda 提報 2011 年亞太地區協調人的情況，說明自 2011 年以來的過渡性發展，接著並介紹 WSG (11.14) 所提協調人獨立性的最佳做法與不良做法。



2. 亞太地區目前僅有四個獨立協調人：澳洲 (ACA)，台北 (ACT)，日本 (JSC) 和印尼 (IASM)。

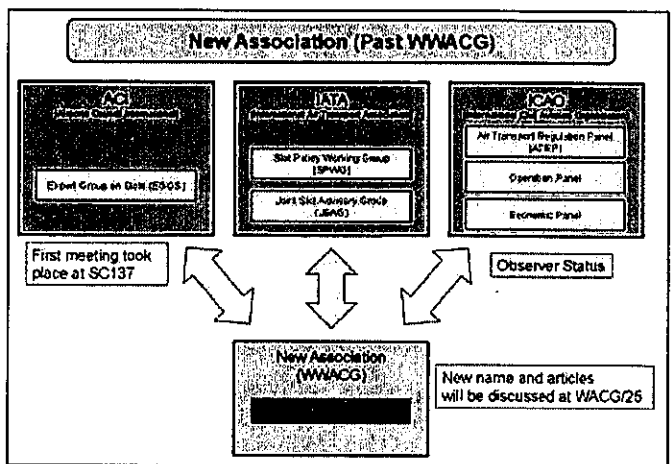
紐西蘭的協調服務由英國 ACL 提供，菲律賓則是由澳洲 ACA 提供。

3. 其中有 1 個協調人是國營航空負責，6 個協調人由機場負責和 10 個協調人由亞太地區的民航當局負責。

4. Mr. Takeda 強調設立獨立協調人的重要性，以中立、透明和公正的方式提供協調服務。實質上，協調人應該獨立於航空公司、機場甚至政府。

(五) 議程四－新協會條款草案

1. Mr. Takeda 提報新協會條款草案的大綱。在過去兩次 APACA 會議曾討論建立更正式、更健全組織的重要性。由於新協會 (過去的 WWACG) 的工作範圍正逐步擴大到與 ICAO 和 ACI 等其他國際組織進行交流，因此需要更正式和良好的組織。



2. Mr. Takeda 說明第 3 條 (範圍)，第 4 條 (成員)，第 7 條 (成員費)，第 9 條 (大會)，第 11 條 (表決，法定人數) 和第 12 條 (董事會) 等條款草案的主要部分。

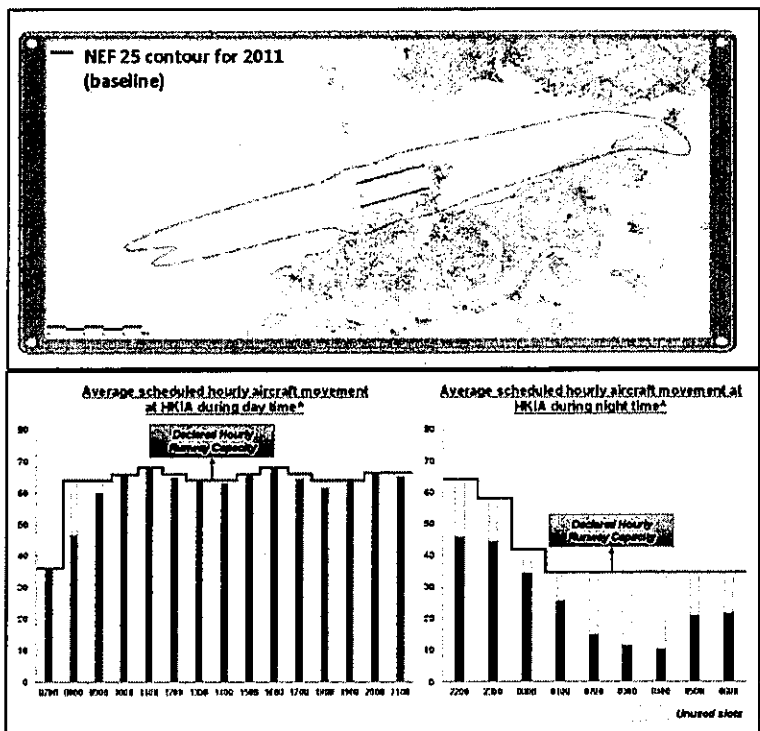
- 與會者對於是否有意願成為新協會的會員表示尚需進行內部協調。

(六) 議程五：WWACG 時間帶指南 (協調參數)

- 有關前次會議中 Mr. Takeda 表示協調參數的定義已多次於 APACA 會議被提出(協調參數附加解釋的文件包括環境限制、航管、跑道容量、停機坪容量和航站容量等)，相較於 WSG 相關文件更適合放入 WWACG 文件當中，由於雙方成員均無反對或修改意見，爰該草案已在亞特蘭大 WWACG / 26 會議獲得批准。
- Mr. Takeda 感謝與會者為實現此目標所做的貢獻，並指出亞太地區應繼續為 WACACG 在其他領域開發新的時間帶指導方針。

(七) 議程六：香港國際機場噪音限額試驗計劃

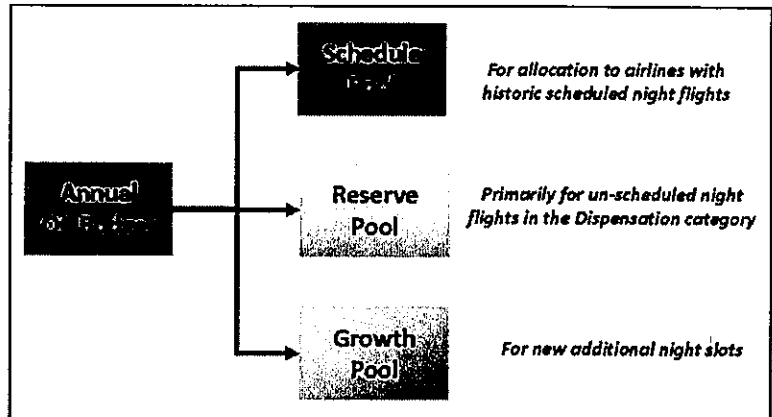
- 香港協調人 Ms. Birdie Yuen 說明香港國際機場 (HKIA) 的噪音限額試驗計畫，香港機場管理局 (AAHK) 以香港國際機場 2011 年鄰近之噪音值為基準，承諾在第三條跑道計算 NEF 時，以不超過 2011 年以兩條跑道營運之數據為原則。



- 另以該機場日間與夜間時間帶使用情況來看，上午 7 時至下午 9 時的日間時段幾乎無剩餘時間帶，晚間 10 時至隔日上午 6 時 59 分，尚有部分未使用的時間帶主要係因環境限制無法分配。另根據機場每年 42 萬架次的最大實際容量，夜間時間帶只有 20% 可以分配，為利監測夜間噪音及更有效利用夜間時間帶，在不降低目前的 NEF 下，AAHK 決定納入噪音配額數 (QC) 計畫。QC 根據噪音發射的測

量將當前的波音和空中巴士分為 7 個噪音頻段。

3. 年度 QC 預算由三個部分組成：
- (1)、時間表(航空公司根據其在 S16 / W16 的歷史航班時間獲得年度 QC 配額的總額。他們可以透過引進更低噪音



的飛機來調整機隊組合，並在配額範圍內增飛航班)。(2)、保留部分(適合不定期的夜航，如國家 VIP、救援、軍用飛機和緊急情況)。(3)、增加部分(包含由於航空公司開發低噪音的飛機而所省下的 QC 配額數，或取消的時間帶)，若航空公司超過其批准的 QC 計畫，則將徵收罰金。

4. 目前正在進行審查：AAHK 密切監測 QC 試驗計畫的績效，確保達到目標，在實施 QC 試驗計劃一年後進行中期審查，以便早日完成該計畫，另民航處會繼續追蹤機場附近噪音監測站的飛機噪音影響。
5. 會後記錄：根據航空公司的意見，機場管理局正在完成該計畫，並會在確認實施前與航空公司進一步協商。

肆、心得與建議

- 一. 本次亞太地區機場協調人團體會議(APACA)中，其時間帶協調參數之定義包括環境限制、航管、跑道容量、停機坪容量和航站容量等已於本次 WWACG / 26 會議獲得批准，考量目前我國桃園機場之協調參數僅包括跑道及停機坪，爰建議未來時間帶協調中心可持續瞭解相關機場時間帶協調參數作法，以作為後續研議是否調整時間帶協調參數之參考。
- 二. 目前桃園機場因陸續進行滑行道整修及空橋汰換工程致桃園機場過夜機坪減少，部分航空公司反映因無過夜機坪致無法取得時間帶，經協調後桃園機場將部分較大型之停機坪調整為中小型停機坪供其使用。建議桃

園機場往後若有相關整建工程影響停機坪時，可預先規劃過夜停機坪彈性使用之可行性，以增加航空公司飛航我國機場之意願。

- 三. 時間帶會議舉行期間 IATA 亦提供航空相關產業之展覽場地，各國知名機場皆藉由發送精美紀念品或相關文宣行銷其機場吸引航空公司將其列為增開新航點或商業往來之合作對象，進而增加機場收益考量；為增加我國在國際上之能見度，建議桃園國際機場或高雄航空站可於會場設置攤位吸引外籍航空公司來臺新闢航班提升我國機場知名度促進國際間交流合作。



SC139 Convening Memorandum

TO: Head Delegates (HODs)
FROM: Head Worldwide Airport Slots
DATE: 8th August 2016
SUBJECT: 139th Slot Conference 8 – 11 November 2016

The 139th Slot Conference for the Northern Summer Period, 26 March 2017 to 28 October 2017 is hereby convened as follows:

Dates

Registration	: Mon	7 November	09:00 - 18:00
Conference opens	: Tue	8 November	08:00 - 18:00
Conference times	: Wed - Fri	9 - 11 November	09:00 - 18:00

Venue

Sheraton Atlanta Hotel
165 Courtland Street NE
Atlanta
GA, 30303
United States

Calendar of Slot Activities

Delegates are to note the Calendar of Slot Activities (pdf) deadline dates for the Summer and Winter Period.

Online Registration

Conference registration, hotel reservation, visa letter requests and payment (delegate registration fee 50 USD is completed in one online process. Accepted methods of payment are via IATA Clearing House or credit card. Payment by bank transfer will incur an additional \$100.00 USD to cover bank processing fees.

Delegates are strongly encouraged to register as soon as possible, but no later than **Wednesday 5th October 2016**. After this time the IATA group rate cannot be guaranteed and the Appointments Calendar (AppCal) access will be delayed.

Online Accreditation System (OAS)

Head Delegates can add, edit and remove their delegation's details using OAS. Once a delegate has been accredited by their HOD a new email from iatasc@worldTEK.com will be

www.iata.org/slots



sent directly to the delegate (within 48 hours Mon – Fri) giving details of how to register online, request a visa letter (if required) make hotel reservations and pay to attend the Slot Conference. New HODs should follow the link to [OAS](#), add their email address under 'Request for Accreditation of new HOD' and follow the step by step instructions. For more information and instructions please visit the [help section](#).

Visas

Delegates are reminded that it is their individual responsibility to obtain a valid visa to attend the Slot Conference. Please ensure you check your visa requirements as soon as possible to prevent any delay in your visa application. For guidance and further information delegates should consult the following link [IATA Travel Centre](#).

Delegates requiring a letter of invitation to attend SC139 in order to support their visa application should check the "Visa Letter Request" box when registering online and then follow the instructions. The deadline for the submission of the online Visa Invitation Request Form is **5th October 2016** after this date charges will apply.

Onsite Registration – Monday, 7th November from 09:00 – 18:00

Delegates will be able to collect their badges at the Georgia Booth located on level 1. AppCal workstations, printers and an area for any pre-conference team meetings will also be available at the Georgia pre-function area, near registration during this time.

We look forward to seeing you in Atlanta!

Best regards

Lara Maughan,
Head Worldwide Airport Slots
maughanl@iata.org | www.iata.org | [#slotconference](https://twitter.com/slotconference)



International Air Transport Association
33, Route de l'Aéroport, 1215 Geneva 15 Airport, Switzerland

www.iata.org/slots

WWACG / 26th Meeting : AGENDA

Date: Monday, November 7th, 2016 15:30 – 17:30 h
Place: USA, Atlanta, GA, Sheraton Atlanta, Savannah Meeting Room, Level 2

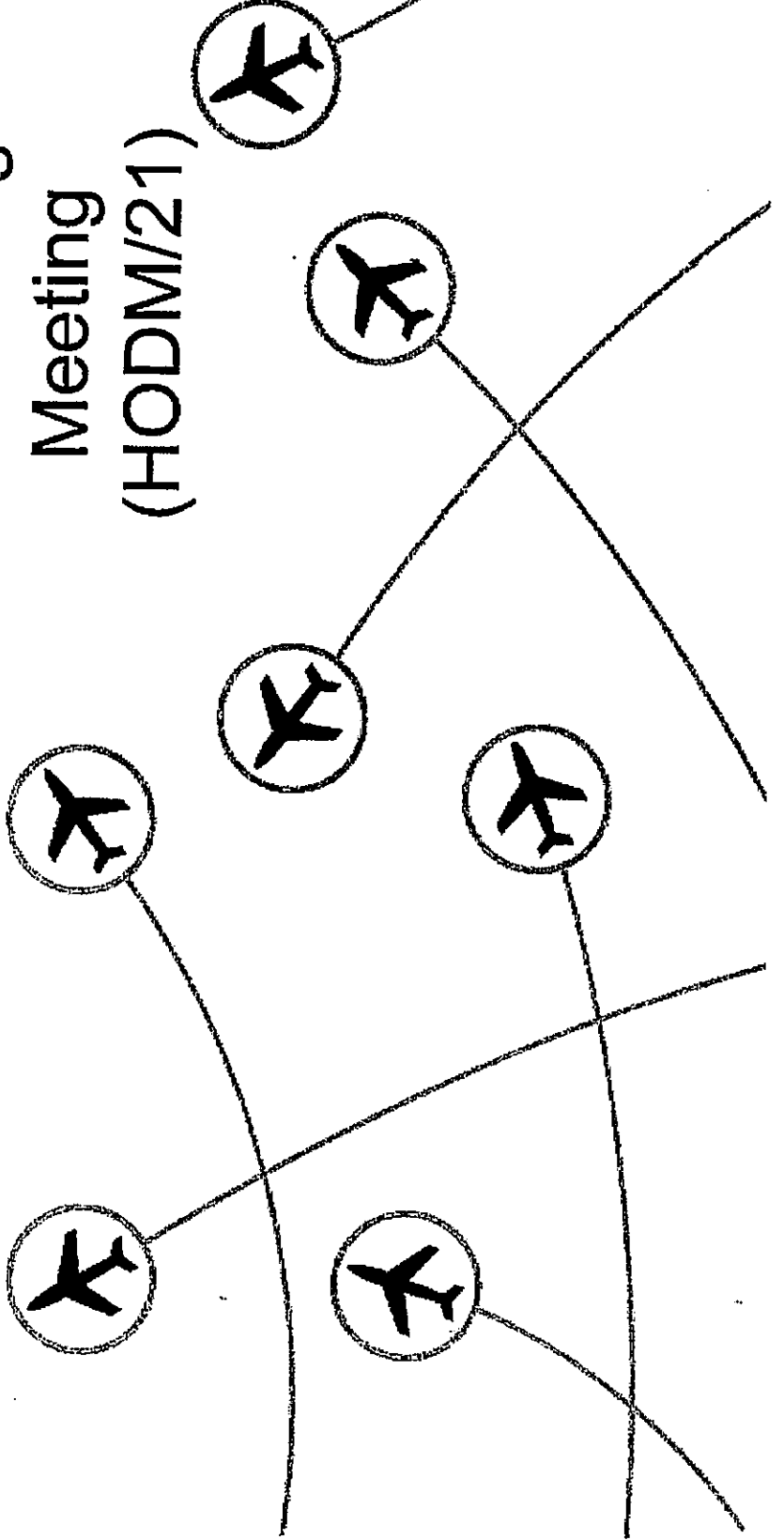
1. Welcome, new organisations, appointment of meeting secretary	EH
2. WSG Strategic Review Presentation	Dimiter Zahariev (IATA)
3. Notes WWACG/25 th , Hamburg	EH
4. Budget for 2017	WG
5. Debrief on JSAG/51 (GVA) and JSAG/52 (ATL) meetings	BM/PP
6. WWACG items <ul style="list-style-type: none"> • Feedback on Questionnaire to members • Presentation of Future Articles of the Formal Association • Place of incorporation and name • Adoption of the WWACG Slot Guidelines on coordination parameters • WWACG Slot Guidelines Work Program 	BK EH EH HT BK
7. ICAO matters: <ul style="list-style-type: none"> • Follow-up of the 39th Assembly 	EH
8. Update on Regional Coordination Issues <ul style="list-style-type: none"> • Asia - Pacific • Americas • Europe • Middle-East & Africa 	HT BM FWA PP
9. Any Other Business	All
10. Date/time and place of next meeting: Kuala Lumpur, Monday June 12 th , 2017 (15:30-17:30)	EH

WG: Wolfgang Gallistl
HT: Hiroki Takeda
BM: Brian Meeham
EH: Eric Herbane

BK: Birgit Krenzin
PP: Petra Popovac
FWA: Fred Wister



Heads of Delegation Meeting (HODM/21)





AGENDA

Agenda Item 1 – Welcome

Agenda Item 2 – Future conferences

- 2.1: 2017 & 2018 update
- 2.2: Calendar of Coordination Activities
- 2.3: SC Budget for 2017

Agenda Item 3 WSG Strategic Review

- 3.1 WSG Strategic review update and next steps

Agenda Item 4 – JSAG Report

- 4.1 Report from JSAG/52 meeting

Agenda Item 5 – WSG 8th edition

- 5.1 Endorsement of WSG 8th edition

Agenda Item 6 – AOB



Agenda Item 2: 140th – 143rd Slot Conferences

KLCC with Mandarin Oriental & Traders Hotel



Mandarin Oriental Rates:
Deluxe City View Room
815 RM (\$199 USD)
Twin Tower View Room
865 RM (\$211 USD)

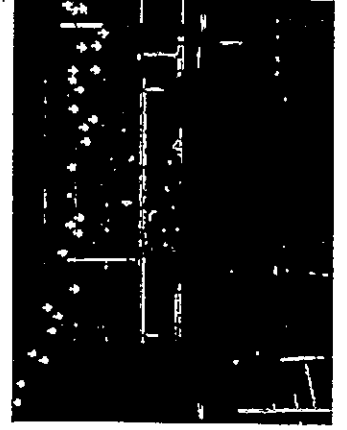
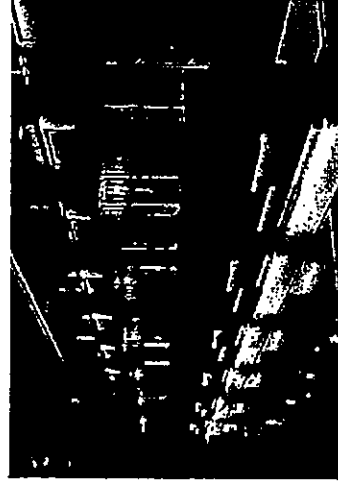
Trader Hotel Rates:
Deluxe City View
550 RM (\$134 USD)
Deluxe Garden View
590 RM (\$144 USD)
Deluxe Twin Tower View
620 RM (\$151 USD)

*All room rates include wireless internet and breakfast
but exclude 10% service charge and 6% GST.*

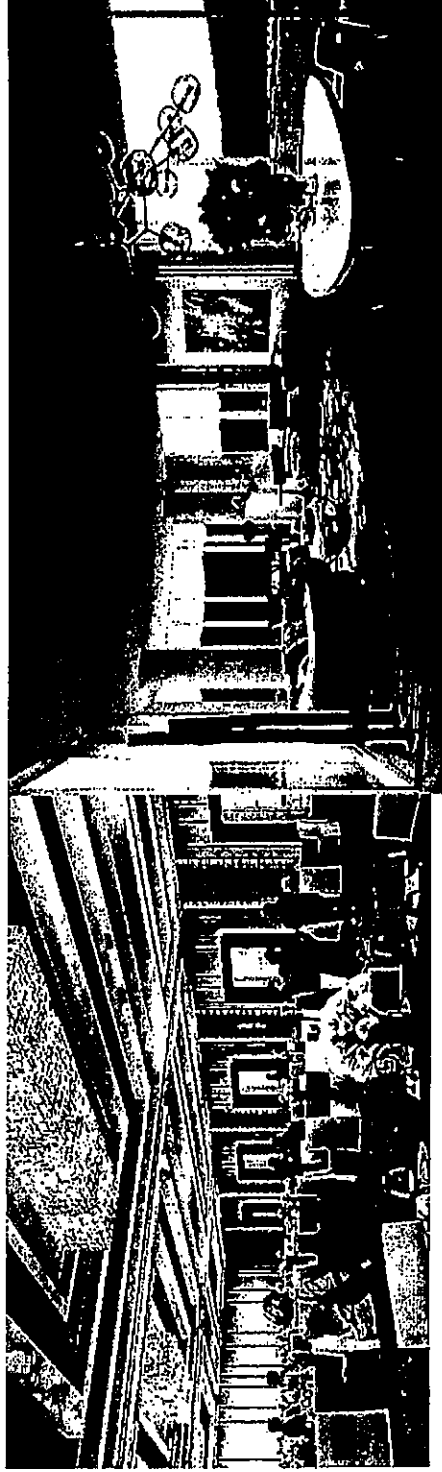
Madrid Marriott Auditorium Hotel & Conference Center



€176.36
(approx. \$198 USD)
Rate includes
breakfast, internet
but excludes 10%
VAT



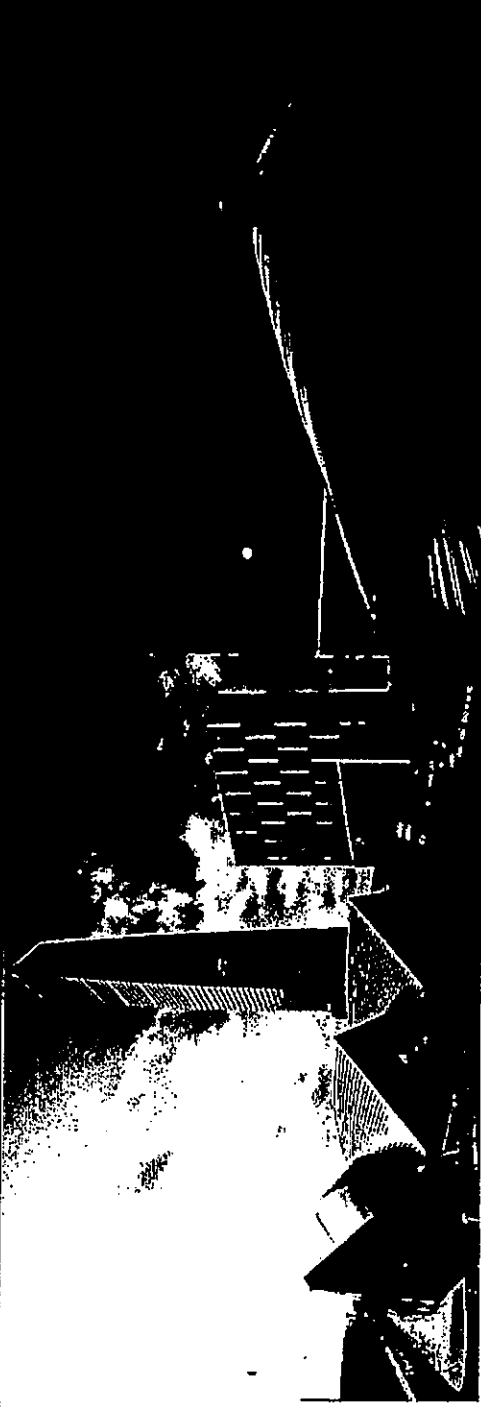
JW Marriott Parq Vancouver



319.00 CAD / \$249
USD

Rate includes breakfast &
internet but excludes state
and local taxes and fees
(currently 17.5%)

Songdo Convencia



Sheraton

approx. \$199 USD

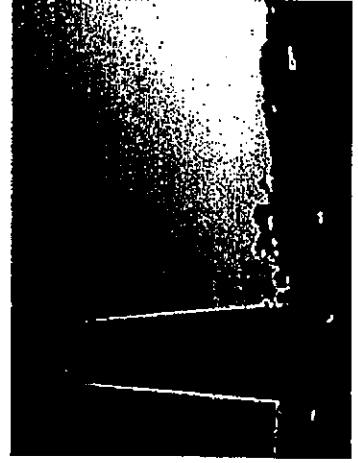


Both properties are
next to the
convention center

All rates are
inclusive of
breakfast, service
fee and taxes

Oakwood Premier

approx. \$166 USD





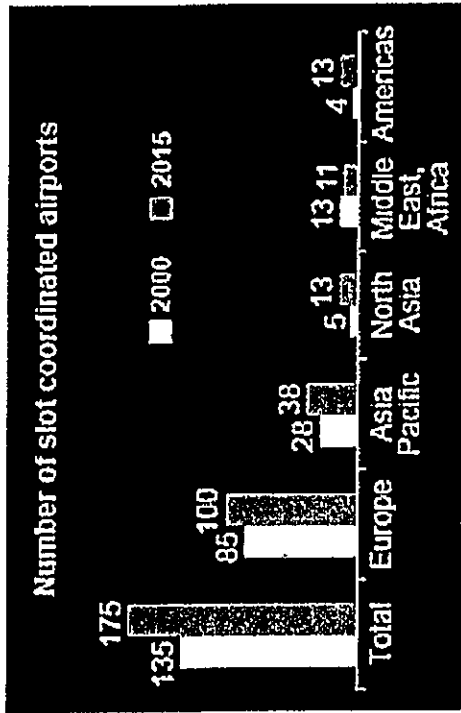
Summer	ACTIVITY	Winter
2017		2017/18
SC/139		SC/140
Atlanta		Kuala Lumpur
12 Sep 16	SHL Deadline	17 Apr 17
29 Sep 16	Agreed Historics Deadline	04 May 17
06 Oct 16	Initial Submission Deadline	11 May 17
25 Oct 16	AppCal opened to Coordinators	30 May 17
27 Oct 16	SAL Deadline (no later than)	01 Jun 17
31 Oct 16	AppCal opened to Airlines	05 Jun 17
08 Nov 16	IATA Slot Conference	13 Jun 17
15 Jan 17	Slot Return Deadline	15 Aug 17
31 Jan 17	Historics Baseline Date	31 Aug 17



3. WSG Strategic Review

3.1 WSG Strategic Review update and next steps

State of the industry



43% of total global passengers departed from a slot coordinated airport in 2015

Proportion of global slot coordinated airports

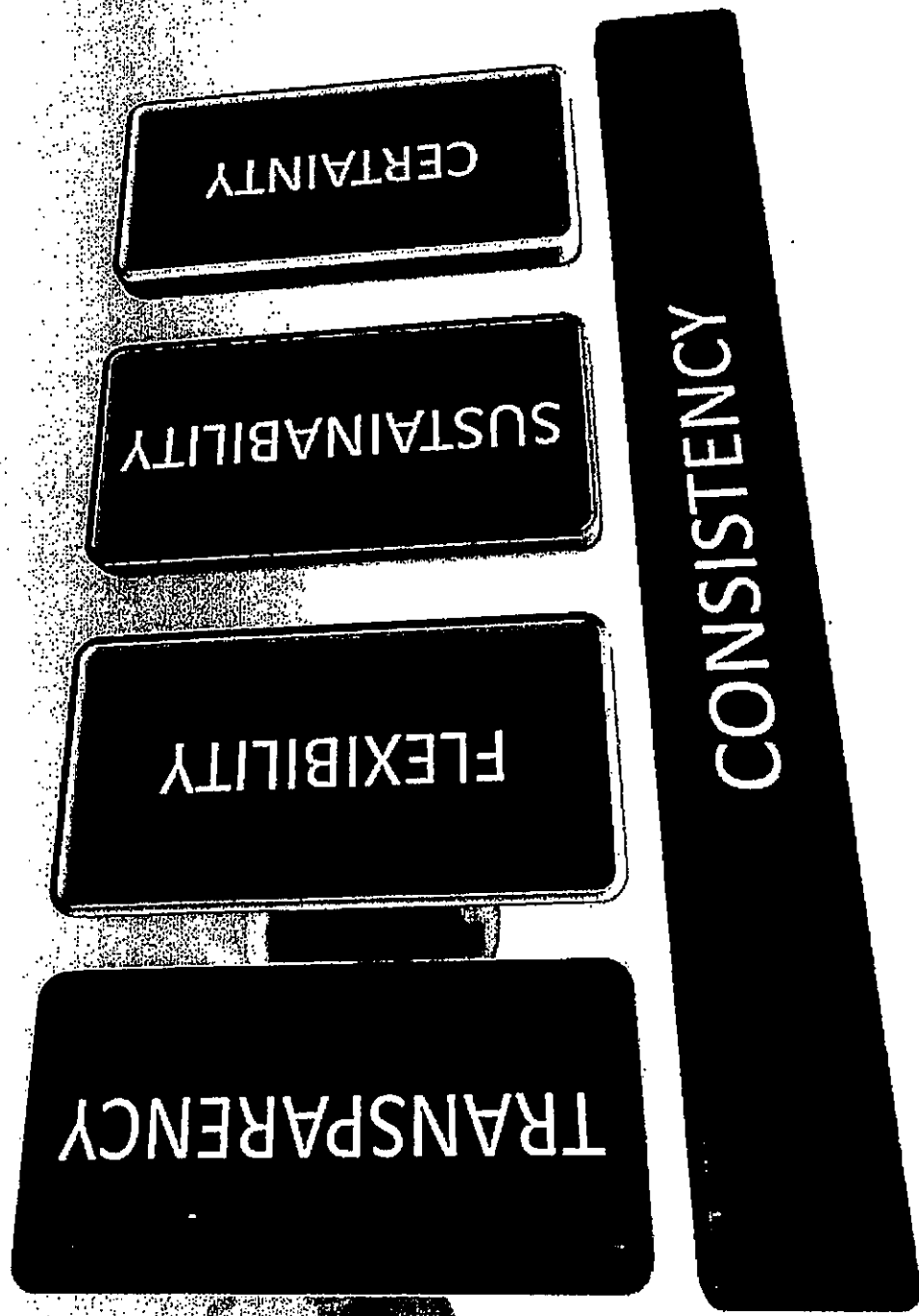




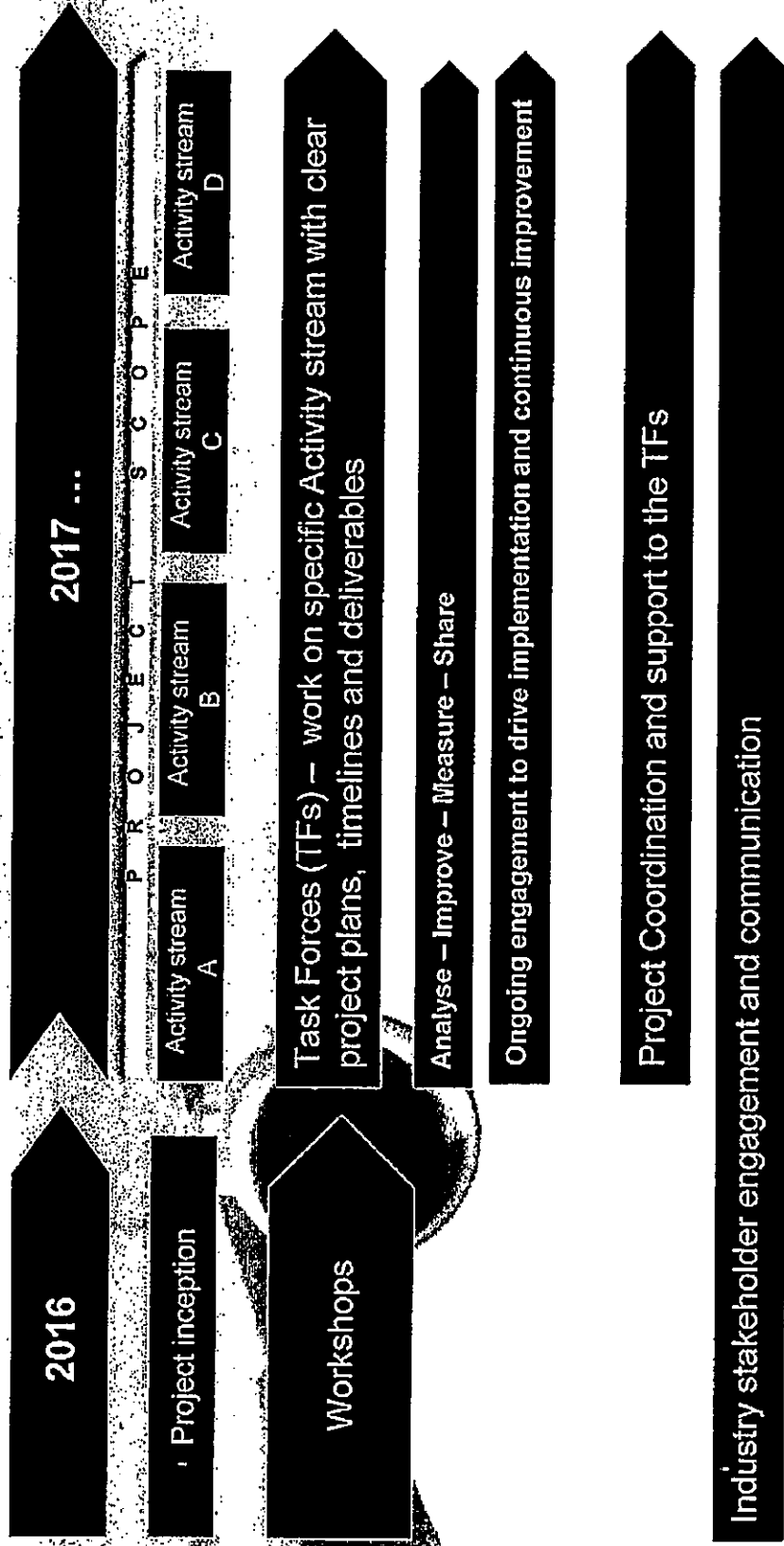
Objectives

- Strengthen the principles of the WSG
- Ensure policies and procedures remain relevant
- Reinforce the benefits of a single global process, supported by all stakeholders
- Not a re-write of the WSG!

Key themes and feedback from workshops

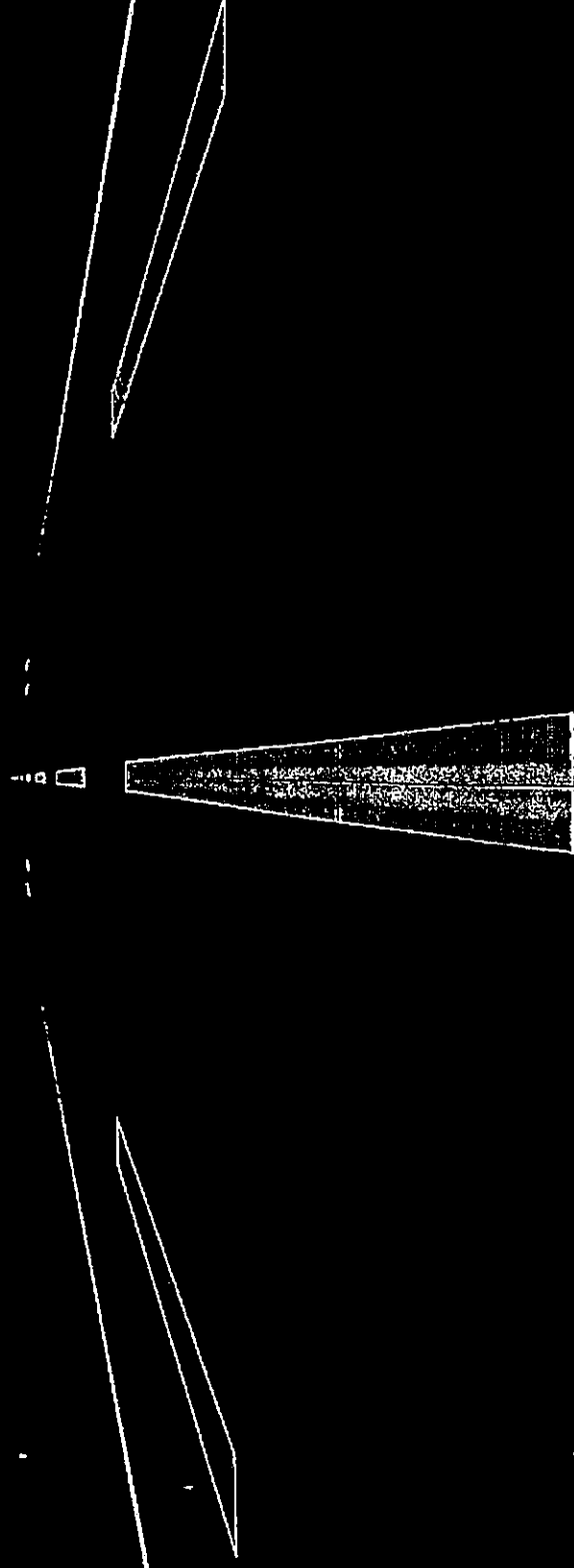


'WSG Strategic review' - Project roadmap



NEXT STEPS

- Identify scope for activity streams
- Define deliverables and timelines
- Create task forces and identify experts



How would you like to input into the strategic review?

Which method/s you would prefer to let us know what is working well today and where your challenges are related to the WSG Process?



- Sessions/Workshops in a number of regional locations to allow you to attend in-person and give feedback to IATA
- Teleconference sessions with IATA in groups
- One to One interviews with IATA
- Other suggestions (please detail your suggestion)





4. JSAG Report

4:1 Report form JSAG/52 meeting



5. WSG 8th edition

5.1 Approval of WSG 8th edition



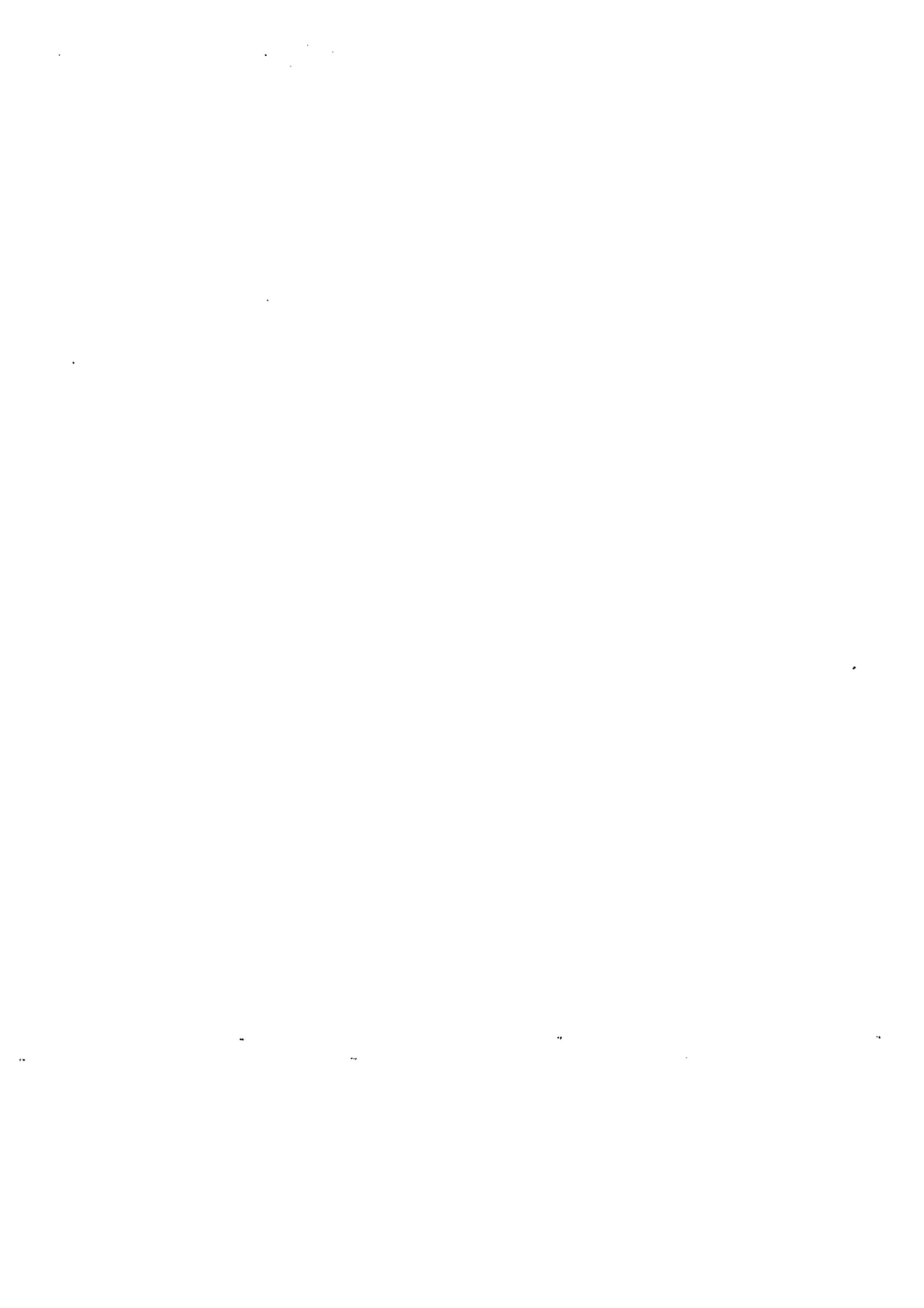
6 Any Other Business

6.1 Atlanta 2016 feedback

6.2 Update of delegates' OAS contacts



Heads of Delegation Meeting (HODM/21)





21st Head of Delegation Meeting (HOD-M/21) Minutes

**November 10, 2016 - 14h00 to 15h00
Room Savannah 1-3, Level 2 Sheraton Hotel
Atlanta, United States**

Agenda Item 1: Administration

Lara Maughan, Head of Worldwide Airport Slots (IATA), welcomed the Head Delegates to the 21st Head of Delegation meeting and invited active participation.

Agenda Item 2: Future Conferences

IATA advised that the post conference survey will include a question about whether the November conference should be 3 or 4 days in length as a result of the delegates experience in Atlanta and the previous November conference in Singapore.

2.1: 2017 & 2018 Venues

Maria Young (WorldTEK) reported on the forthcoming conference locations and venues.

- 140th Slot Conference 13 - 15 June 2017, Kuala Lumpur
- 141st Slot Conference 7 - 10 November 2017, Madrid, Spain
- 142nd Slot Conference 19 - 21 June 2018, Vancouver, Canada
- 143rd Slot Conference 6 - 9 November 2018, Incheon, South Korea

For further information please see the full presentation in Attachment A which includes details on the hotels and the locations.

2.2: Calendar of Coordination Activities

The Calendar of Slot Activities was presented by Mrs. Maughan.

IATA advised that the WSG will include a calendar that covers at least four seasons ahead in future editions to ensure industry have this available even if the WSG is not updated for 18 months or longer.

2.3: SC Budget – Registration Fee

Budget USD \$100 per event for 2017, however IATA will endeavor to keep the fee as low as possible towards \$50 per event, per delegate.

Agenda Item 3: WSG Strategic Review

Mr. Zahariev discussed the undertaking of the strategic review of the WSG, and an immediate overview of the workshops that take place during the Slot Conference.



State of the Industry:

- 43% of total global passengers departed from a coordinated airport in 2015
- 1.5 billion passengers a year
- Together we provide customers with global connectivity.

IATA highlighted that today although the biggest congestion is within Europe, there will be a shift in the global demand towards the East; China, Indonesia and India will become one of the top aviation markets in the world. In the future IATA forecasts that global passenger traffic will double to 7 billion passengers by 2030.

IATA highlighted that these changes are important to keep in mind when developing our policy and procedures in order to prepare for future growth.

3.1: Strategic Review

The objectives of the strategic review are to;

- strengthen the principles of the WSG;
- ensure policy and procedures remain relevant;
- reinforce the benefits of the single global process
- and ensure that it is supported by all stakeholders.

Mr. Zahariev stressed that the strategic review is not a rewrite of the WSG but a process of continuous improvement to ensure all stakeholders benefit in one global process.

55 participants joined the workshop over two days with excellent global representation including facilitators, coordinators, airlines and airports from all regions.

Key themes and outcomes:

The current WSG pillars were reviewed in terms of each groups understanding of them. IATA encouraged delegates to raise and discuss in groups any issues or challenges experienced today with the process and with coordination generally in order to improve the process.

Key messages highlighted by those attending the workshops included:

- Concerns about the efficiency of the level 2 airport process
- Need to ensure that we push training and education; consistent application of the rules globally is important
- Help ensure local rules are published in a transparent and proactive manner
- There should be a more proactive approach in adopting technology in our processes
- Consider policy and procedure for general and business aviation
- Need to address the issue of late slot handbacks



Next Steps:

- Identify and finalize scope and activity streams
- Define deliverables and timelines
- Create taskforces and identify experts

IATA encouraged active feedback and suggestions to be sent to slots@iata.org or via the post-conference survey question concerning how delegates would prefer to input feedback on the strategic review.

Agenda Item 4: JSAG Report

Paul Petrykowycz (QF), Chair of JSAG presented the following as a summary of the JSAG meeting in Atlanta;

- There is a new member of JSAG, Mr. Takayuki Asai, from ANA was welcomed, replacing Hervé Mahieux (AF) who has been promoted to a new role.
- Mr. Petrykowycz thanked the SSIM Chapter 6 working group for finalizing the review, to be released in March 2017, especially highlighting the leadership Mrs. Boyce provided to this project and ensuring its completion.
- IATA thanked Mrs. Krenzin (Fhkd) and Mr. Watt (AA) for their hard work on the WSG 8th Edition. IATA encouraged delegates to raise any unclear areas of the WSG to slots@iata.org.
- SPWG and JSAG advised that post SAL activity has gone well and appears to be a successful change to the process allowing more activity pre-SC. Mr. Petrykowycz asked the room if they agreed and no comments were raised.
- Mr. Petrykowycz explained there was concern that deadlines were being used as the defined date for sending and clearing messages, rather than being used as a deadline; the last date for sending communications. He encouraged everyone to not wait until the last minute on the calendar of activity, instead send when SALs, Initial Submissions and other communications as soon as they are ready.

Agenda Item 5: WSG 8th Edition

Mrs. Maughan advised the group of one minor adjustment to the Draft WSG 8th edition; 8.1.1(i) included additional text 'and among', which on reflection has caused confusion and therefore JSAG agreed to remove this change. Therefore 8.1.1(i) will not include 'among'.

No further comments were received with regards to the WSG 8th edition and therefore it will be published by 1 January 2017.



Agenda Item 6: AOB

6.1 Update of delegates; OAS Contacts

Mrs. Raitsidis presented the Online Accreditation System (OAS) now used for accrediting all delegates for the slot conference and HODs. The added benefit of the system is it offers delegates a database of registered and accredited contacts. Mrs. Raitsidis therefore encouraged all HODs to clean up their staff lists in order to keep a clean and up to date database.

AOB

A comment was made about the transparency in venue selection.

Mrs. Raitsidis presented how Slot Conference (SC) venues are chosen and what the delegate fee covers at the past conference. The full presentation can be found in Attachment A of the HODM pg. 28 "Slot Conference Delegate Registration Fee and Venue Choice"

Asia/Pacific Airport Coordinators Association (APACA)

13th Meeting of APACA

17:00 – 18:00

8 November (Tuesday), 2016

**Room: Savannah Room on Level 2, Sheraton Atlanta Hotel
Atlanta, Georgia, U.S.A.**

AGENDA

- 1. Approval of Minutes of 12th meeting held on 21 June (Tuesday), 2016 at Congress Center Hamburg (CCH), in Hamburg, Germany**

- 2. ICAO Assembly - 39th Session – Economic Commission
Agenda Item 39: Economic Regulation of International Air Transport
(ACI, IATA position paper)**

- 3. Independence of Coordinator (Update)**

- 4. Draft Article of New Association (ASCI)**

- 5. WWACG Slot Guidelines - Coordination Parameter**

- 6. Noise Quota Count Pilot Scheme at Hong Kong International Airport**

- 7. Any Other Business**

Asia/Pacific Airport Coordinators Association (APACA)

Minutes of 13th Meeting of APACA

8 November (Tuesday), 2016

**Room: Savannah Room on Level 2 at Sheraton Atlanta Hotel
Atlanta, Georgia, USA**

15 December, 2016

1. Administration

The thirteenth general assembly meeting of APACA was held at Savannah Room on Level 2 at Sheraton Atlanta Hotel from 17:00 to 18:00 on 8 November (Tuesday), 2016 at the occasion of IATA 139th Slot Conference in Atlanta, Georgia, USA. The chairman, Mr. Hiroki Takeda (JSC – Japan Schedule Coordination), welcomed the participants and expressed his appreciation for attending the thirteenth meeting of APACA under the Worldwide Airport Coordinators Group (WWACG). The meeting was progressed according to the agenda items shown in Appendix 1.

The number of participants was 27 representing 10 economies and 13 organizations which constitute more than half of the entire economies and organizations in the Asia/Pacific region. The list of participants is shown on the last page. Thus, the thirteenth general assembly meeting of APACA formed a quorum.

2. Agenda Item 1: Approval of Minutes of 12th meeting

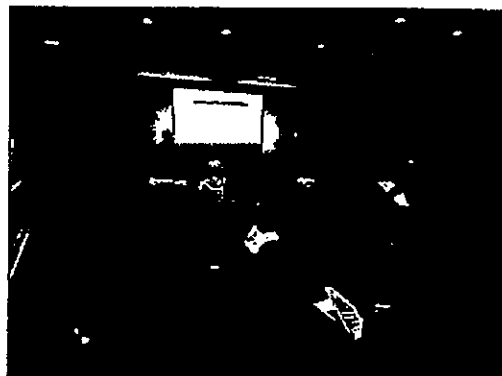
The minutes of the twelfth general assembly meeting of APACA held on 21 June (Tuesday), 2016 at Congress Center Hamburg (CCH), Hamburg, Germany was endorsed by the meeting without adjustments.

3. Agenda Item 2: ICAO Assembly – 39th Session

Mr. Takeda reported the ICAO Assembly - 39th Session using the material shown in Appendix 2. ICAO Assembly - 39th Session was held from 27 September to 7 October, 2016 in Montreal, Canada.

He remarked two working papers (WP) relating to airport slot allocation which were submitted to ICAO Assembly - 39 Session. One is WP/231 submitted by Airport Council International (ACI) and the other is WP/340 submitted by International Air Transport Association (IATA).

Although the IATA and WWACG started dialogue with ACI regarding airport slot allocation just from last November (SC137), ACI submitted this WP without prior consultation with IATA and WWACG. This action made IATA and WWACG little disappointed.



He reported that WP/231 (ACI) explicitly suggests the involvement of ACI in developing Worldwide Slot Guidelines (WSG) and the review of the current definition of slot in WSG. It also implicitly suggests the review of 80/20 (U/L calculation), the introduction of reservation fee, introduction of the confiscation of historic by on-time performance (OTP), the review of the priority items at initial allocation and the introduction of secondary trading.

He also reported that WP/340 (IATA) defends the current scheme involving all stakeholders like states, airports, airlines, slot coordinators and air traffic management organization is safe and sound.

Both ACI and IATA presented their views at the economic commission, and agreed to work collaboratively on the ongoing process to develop a more efficient and effective slot allocation process. The commission finally noted that ACI and IATA would work with states, the industry stakeholders as partners and would report the progress at the next session of the Assembly.

Finally, he asked the participants to monitor very carefully the progress on airport slot allocation to be made by both ACI and IATA.

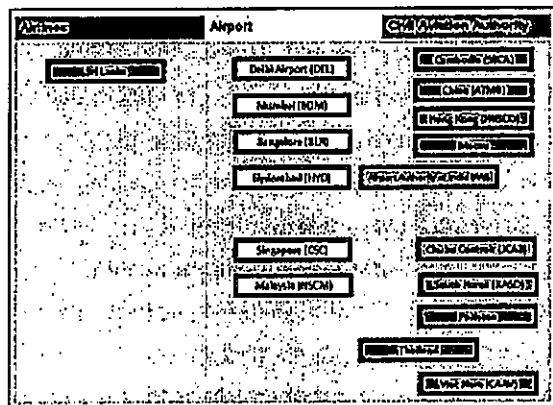
4. Agenda Item 3: Independence of Coordinator (Update)

Mr. Takeda reported the current status of independence of coordinator in Asia/Pacific region using the material shown in Appendix 3. As this topic was originally discussed at APACA/3 held in Singapore in 2011, this is an update of the current status. This topic relates with the previous agenda (ACI involvement) as well as the following agenda (Draft article of new association).

He firstly showed the situation in 2011 and explained the transitional developments since then. He then showed the best practice and poor practice regarding the independence of coordinator which is the annex of WSG (11.14).

There are only four independent coordinators in Asia/Pacific region; Airport Coordination Australia (ACA), Airport Coordination Taipei (ACT), Japan Schedule Coordination (JSC) and Indonesia Airport Slot Management (IASM). In New Zealand, coordination services are provided by ACL in UK. In Philippines, coordination services are provided by ACA in Australia.

There is one organization run by national flag carries, 6 organizations run by airports and 10 organizations run by civil aviation authorities in Asia/Pacific region.

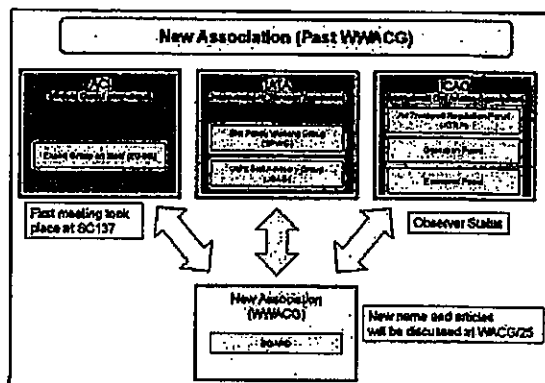


He emphasized that the creation of independent coordinators or facilitators is very important to provide coordination services in a neutral, transparent and non-discriminatory way. In essence, they should be independent from airlines, independent from airports and even independent from the governments.

5. Agenda Item 4: Draft Article of New Association (ASCI)

Mr. Takeda reported for the first time the outline of draft article of new association using the material shown in Appendix 4.

He discussed the importance of creating a new organization which is more formal and robust in the past two APACA meetings. As the scope of work of New Association (Past WWACG) is now gradually expanding to interact with other international organizations like ICAO and Airport Council International (ACI), it needs to be more formal and well organized.



He explained major parts of draft article like Article 3 (Scope), Article 4 (Membership), Article 7 (Membership Fees), Article 9 (General Assembly), Article 11 (Voting, Quorum) and Article 12 (Board). Finally, he asked the participants as to who would be willing to be a member of new association, however, there were few members to raise the hands. Most members seem to need more time for the internal coordination after they come back to their countries.

6. Agenda Item 5: WWACG Slot Guidelines (Coordination Parameter)

Mr. Takeda explained briefly WWACG Slot Guidelines (Coordination Parameter) using the material shown in Appendix 5.

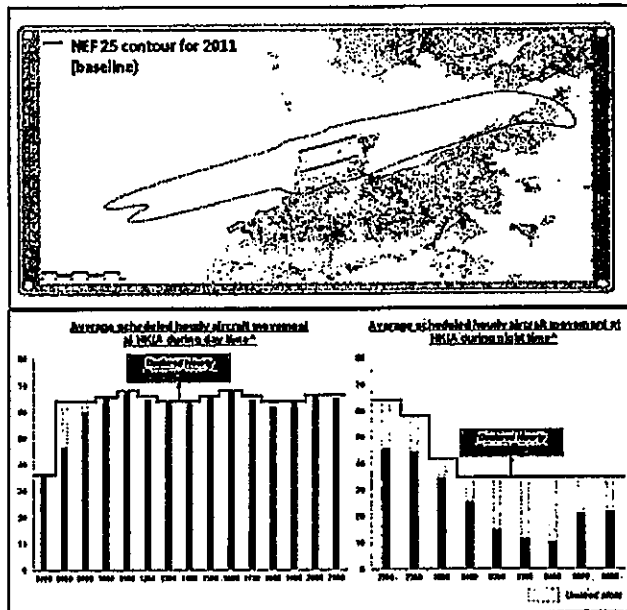
Originally, the coordination parameters were discussed many times in the past APACA meetings and the draft form of slot guidelines was developed by APACA itself. At the last WWACG/25 plenary meeting in Hamburg, Mr. Takeda presented the draft form of slot guidelines for comments. A chairman of WWACG also circulated this draft to all WWACG members on 29 June for comments with a deadline date of 12 August. Mr. Takeda received some supporting comments from members but neither objection nor modification by the deadline date.

While he also circulated the draft form to SPWG members (Airlines members) for comments, he received no objection but welcoming comments from SPWG in September in Geneva. Since neither objection nor modification was received from our members as well as airlines member, this draft was finally approved by WWACG/26 plenary meeting in Atlanta.

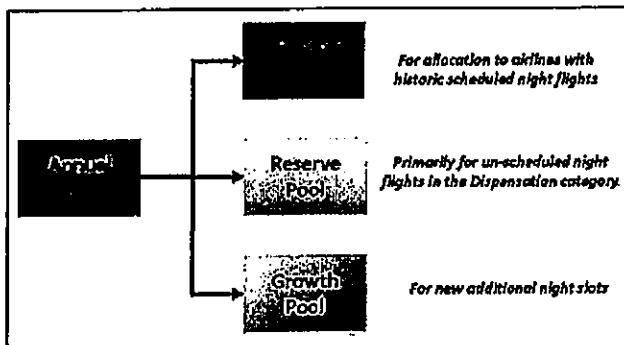
He finally thanked all the members for their contribution to make this happen and remarked that APACA should continue to develop new slot guidelines in another fields for the sake of WWACG.

7. Agenda Item6: Noise Quota Count Pilot Scheme at Hong Kong International Airport

Ms. Birdie Yuen (HKSCO – Hong Kong Schedule Coordination Office) explained the Noise Quota Count Pilot Scheme at Hong Kong International Airport (HKIA) using the material shown in Appendix 6. She firstly showed the 2011 Noise Exposure Forecast (NEF) surrounding HKIA, Airport Authority HK (AAHK) has committed under the third runway project that the NEF cannot be expanded beyond that of 2011 with the current two runway operations. Then, she showed the bar chart showing the slot situation during day time and night time. The slots are almost fully taken during day time from 7:00 to 21:00, however, there are some unused slots from 22:00 to 06:59 next morning but these slots cannot be allocated due to environmental restriction: only 20% of the slots can be allocated in the night period based on the airport maximum practical capacity of 420,000 movements per year.



To better monitor the night noise impact and make a more efficient use of night time slots without degrading the current NEF, AAHK has decided to introduce Noise Quota Count (QC) scheme. QC classifies the current Boeing and Airbus fleets into 7 noise bands according to the measurement of noise emission. The annual QC budget is comprised of three pools: Schedule pool – Airlines have been given a sum of annual QC budget based on their historical slots in S16/W16, and they can adjust their aircraft mix by introducing quieter aircraft and thus have the possibility to add flights so long as the total QCs are within the budget. Reserve pool caters for un-scheduled night flights like State VIPs, relief flights, military aircraft and emergencies. Growth pool contains new additional night slots if there are any QC saved due to



airlines developing quieter aircraft or slot cancellations. Penalty will be levied if the airline exceeds its approved QC plan.

Finally, she reported that following reviews are currently ongoing: AAHK closely monitors the performance of the QC Pilot Scheme to ensure that its objectives are met. An interim review will be undertaken one year after

implementation of the QC pilot scheme to enable earlier refinement of the scheme. Civil Aviation Department will continue to track the aircraft noise impact by noise monitoring terminals around the airport. Post meeting notes: With the comments received from airlines, AAHK is refining the scheme and will have

further consultation with airlines before confirming the implementation.

8. Agenda Item7: Any Other Business

(1) Asian Tea Gathering

Ms. Petra Popovac (ACA) announced that Asian Tea Gathering would be hosted by Airport Coordination Australia. Tea Gathering would take place at Georgia 10 on Level one of Sheraton Atlanta Hotel during a lunch time from 12:00 to 13:00 on 11 November (Friday). The participants were invited to join the gathering.

The list of participants at APACA/13 meeting

No	Economy	No	Member Organization
1	Australia	1	Airport Coordination Australia (ACA)
2	Cambodia	2	State Secretariat of Civil Aviation
3	Chinese Taipei	3	Airport Coordination Taipei (ACT)
4	Hong Kong	4	Hong Kong Schedule Coordination Office (HKSCO)
5	India	5	Bangalore International Airport Limited (BIAL)
		6	Delhi International Airport Limited (DIAL)
		7	Mumbai International Airport Limited
6	Japan	8	Japan Schedule Coordination (JSC)
		9	Central Japan International Airport Co. (CJIAC)
7	Malaysia	10	National Slot Coordination Malaysia (NSCM)
8	Singapore	11	Changi Slot Coordination (CSC)
9	Sri Lanka	12	Sri Lankan Colombo Airport Coordination
10	Viet Nam	13	Civil Aviation Administration of Viet Nam (CAAV)



Asia/Pacific Airport Coordinators Association (APACA)

13th Meeting of APACA

17:00 – 18:00

8 November (Tuesday), 2016

**Room: Savannah Room on Level 2, Sheraton Atlanta Hotel
Atlanta, Georgia, U.S.A.**

AGENDA

- 1. Approval of Minutes of 12th meeting held on 21 June (Tuesday), 2016 at Congress Center Hamburg (CCH), In Hamburg, Germany**

- 2. ICAO Assembly - 39th Session – Economic Commission
Agenda item 39: Economic Regulation of International Air Transport
(ACI, IATA position paper)**

- 3. Independence of Coordinator (Update)**

- 4. Draft Article of New Association (ASCI)**

- 5. WWACG Slot Guidelines - Coordination Parameter**

- 6. Noise Quota Count Pilot Scheme at Hong Kong International Airport**

- 7. Any Other Business**

Asia/Pacific Airport Coordinators Association (APACA)

Agenda Item 2

ICAO Assembly – 39th Session

**13th APACA meeting
8 November, 2016
Atlanta, Georgia, U.S.A.**

**International Civil Aviation Organization (ICAO)
39th General Assembly**

39TH GENERAL ASSEMBLY

Duration: 27 September (Tue.) to 7 October (Fri.), 2016
Place: ICAO Head Quarter, Montreal, Canada

ECONOMIC COMMISSION

Agenda Item 39: Economic Regulation of International Air Transport - Policy

The Council will report on ICAO work in the implementation of the recommendations of the Sixth Worldwide Air Transport Conference (ATConf/6, March 2013). Priorities for the 2017-2018-2019 triennium will be proposed based on the need to harmonize the global regulatory framework for international air transport, facilitate and support the liberalization process, and maximize aviation's contribution to economic development.

Airport Council International (ACI) WP (1)

Agenda Item 39: Economic Regulation of International Air Transport – Policy

AIRPORT SLOTS

(Presented by the Airports Council International (ACI))

EXECUTIVE SUMMARY

Airport operators wish to promote efficiency in the allocation and use of the capacity that they build, maintain and operate, which in turn affects issues such as destinations served, aircraft seat capacity, competition, delays to aircraft, cost and level of service in passenger terminals, connectivity, and full use of allocated slots.

Airports Council International ACI wishes to engage with States and industry stakeholders to improve industry guidance on slot allocation and to explore means of modernizing allocation criteria to address the evolution of the industry and new challenges.

Action: The Assembly is invited to agree to the recommendations in paragraph 3.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective D — <i>Economic Development of Air Transport</i>
<i>Financial implications:</i>	None
<i>References:</i>	Not applicable

2. DISCUSSION

2.1 Airport operators wish to promote the greatest possible efficiency in the use of the infrastructure that they have built, which implies the full and effective use of all slots. Airport operators will also aim to build new capacity to meet demand, but for a variety of reasons they may be limited in their ability to do so.

2.2 The allocation of slots in turn affects issues such as destinations served, aircraft seat capacity, competition, delays to aircraft, level of service in terminals, apron capacity and level of noise and emissions. An efficient allocation of slots facilitates meeting the demands of aviation industry stakeholders, but that alone is not sufficient - airport operators must take into account the social and economic welfare of consumers and local communities, with which they interact on a daily basis.

2.3 Furthermore, given the specific circumstances of airports and regions, adequate flexibility should be ensured through the allowance of local rules, as acknowledged in the European Union Regulation on slots.

Airport Council International (ACI) WP (3)

2.4 An airport slot is currently defined as “a permission given by a coordinator for a planned operation to use the full range of airport infrastructure necessary to arrive or depart at a Level 3 airport on a specific date and time”. (IATA WSG; 7th Edition, chapter 1.6.1.). The definition of a slot should be explicit not only with reference to the benefit to the aircraft operator to use the infrastructure at a given date and time, but also with regard to its obligation to use the allocated capacity. Under the current guidelines, the non-utilisation of allocated slots (hence airport infrastructure) has no consequence for airlines during the season in course, which may result in inefficient use of airport capacity and an economic impact for the community and the airport operator, as well as potential adverse consequences to competition at the airport.

2.5 Beyond the “use it or lose it” rule, early or late arrival or departure without operational cause is not defined in terms of clearly stated time windows and it lies within each Slot Coordinator’s discretion to make these calculations as per their own standards and local rules.

2.6 Within the context of an increasing level of congestion at a growing number of airports, a wider discussion is needed between States and the industry to improve current slot allocation methods and to ensure the most efficient use of the existing capacity from an overall perspective in the future. We note that tools are available to allow simultaneous optimization of differing criteria (e.g. effect on connectivity, effect on hub operations, operational challenges, competition, and economic value) and can enable an optimal outcome according to the defined efficiency goals.

Airport Council International (ACI) WP (4)

2.7 Under the current industry guidelines, important criteria for the efficient use of scarce capacity such as destinations served, size of aircraft or best offer for the public are ignored or at best regarded as optional secondary criteria. The operator of each slot coordinated airport should be able to prioritise the secondary criteria for use by the coordinator of the airport, depending on its circumstances.

2.8 Moreover, the potential benefits of alternative allocation methods for slot allocation should be explored. Market mechanisms have been used in other fields to allocate limited resources in the most efficient way.

2.9 In this context, ACI also believes that when new air services agreements are signed, the granting of slots for new services should not be part of these agreements, as this may distort slot allocation priorities and lead to unforeseen impacts on other services and operators.

3. RECOMMENDATIONS TO THE ASSEMBLY

3.1 The Assembly is invited to:

- agree that the interests of airport operators should be considered together with the interests of airlines in the definition of slot allocation policy and the development of industry slot guidelines for the common benefits of passengers and communities.
- recognize airport operators as significant players in local rules for slot allocation to suit the needs of the individual airport and its users. Local cooperation benefits all parties and improve the outcome in terms of efficiency of operational and economic use of airport facilities.
- recommend amendment of the definition of an airport slot and the understanding of slot allocation, in order to contain both permission for the aircraft operator to use the required infrastructure, but also the obligation for the aircraft operator to use that allocated capacity, with proportionate sanctions for intentional misuse.
- recommend a reference to a Panel to explore and evaluate the potential benefits of alternative capacity allocation methods for airport slots.

International Air Transport Association (IATA) WP (1)

Agenda Item 39: Economic Regulation of International Air Transport — Policy

AIRPORT SLOT ALLOCATION

(Presented by the International Air Transport Association (IATA))

EXECUTIVE SUMMARY

The industry has developed the Worldwide Slot Guidelines (WSG) for the management and allocation of airport slots to ensure the most efficient use is made of congested airport infrastructure. IATA (which facilitates the production and updating of the WSG) believes that States, airport operators, slot coordinators, along with the other air transport industry stakeholders, are fundamental partners in developing robust airport slot management policies and procedures. IATA has committed to ensuring all of these stakeholders remain key contributors and participants in the review and revision process for the WSG.

Action: The Assembly is invited to:

- a) recognize the critical role that all stakeholders currently play on both a global and local basis in defining the slot allocation policies and rules, and to that end support IATA's efforts to enhance the involvement of States, airports, airlines, slot coordinators and air traffic management organizations in future global optimization efforts;
- b) support the strategic review of the WSG as a key initiative to ensure the continual improvement and optimization of the WSG policies and processes, and to that end encourage States and other stakeholders to provide input into the process; and
- c) determine that the existing industry working groups and fora offered by the WSG sufficiently address slot allocation issues and therefore obviating the need for a panel or similar duplicative structures to address such issues.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective D — <i>Economic development of air transport.</i>
<i>Financial implications:</i>	None
<i>References:</i>	ACI WP/231-EC/23 ATConf/6-WP/104 Doc 9587, <i>Policy and Guidance Material on the Economic Regulation of International Air Transport</i>

International Air Transport Association (IATA) WP (2)

3. RECOMMENDATION TO THE ASSEMBLY

3.1 The Assembly is invited to:

- a) recognize the critical role that all stakeholders currently play on both a global and local basis in defining the slot allocation policies and rules, and to that end support IATA's efforts to enhance the involvement of States, airports, airlines, slot coordinators and air traffic management organizations in future global optimization efforts;
- b) support the strategic review of the WSG as a key initiative to ensure the continual improvement and optimization of the WSG policies and processes, and to that end encourage States and other stakeholders to provide input into the process; and
- c) determine that the existing industry working groups and fora offered by the WSG sufficiently address slot allocation issues and therefore obviate the need for a panel or similar duplicative structures slot issues.

International Civil Aviation Organization (ICAO) Resolution

Agenda Item 39: Economic Regulation of International Air Transport - Policy

39.30 Concerning the issue of slot allocation raised in WP/231 presented by ACI, and WP/340, presented by IATA, the Commission heard and welcomed the joint statement made by both Organizations, which recognized the need to optimize the use of scarce capacity, particularly at capacity constrained airports.

As such, the two Organizations agreed to work collaboratively on the ongoing process to develop a more efficient and effective slot allocation process. They also agreed that such a process must ensure transparency, certainty, consistency, fairness and non-discrimination, as well as remaining globally harmonized.

The Commission noted that ACI and IATA would work with States, the industry stakeholders as partners and would report progress to the next session of the Assembly.

Asia/Pacific Airport Coordinators Association (APACA)

Agenda Item 3

Independence of Coordinator (Update)

**13th APACA meeting
8 November, 2016
Atlanta, Georgia, U.S.A.**

Independence of Coordinator in 2011

Airlines	Airport	Civil Aviation Authority
Indonesia	Delhi Airport (DEL)	Cambodia (SSCA)
New Zealand	Mumbai (BOM)	China (ATMB)
Philippines	Bangalore (BLR)	Hong Kong (HKSCO)
Sri Lanka	Hyderabad (HYD)	Airport Authority of India (AAI)
	Singapore (CSC)	Chubu Centrair (JCAB)
		Fukuoka (JCAB)
		Macao
		Malaysia (AGM)
		Pakistan
		Thailand
		Viet Nam (CAAV)

WSG (Independence of Coordinator (1))

(WSG 11.14 Independence Of Coordinator)

<p>The company employing the staff should be the coordination entity</p>	<p>Multiple parties representing various stakeholders share funding of the coordination entity</p>
<p>An alternative employment arrangement is a clear secondment contract to the coordination entity</p>	<p>Single till approach which allows some internal cross subsidy in the coordination entity</p>
<p>Financial stakeholders review budget only</p>	<p>Not for profit organization (cost recovery primarily but allow for ICAO principle of 'reasonable margin')</p>
<p>The "Board" of the coordination entity cannot influence coordination decisions</p>	<p>Revenue generation acceptable but must not effect the functional independence</p>
<p>Separation of physical location or independent office facilities</p>	<p>Secondments from stakeholder organizations are acceptable but financial control of coordination staff through pay must not be in the hands of stakeholders</p>
<p>Separation of coordination software systems and schedule data from other stakeholders e.g. airlines or airports</p>	
<p>The coordinator must conduct business in an independent manner</p>	
<p>No conflict of coordination role with other activities</p>	
<p>No single stakeholder holds a majority interest</p>	
<p>All stakeholders should be consulted in the appointment of a coordination entity</p>	
<p>Separation of coordination from sanctions role in order to maintain a 'balance of power'</p>	
<p>Free from external direction</p>	

WSG (Independence of Coordinator (2))

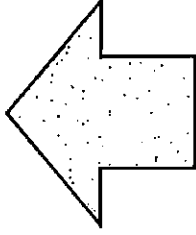
[REDACTED]	
[REDACTED]	
Active employees of interested stakeholders are responsible for coordination (governments, airports, airlines)	One party fully funds coordination
Dual-role (coordinator/airline scheduler)	Coordination entity is subsidized by an interested party

Independence of Coordinator (1)

	Australia	Chinese Taipei	Japan	Indonesia
Economy				
Organization	Airport Coordination Australia (ACA)	Airport Coordination Taipei (ACT)	Japan Schedule Coordination (JSC)	Indonesia Airport Slot Management (IASM)
Form of Organization	Private Company (Established in 1997)	Non profit organization (Established in 2005)	Non profit organization (Established in 2008)	Non Profit Organization (Established in 2015)
Representative	Petra Poyovac	Flora Yeh (Summer) Karyn Huang (Winter)	Hiroki Takeda	Anggrisia F. Tampubolon
Airport Coordinated	12 Airports in Australia (Level 3: 8, Level 2: 4) 1 Airport in Abu Dhabi 1 Airport in Philippines	2 Airports (Level 3: 1, Level 2: 1)	5 Airports (Level 3: 3, Level 2: 2)	8 Airports in Indonesia (Level 3: 1, Level 2: 1)
Coordination Committee	Runway Coordination Committee (Sydney) Facilitation Committee (Others)	Coordination Committee	Airports Coordination Committee	
Web Site	http://www.coordaus.com.au/	http://www.apccoord.org.tw/	http://www.schedule-coordination.jp/	http://www.iasmslot.com/

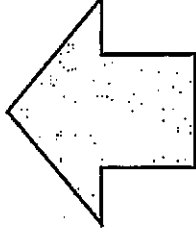
Independence of Coordinator (2)

New Zealand



Services are provided by
ACL in U.K.

Philippines



Services are provided by
ACA in Australia

Independence of Coordinator (3)

Airlines	Airport	Civil Aviation Authority
Sri Lanka	Delhi Airport (DEL)	Cambodia (SSCA)
	Mumbai (BOM)	China (ATMB)
	Bangalore (BLR)	Hong Kong (HKSCO)
	Hyderabad (HYD)	Macao
	Singapore (CSC)	Airport Authority of India (AAI)
	Malaysia (NSCM)	Chubu Centrait (JCAB)
		South Korea (KASO)
		Pakistan
		Thailand
		Viet Nam (CAAV)

Asia/Pacific Airport Coordinators Association (APACA)

Agenda Item 4

Draft Article of New Association (ASCI)

**13th APACA meeting
8 November, 2016
Atlanta, Georgia, U.S.A.**

Article 1

Legal framework, name

The association shall act as a non-profit association, established and registered in MONTREAL under Canadian law.

The name of the association is "Airport Slot Coordination International (ASCI)" and use the acronym ASCI

Article 2

Registered Office

The registered office of the Association may be transferred to any other location in the country where Association is registered following a decision taken by two-thirds of the votes cast by the General Assembly provided that half of the Members shall be present or represented.

Article 3
Scope

- 3.1. The purpose of "Airport Slot Coordination International (ASCI)" as a non-profit association shall be:
- Serving the common interests of the Members of the Association or their regional organizations in all matters pertaining to slot allocation, schedules facilitation and related aviation;
 - Providing a forum for Members to exchange information on slot allocation, schedules facilitation and related matters;
 - Representing issues, and common positions of worldwide interests of its Members to relevant national and international authorities, organizations and institutions;
 - Being the voice of and representing the interest of the Facilitators and Coordinators towards international organizations such as ICAO, IATA, and ACI World
 - Promoting and facilitating international cooperation in all matters pertaining to slot allocation, schedules facilitation and related aviation matters;
 - Promoting the development of professional skills in relation to slot allocation, schedules facilitation and related aviation matters;
 - Undertaking projects and research to improve standards of coordination and schedules facilitation;
 - Supplying assistance and collective services for its Members also by developing systems and processes.

3.2. In pursuing its objectives the Association will undertake the following activities:

- Provide a network for its Members;
- Organize working groups and task forces on subjects of particular interest to the Members.
- Facilitate training to develop skills and expertise among its Members, and third parties involved in airport slot allocation or facilitation.
- Cooperate with international institutions and world-wide organizations;
- Compile, provide and publish relevant information and expertise.

3.3. In pursuing the activities of the Association Members do not seek to obtain direct financial advantage for themselves, nor shall it be the objective of the Association to procure direct financial advantage for them.

Article 4
Membership

- 4.1. All Members are individuals, or organizations legally established according to the laws of their country.
- 4.2. All independent Coordinators and/or Schedules Facilitators either as individuals or as representatives of their organizations are eligible to be Member of the Association either as an individual or as an organization. The Members must be legally appointed as Coordinators and/or Schedules Facilitators according to the laws and customs of their country of origin.
- 4.3. Members can opt out if a decision taken by the Association on a specific issue would not be in line with their national government position. In such cases they would not be committed by the association's decision in question and their opting out decision would be duly registered and mentioned.
- 4.4. Members of the Association shall be bound by the provisions of the Articles of the Association and the Internal Rules duly adopted by the Board and the General Assembly.

- Article 5
Admission of Members
- 5.1. Application of Members shall be made in writing to

- Article 6
Termination of Members
- 6.1. Each member may terminate its Membership by a written.....

Article 7

Membership Fees

- 7.1. An annual membership fee set by the General Assembly to cover the operating cost of the Association will be charged to the Members.
- 7.2. A full Membership fee for the current year is due upon joining the Association, regardless the month of joining.
- 7.3. Members must be notified in writing of the Membership fee and payment conditions at any time payable by them.
- 7.4. In case a Member is unable to pay the Membership fee the matter will be discussed by the Board with a view to reaching a suitable solution.
- 7.5. If the revenues to cover the running costs of the Association are not sufficient, the Members are responsible for uncovered costs, as specified in the internal rules.
- 7.6. Observers are encouraged to pay a voluntary monetary contribution fixed by the Board.

Article 8

General Assembly of the Members, Board, sub-Committees
The Association shall be governed by the General Assembly

Article 9

General Assembly

- 9.1. The General Assembly shall be the major organ of the Association; the power of decision is vested in the Members acting collectively.
- 9.2. The General Assembly shall be invested with all powers necessary or advantageous for the purpose of achieving the objectives of the Association.
- 9.3. The General Assembly shall decide the general policy of the Association and shall oversee the management of the Association by the Board.
- 9.4. The following powers shall be reserved exclusively for the General Assembly:
- Approval of the final accounts and annual report;
 - Discharge of the Members of the Board and the Treasurer in respect of their stewardship of the affairs of the Association during the preceding financial year;
 - Approval of the budget of the Association presented by the Treasurer;
 - The election and dismissal of the Members of the Board;
 - Amendments to the Articles of Association;
 - Admission and exclusion of Members;
 - Dissolution of the Association;
 - Establishment and subsequent amendment of Internal Rules of the Association;
 - Nomination of auditors;
 - Membership fees and any other contributions due by the Members for each financial year;
 - Any action or instrument that shall bind the Association for more than 3 years.

Article 10
Meetings

- 10.1. Meetings will be held as often as necessary to conduct the work of the Association, but at least twice each year, whereof one meeting shall be declared as General Assembly.
- 10.2. Additional meetings may be called if at least one third of the Members of the Board or 10% of the Members require a meeting.
- 10.3. The General Assembly will normally be called by the Chair and shall meet under the chairmanship of its Chair or, if the Chair should be prevented from attending, under the chairmanship of one Vice-Chair.
- 10.4. Observers are invited to attend the General Assembly unless the Board decides otherwise for an individual meeting. The Chair may decide to invite representatives of other industry bodies to attend a meeting on an ad-hoc basis.
- 10.5. Notice shall be given to each Member and Observers at least 14 days prior to the date of the meeting except in urgent cases, indicating the date, time and place, as well as the agenda of the meeting.

Article 11

Voting, Quorum

- 11.1. Only Members shall be entitled to vote at the General Assembly.
- 11.2. Except as otherwise specified in these Articles, each Member has one vote.
- 11.3. A Member can give an authorization by a proxy to another Member to represent it or may delegate by a proxy its vote, in writing, to the Chair if it is not able to attend the relevant meeting. Any other Member than the Chair shall not hold more than three (3) proxies.
- 11.5. Except as otherwise provided for in the Articles, decisions by the General Assembly shall be taken by simple majority vote of the Members present at the meeting.
- 11.6. The General Assembly shall only vote on items clearly mentioned in the agenda.
- 11.7. Voting in writing is permitted.
- 11.8. In case of a split vote, the Chair can exercise a casting vote or ask for another vote.
- 11.9. Abstentions are not taken into account in case of elections or votes by the General Assembly.
- 11.10. Decisions related to:
 - a) The dissolution of the Association,
 - b) Modifications of the Articles,
 - c) The adoption and modification of the internal rules,
 - d) The initiation of a legal action,
 - e) Approval of the budget, the level of reserves, if any, the need for investment financing, if any,
 - f) Setting the annual Membership fees

- g) The endorsement of the auditor's report,
- h) The transfer of the registered office of the Association to another location,
- i) The acceptance or exclusion of Members;
- j) Censure votes against the Board or a Member of the Board;

must have two-thirds of the votes cast by the General Assembly provided that half of the Members shall be present or represented. 11.10. If one of these issues is to be discussed it has to be put on the agenda of the respective meeting and all Members must be notified in advance.

11.12. Decisions by the General Assembly shall be recorded in minutes, which shall be made available to all Members and be kept at the registered offices of the Association. The minutes shall indicate any opt out decision concerning the General Assembly's decisions.

11.13. Decisions related to:

- a) The dissolution of the Association,
- b) Modifications of the Articles,
- c) The adoption and modification of the Internal Rules
- d) The transfer of the registered office of the Association to another location,
- e) Censure votes against the Board or a Member of the Board,
- f) Election of the Board's Members and the Officers

shall be taken with a "one country one vote" rule. In such cases in countries where more than one Member exist, it is the responsibility of the Members in that country to decide who is going to cast the votes related to these matters on their behalf. In the context of these Articles, countries are those recognized by the International Civil Aviation Organization (ICAO).

Article 12
Board

- 12.1. The Association shall be administered and represented by the Board consisting of not less than five but not more than seven representatives of Members elected by the General Assembly with due consideration to geographical representation. Only one Member per country is entitled to be nominated as Board Member. If agreement cannot be reached on a single candidate for any country then all prospective candidates from that country will be excluded from the election process.
- 12.2. Members of the Board are elected at the same time for 2 years and can be re-elected.
- 12.3. Any Member of the Board who has ceased to belong to the Association or has ceased to represent a Member shall automatically resign.
- 12.4. Any member of Board may resign



Asia/Pacific Airport Coordinators Association (APACA)

Agenda Item 5

**WWACG Slot Guidelines
(Coordination Parameter)**

**13th APACA meeting
8 November, 2016
Atlanta, Georgia, U.S.A.**

(1) Environmental Limits

WWACG SLOT GUIDELINES



4. COORDINATION PARAMETERS

(1) Environmental Limits

Factor	Parameter	Explanation	Example
Environmental Factor	Movement Limit	A limit on the total number of movements in a specified period (eg, day, week, season or year) imposed for environmental reasons. The limit may apply during specified hours (eg, a night period).	480 movements/day, or 3,200 movements/week, or 170,000 movements/year or 7000 night movements/season
	Noise Quota	A limit on the total number of noise points in a specified period (eg, day, week, season or year) imposed for environmental reasons. The limit may apply during specified hours (eg, a night period). Noise Points are assigned to each aircraft type, typically based on noise certification data with noisier aircraft types having more points per movement.	26 points/night or 5200 points/season (during night period)
	Night Curfew	Certain hours of the night where aircraft operations are totally banned at the airport to protect local communities. Note: where the curfew is defined by landing takeoff times, the coordination parameters must include an appropriate taxi time as slots are allocated based on on/off block times.	Night curfew from 23:00 to 06:00 next morning
	Reduced Operation	Hours where capacity is limited for environmental reasons, typically during late at night and early in the morning at the airport to protect local communities.	28 movements/ 60min from 21:00 to 23:00 28 movements/ 60min from 6:00 to 7:00

(2) Runway Capacity (ATC Factor) (1)

WWACG SLOT GUIDELINES



(2) Runway Capacity

Factor	Parameter	Explanation	Example																																												
ATC (Air Traffic Control) Factor	Hourly Movements	<p>The maximum number of aircraft movements in each 60 minute period (clock hours or rolling hours), typically expressed as a maximum number of Arrivals, Departures and Total movements.</p> <p>The arrival + departure limits may be higher than the total limit, providing some flexibility to switch arrival and departure slots for a mixed-mode runway operation).</p> <p>The capacity may vary by hour-of-day for operational or environmental reasons, or be profiled to better match patterns of demand (eg, hours with mostly arrivals or mostly departures).</p>	<table border="0"> <tr> <td>Hours</td> <td>Air</td> <td>Dep</td> <td>Tot</td> </tr> <tr> <td>05-18</td> <td>48</td> <td>50</td> <td>68</td> </tr> <tr> <td>19-22</td> <td>36</td> <td>36</td> <td>48</td> </tr> </table> <p>or</p> <table border="0"> <tr> <td>Hour</td> <td>Air</td> <td>Dep</td> <td>Tot</td> </tr> <tr> <td>0600</td> <td>15</td> <td>35</td> <td>45</td> </tr> <tr> <td>0700</td> <td>25</td> <td>31</td> <td>50</td> </tr> <tr> <td>0800</td> <td>24</td> <td>24</td> <td>40</td> </tr> <tr> <td>.</td> <td>.</td> <td>.</td> <td>.</td> </tr> <tr> <td>2000</td> <td>24</td> <td>24</td> <td>40</td> </tr> <tr> <td>2100</td> <td>31</td> <td>15</td> <td>38</td> </tr> <tr> <td>2200</td> <td>27</td> <td>20</td> <td>36</td> </tr> </table>	Hours	Air	Dep	Tot	05-18	48	50	68	19-22	36	36	48	Hour	Air	Dep	Tot	0600	15	35	45	0700	25	31	50	0800	24	24	40	2000	24	24	40	2100	31	15	38	2200	27	20	36
			Hours	Air	Dep	Tot																																									
05-18	48	50	68																																												
19-22	36	36	48																																												
Hour	Air	Dep	Tot																																												
0600	15	35	45																																												
0700	25	31	50																																												
0800	24	24	40																																												
.	.	.	.																																												
2000	24	24	40																																												
2100	31	15	38																																												
2200	27	20	36																																												
	Slicing Scale	<p>The possible combinations of arrival and departure movement limits are specified on a slicing scale in a tabular form, allowing flexibility between the mix of arrivals and departures in each time period.</p> <p>Typically total capacity is maximized when there is close to a 50/50 split between arrivals and departures; hours with mostly arrivals or departures will have lower total capacity.</p>	<table border="0"> <tr> <td>Air</td> <td>Dep</td> <td>Total</td> </tr> <tr> <td>2</td> <td>30</td> <td>32</td> </tr> <tr> <td>.</td> <td>.</td> <td>.</td> </tr> <tr> <td>16</td> <td>18</td> <td>34</td> </tr> <tr> <td>17</td> <td>17</td> <td>34</td> </tr> <tr> <td>18</td> <td>15</td> <td>33</td> </tr> <tr> <td>.</td> <td>.</td> <td>.</td> </tr> <tr> <td>26</td> <td>3</td> <td>29</td> </tr> </table>	Air	Dep	Total	2	30	32	.	.	.	16	18	34	17	17	34	18	15	33	.	.	.	26	3	29																				
Air	Dep	Total																																													
2	30	32																																													
.	.	.																																													
16	18	34																																													
17	17	34																																													
18	15	33																																													
.	.	.																																													
26	3	29																																													

(2) Runway Capacity (ATC Factor) (2)

WWACG SLOT GUIDELINES



Sub-constraint	<p>In addition to hourly capacities, a narrower time interval sub-constraint of 5, 10, 15 or 30 minutes is used to smooth flights within the hour. In order to provide the best balance between scheduling flexibility for airlines and effective schedule smoothing, 10 or 15 min sub-constraints are useful.</p> <p>Typically the sum of sub-constraints across an hour is 10-20% higher than the hourly limit to provide some scheduling flexibility. For example, if the hourly limit is 40/hour, the sub-constraint might be 8-per-10min or 12-per-15min.</p>	<p>Constr. Air 60min 24</p> <p>10min 5 Or 15min 7</p> <p>Dep 24 5 7</p> <p>Tot 40 8 12</p>
Rolling Factor	<p>Coordination parameters may be fixed constraints, calculated at the same time interval of the constraint (eg, a 60min limit calculated every 60min), or rolling constraints calculated more frequently (eg, 60min limit calculated every 10 min). Rolling factors can help smooth the schedule, but are more complicated than fixed constraints.</p>	<p>10 movements/ 15min with a rolling factor of 5min.</p>

(3) Parking Capacity

WWACG SLOT GUIDELINES



(3) Parking Capacity

Factor	Parameter	Explanation	Example
Aircraft Type/ Stand Size	Stand Size	<p>The size of aircraft which can be parked on a particular stand and/or the number of stands available by each size.</p> <p>The ICAO standard aircraft sizes are: Code F -- A380, B748 Code E -- B747, B777, B787, A330, A340, A350 Code D -- A300, A310, B757, B767, MD11 Code C -- A320, B737, E170/190 Code AB -- GA/BA types</p> <p>Specific airports may have non-standard stand sizes, and specific stand categorization may be required</p>	<p>APRON C</p> <p>Alpha 6 D 1 E 9 F 3</p> <p>Bravo 14 4 6 0</p> <p>Charlie 20 0 9 0</p> <p>Total 40 5 24 3</p>
	MARS stands	MARS (Multiple Aircraft Ramp System) stands are stands that can either park, for example, 1 Code E or 2 Code C aircraft.	
	Minimum Break Time	The time between the block out time of departing aircraft and the block in time of the arriving aircraft on the same parking stand. Typically it is set at 10 to 20 minutes (shorter for narrow-body aircraft, longer for wide-body aircraft).	15 minutes

(4) Terminal Capacity

WWACG SLOT GUIDELINES



(4) Terminal Capacity

Factor	Parameter	Explanation	Example
Passenger Flow	Terminal Allocation	Flights are allocated to terminals (eg, T1, T2, FRT, GABA) and sub-terminals (eg, domestic and international) based on allocation rules, typically based on parameters such as: Airline, route, service type and/or flight number range.	T1 Domestic Last/Next Country = Domestic T1 International
Load Factors		Assumed LFs used to convert aircraft seats into passengers, typically based on historical data (eg, average LFs in busiest month of previous equivalent season). Different LFs may be used for different types of traffic (eg, domestic/int'l haul, long haul, LCCs, Charter). Different LFs may be used for different days-of-week or periods of the season where there is significant variation. Maximum number of passengers per time period (eg, 60 min). Passengers are calculated from aircraft seats and assumed LFs.	Last/Next Country = all others Dom = 70% L haul = 85% LCC = 85% Charter = 95%
Pax Flow Limits		Different time periods may be used to model different processes, depending on typical passenger reporting profiles (eg, 60 min for security or immigration, 2h or 3h limits for check-in). A sub-constraint (eg, 30 min limit) or rolling factor (eg, 60 min rolling every 15 min) may be used to prevent flight bunching within the hour.	T60 = 2000 pax T120 = 3600 pax T30 = 1200 pax
Check-in counters		Explicit calculation of number of desks required, based on check-in desk opening profiles (eg, for 100-150 seat aircraft, 2 desks from STD-180 min to STD-30 min), or from passenger reporting profiles and boarding times.	
Separation Constraint		As an alternative to Passenger Flow constraints, the minimum separation following the arrival or departure of a flight of a particular size (often used for small terminal facilities).	Up to 150 seats 10 min Up to 300 seats 20 min More than 300 seats 30 min

Asia/Pacific Airport Coordinators Association (APACA)

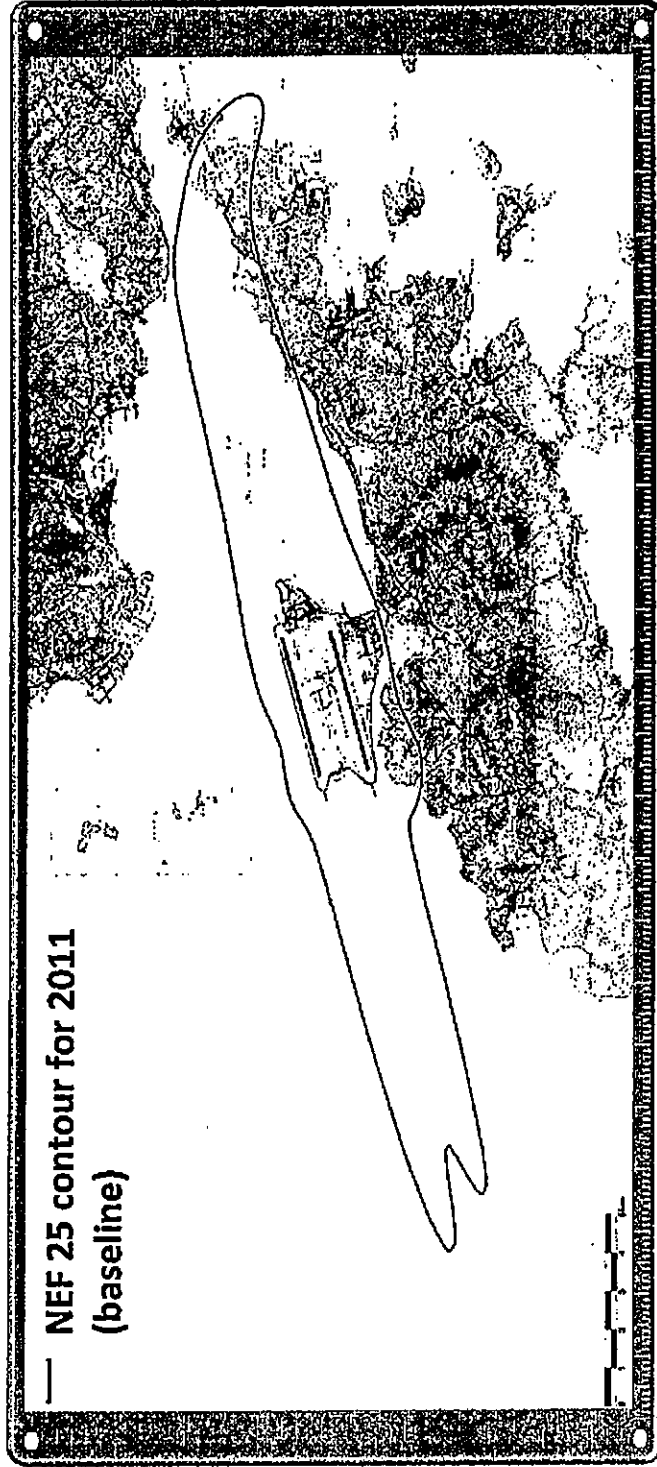
Agenda Item 6

**Noise Quota Count Pilot Scheme
For Hong Kong International Airport**

**13th APACA meeting
8 November, 2016
Atlanta, Georgia, U.S.A.**

2011 Noise Exposure Forecast (NEF) Contour of HKIA

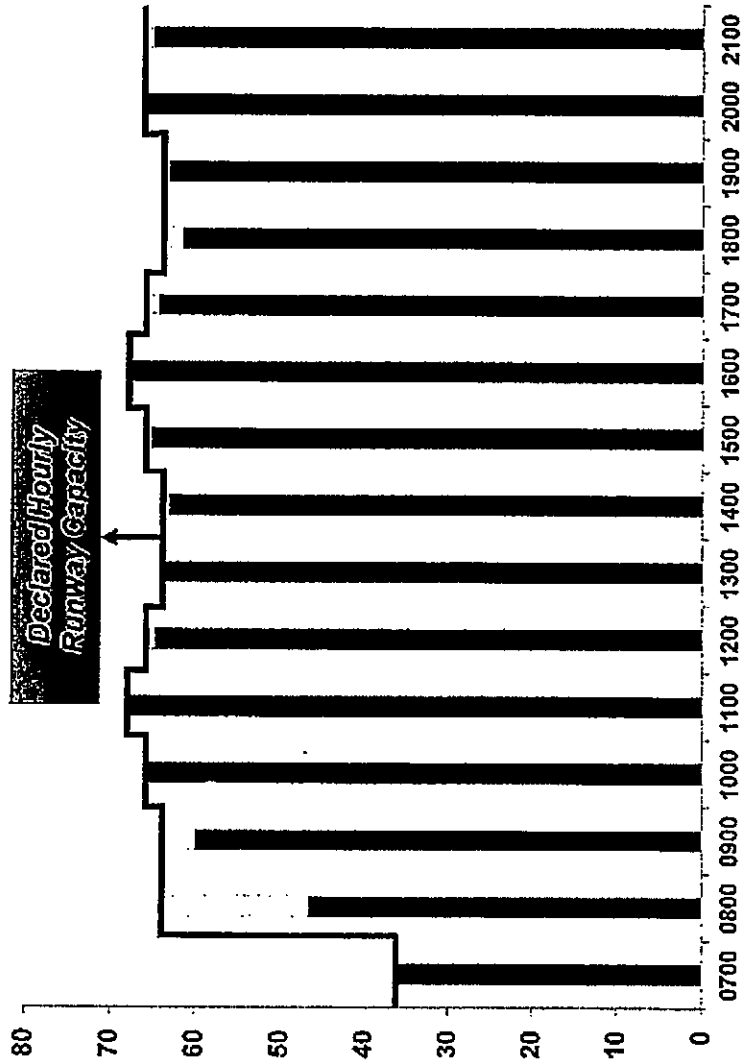
- AAHK has committed under the 3RS EIA that the NEF contour in the remaining years of the 2RS operation would not expand into any new Noise Sensitive Receivers[^].



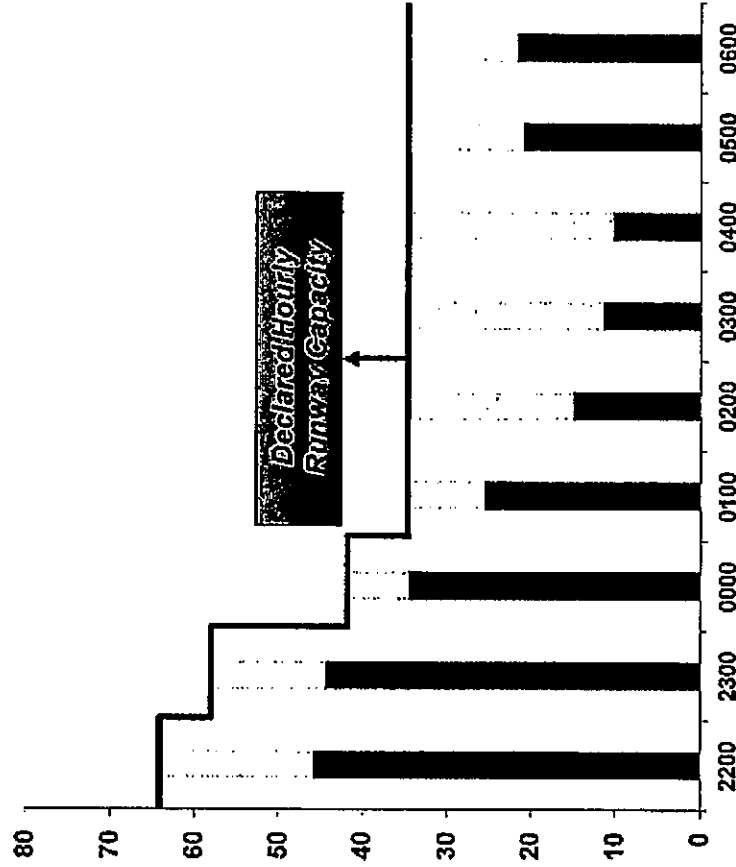
[^] An NSR refers to premises that are used for purposes sensitive to noise and requires protection. Examples of NSRs are domestic premises, hotels and hostels, educational institutions and hospitals and clinics.

Administrative Measure from Summer 2014 – Day/Night slots allocation maintained at ~ 80/20 ratio

Average scheduled hourly aircraft movement at HKIA during day time[^]



Average scheduled hourly aircraft movement at HKIA during night time[^]



Unused slots



[^] For simplicity and illustration purposes, each bar shown in the charts above represents the average hourly aircraft movement scheduled for the period from 15 – 21 Aug 2016.

* Operating hours between 0700 and 2159 are regarded as day-time operating hours and between 2200 and 0659 are regarded as night-time operating hours.

Need for a more effective aircraft noise management tool for the night period

- to incentivize airlines to use quieter aircraft;
- to set a **limit** for each airline on their **aircraft noise emission**; and
- to give **flexibility** to airlines to **adjust their aircraft mix** to optimise their operations and runway utilization.



Proposed Noise Quota Count Pilot Scheme

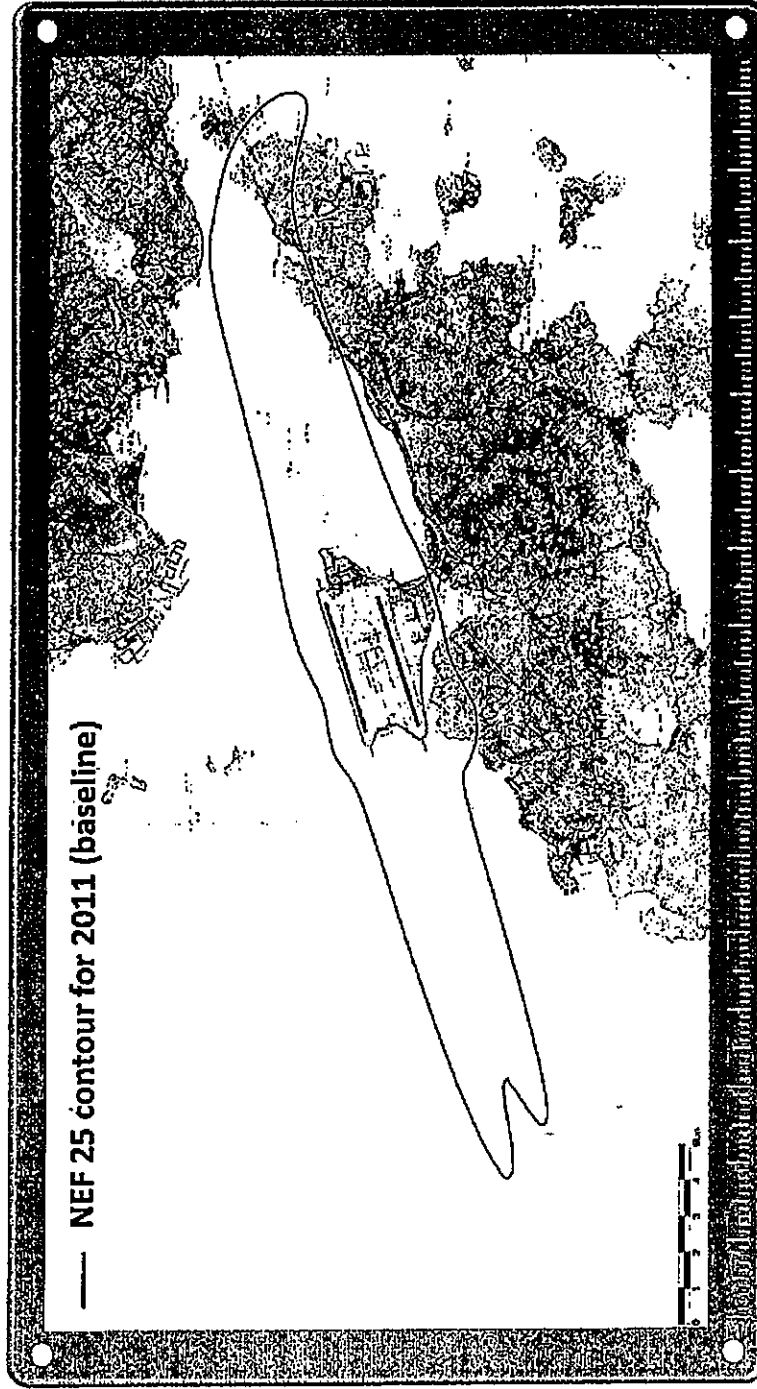
What is Noise Quota Count ("QC")?

Seven Noise Bands	INM Aircraft Noise Database (in EPNdB*)	Quota Count	Examples of Boeing		Examples of Airbus	
			Landing	Takeoff	Landing	Takeoff
1	84 – 86.9	0.25	B787	Nil	A320-232	Nil
2	87 – 89.9	0.5	B737-300 B737-800	B737-300 B787	A330-343 A380	A320-232
3	90 – 92.9	1	B747-8 B777-300	B737-800	A340-600	A330-343
4	93 – 95.9	2	B747-400	B747-8 B777-300	A300-622R A380	A300-622R A380 A340-600
5	96 – 98.9	4	B747-300	B747-400	Nil	Nil
6	99 – 101.9	8	B747-100	B747-300	Nil	Nil
7	> 101.9	16	Nil	B747-100	Nil	Nil

^A Classification is based on FAA INM's aircraft/engine prototypes and noise database at 3 reference measurement points for landing and takeoff.

* Effective Perceived Noise in Decibels, a noise unit used by ICAO for aircraft noise certification tests.

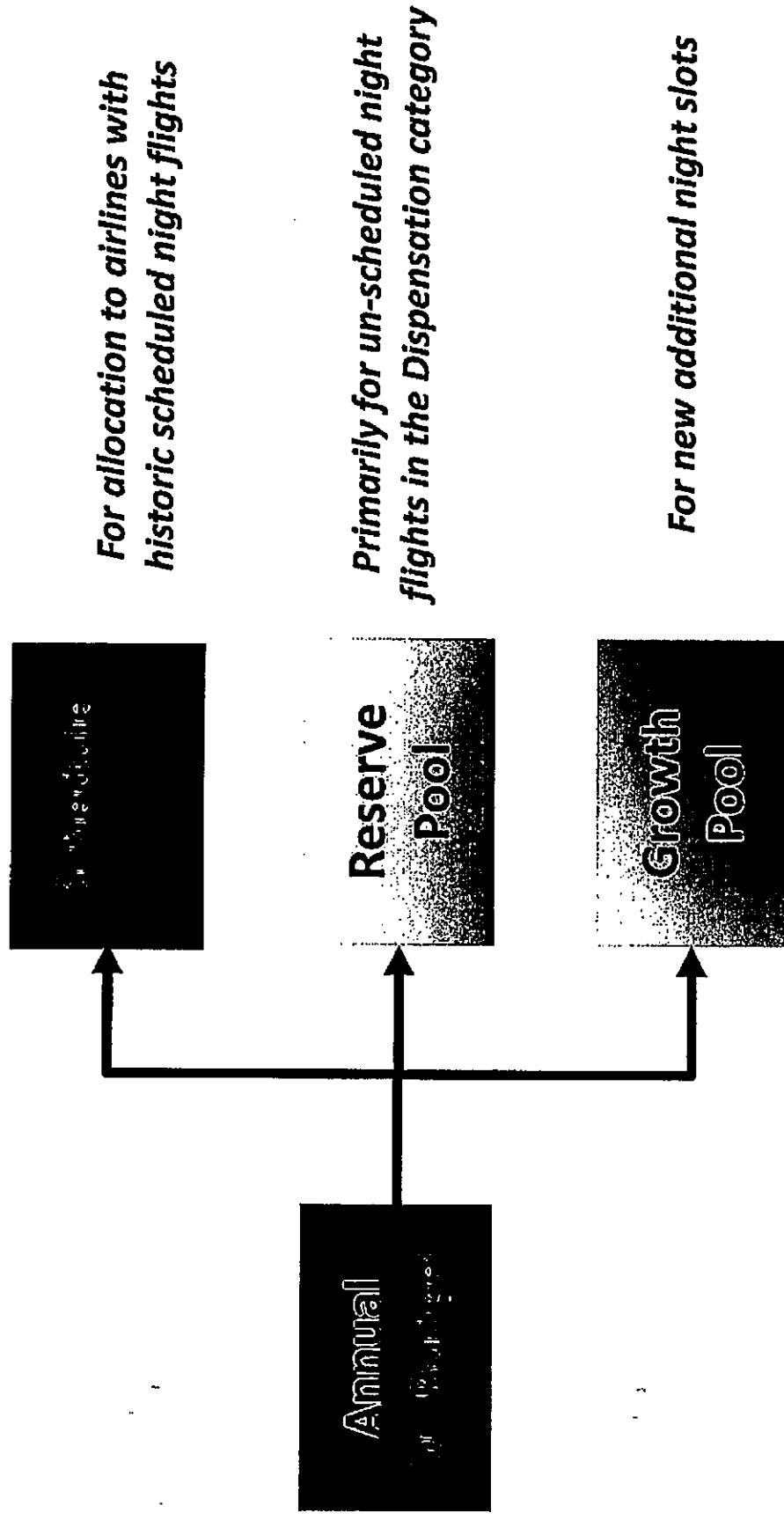
By capping the annual QC budget of HKIA at the 2011 baseline level, the NEF contour will be contained likewise



2011 Baseline
= X QC



Concept of QC Allocation



Dispensation Category to use AA's "Reserve Pool"

- i. Flights involving State VIPs
- ii. Relief Flights
- iii. Military Aircraft and Flights affected by War/Hostilities
- iv. Other Exceptional Circumstances deemed by the Government
- v. Emergencies
- vi. Widespread and Prolonged Air Traffic Disruption due to:
 - *Weather: activation of ALWS and FRCS by AA*
 - *Flow Control: announced by CAD (not covering consequential aircraft rotation delay to destinations not using the air route under flow control)*
- vii. Flights affected by exceptional circumstances that involve serious congestion at the aerodrome or serious hardship or suffering to passengers or animals. (e.g. strike by unions, blockage of the road link to the airport, etc.)
- viii. Shoulder period flights (21:45-21:55 & 07:00-07:10) which actual on or off block in the shoulder period but landing/takeoff in the night period



Penalty of the QC Pilot Scheme

- If an airline has, on a year-to-date basis, overused its approved QC Plan by 10% of the annual QC allocation:
 - AA may ask the airlines to take necessary action to prevent over-use of their QCs by the end of the year, including **the rescheduling and/or cancellation of night flights for the remainder of the year**
- If an airline has over-used its QC allocation by the end of the year, AA will reduce its annual QC allocation, and SCO will disapprove its historic night slots applications, in the following year by the same extent as the amount of QC it has over-used in the preceding year



Benefits of the proposed QC Scheme

1. Offers **incentives to airlines** to deploy quieter aircraft at HKIA;
2. Enables AAHK to **lift the current control on the frequency of night flights** as controlling the total noise level of aircraft is more effective in managing aircraft noise; and
3. **Commonly understood around the world** as it has been practiced for many years in both UK and some European airports.

Ongoing Review

1. AAHK will monitor the performance of the QC Pilot Scheme to ensure that its objectives are met and address stakeholders' feedback on the administration process where necessary;
2. An "interim review" will be undertaken one year after implementation of the QC Pilot Scheme to enable earlier refinement of the scheme, if need be. In addition, the scheme will be subject to a final review at the end of the second year; and
3. CAD will continue to track the aircraft noise impact via its noise monitoring terminals to validate the effectiveness of the QC Pilot Scheme.



Proposed Noise Quota Count ("QC") Pilot Scheme for Hong Kong International Airport

08 November 2016