



International Civil Aviation Organization

**Third Meeting of the Bay of Bengal Reduced Horizontal Separation
Implementation Task Force (BOB-RHS/TF/3)**

Singapore, 18 – 21 May 2010

Agenda Item 8: Any Other Business

BOBCAT AIRLINES SATISFACTION SURVEY RESULT

(Presented by Thailand)

SUMMARY

This working paper presents results of BOBCAT airline satisfaction survey carried out in cooperation with IATA between January and March 2010.

1. INTRODUCTION

1.1 The meeting would recall that, at the 10th Meeting of the ATFM Task Force held in May 2007, agreement was reached that on AIRAC Date 5 July 2007, ATFM and associated BOBCAT procedures would become fully operational.

1.2 Since the BOBCAT system becoming fully operational in July 2007, there were no software changes to the system apart from minor configuration changes to enable usage of B466 (SERKA-PAROD) and UL333 (SERKA-SOKAM) route segments in August 2008.

1.3 The meeting is also advised of AEROTHAI purchase of additional hardware in 2009 with the plan to migrate the BOBCAT software to the new servers, which would enhance energy-efficiency of the system as well as flexibility in managing operations of the BOBCAT system.

2. DISCUSSIONS

2.1 In cooperation with IATA, AEROTHAI conducted BOBCAT airlines satisfaction survey between January and March 2010 with results presented in **Appendix 1**.

2.2 Based on results of the BOBCAT airline satisfaction survey, it appears that the following features were favored by the airlines in order of preference:

- a) *Slot Swapping*: assisted swapping of slots between two aircraft managed by the same airline ensuring that swapping aircraft's slots are retained;
- b) *Smart Slot Allocation Refresh*: slot allocation page refreshes more frequently when slot allocation times presented in the page are approaching;
- c) *Pop-Out Slot Allocation Sections*: sections of slot allocation pages such as "recently used slot allocation" can be popped out to another window to enhance ease of monitoring;

- d) *Adjustable Slot Allocation Refresh Interval*: slot allocation page refresh intervals can be adjusted from the current default of 180 seconds (3 minutes);
- e) *Automatic Slot Compression*: automatic delay reduction when opportunity occurs some set time ahead of AWUT when requested by airlines on an opt-in mechanism; slot compression can be programmed not to take place some certain time ahead of AWUT;
- f) *Flexible Standard Taxi Time*: different standard taxi times within various airports based on airlines and/or gate/runway involved;
- g) *Integration of Data Collection and Analysis*: integration of slot allocation with one-week-per-month ATFM data collected from ANSPs involved in respect to waypoint, time and flight level used in entering the Kabul FIR; and,
- h) *Gate Delay Calculation*: automated calculation of "Gate Delay" based on last submitted slot request prior to initial slot allocation and AWUT in last accepted slot allocation

2.3 In respect to the slot request phase, some airlines requested that some form of “traffic demand” be displayed.

2.4 With respect to slot allocation, there were additional requests to integrate as much actual traffic situation into “waypoint allocation” as possible. This could be reviewed in conjunction with integration of data collection and analysis feature.

2.5 The meeting would recall initial requirements in the ATFM Users Handbook at flight plan and operational ATS messages be forwarded to the Bangkok ATFMU at the AFTN address VTBBZDZX.

2.6 Since flight plans contain routing information as well as elapsed time of entry into various en-route FIRs, flight plans sent to the Bangkok ATFMU can be analyzed in order to obtain traffic demand in the form of planned handover times between various FIRs based on flight plan and departure messages similar to current “waypoint allocation” page based on flight plan and departure messages.

2.7 On the one hand, this information could enhance tactical air traffic management by en route ACCs during the day of operation. On the other hand, this information could be used in the context of ATFM data collection and analysis after the day of operation.

2.8 In addition to the display of “real-time” information within the BOBCAT system, it was also suggested that mechanisms to change slot allocation be amended so that multiple routes with associated EETs can be examined simultaneously and best alternate selected by the airlines. While the current BOBCAT system has the “View Free Slots” capability, requirements similar to slot allocation at DI and PAVLO or DI and SITAX where slot allocation at multiple waypoints are required may complicate the airlines’ search for their best slot.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) Note results of BOBCAT airlines satisfaction survey,
- b) Discuss BOBCAT airlines satisfaction survey results; and,
- c) Discuss changes to be made and features to be included in the next version of the BOBCAT software.

----- End -----

BOBCAT Airlines Survey Result

In cooperation with IATA, AEROTHAI conducted a satisfaction survey of the airlines between January 2010 and March 2010. The total of 8 airlines replied to the survey, together contributing approximately 40 percent of total traffic.

Survey result can be summarized as follows:

1. Customer Satisfaction Index (CSI)

Satisfaction Level:

5 = Most important / Most satisfied

4 = Very important / Very satisfied

3 = Somewhat important / Somewhat satisfied

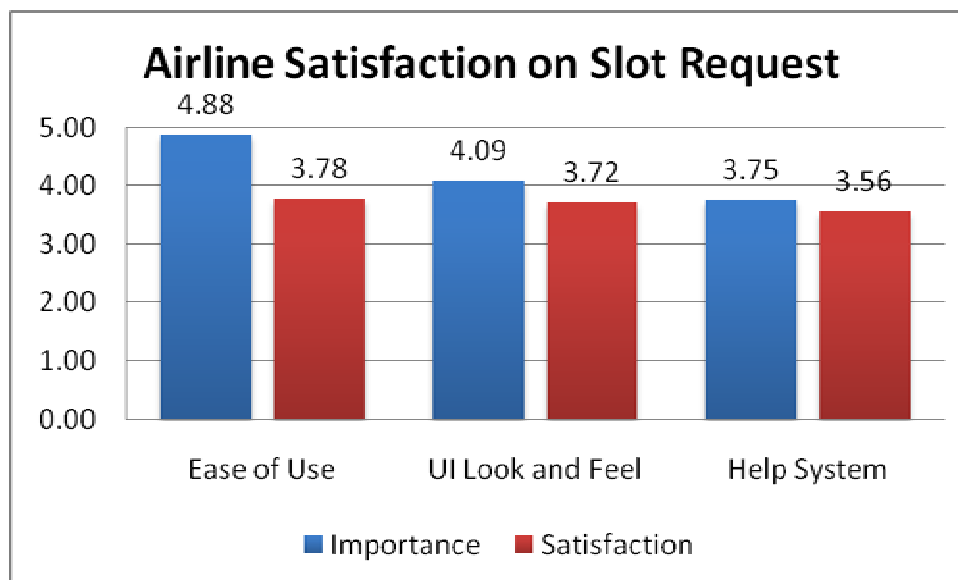
2 = Not very important / Not very satisfied

1 = Least important / Least satisfied

1.1 Airlines Satisfaction on Slot Request Functionality

Topic	Importance			Satisfaction Level	
	Average	Standard Deviation	Weight (%)	Average	Standard Deviation
1. Ease of Use	4.88	0.35	38.33%	3.78	0.90
2. User Interface Suitability (look and feel)	4.09	1.10	32.19%	3.72	0.70
3. Help System	3.75	1.16	29.48%	3.56	0.73

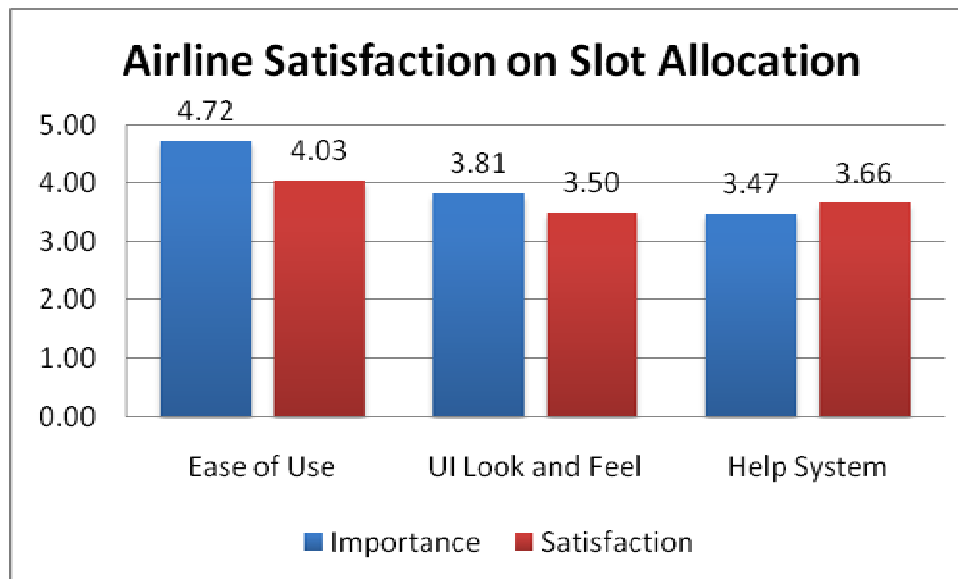
CSI = 73.93



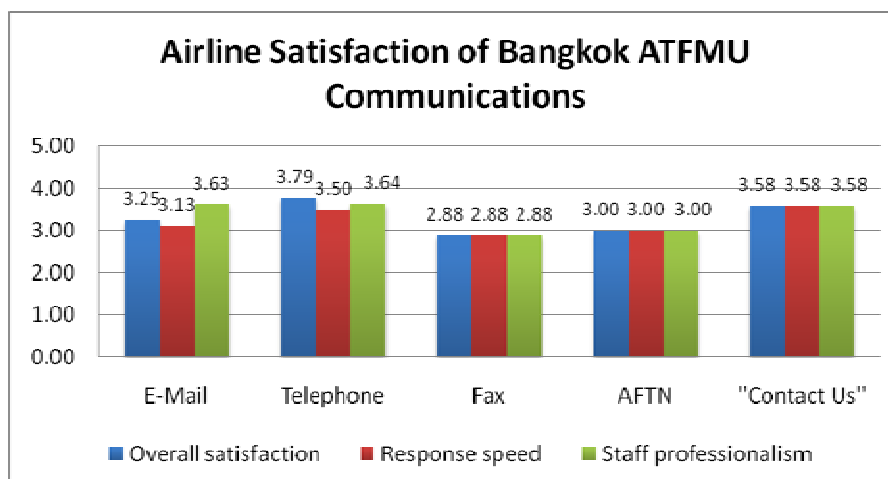
1.2 Airlines Satisfaction on Slot Allocation Functionality

Topic	Importance			Satisfaction	
	Average	Standard Deviation	Weight (%)	Average	Standard Deviation
1. Ease of Use	4.72	0.53	39.32%	4.03	1.07
2. User Interface Suitability (look and feel)	3.81	1.36	31.77%	3.50	0.93
3. Help System	3.47	1.18	28.91%	3.66	0.77

CSI = 75.08

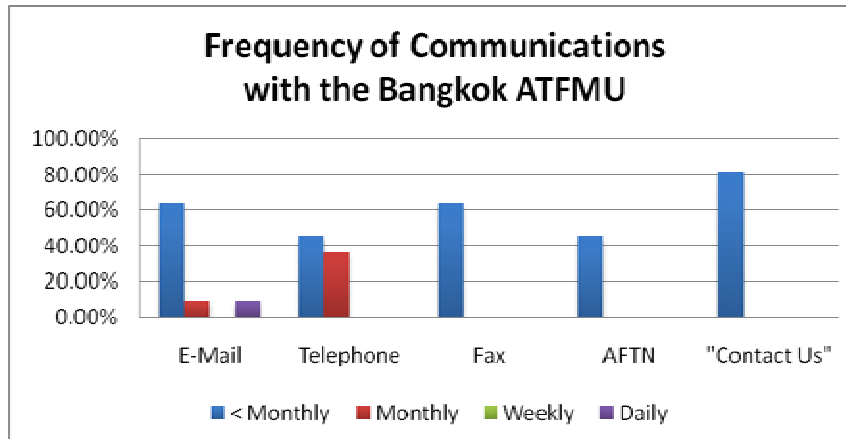


1.3 Airlines Satisfaction of Communications with the Bangkok ATFMU

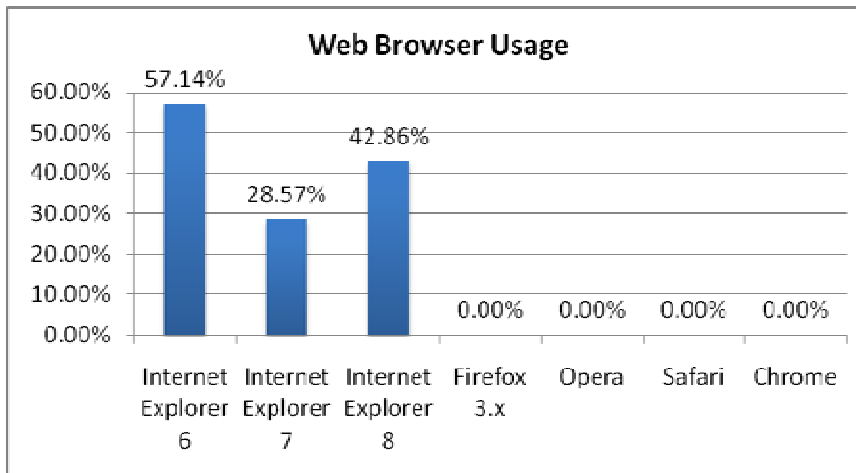


2. System Usage Information

2.1 Frequency of communications with the Bangkok ATFMU by Airlines



2.2 Percentage of Airlines Accessing the BOBCAT System using Various Web Browsers



3. Summary of Suggestions

3.1 Suggestions Related to Slot Request Functions

- Slot Request of call sign following an alphabet such as QFA31D should be possible
- Some form of "traffic demand" should be available during slot request phase

3.2 Suggestions Related to Slot Allocation Functions

- "Waypoint Allocation" should be modified to include actual traffic, which may come from processing of flight plan or departure messages
- Mechanisms used to select new slot should be adjusted so that airlines can input multiple routes' EET and select from multiple options simultaneously

3.3 General Suggestions

- Password resets via e-mail should be possible without the use of forms mailed to the Bangkok ATFMU
- Airlines should be able to give priority level to their slot requests

3.4 Popularity of Potential New Features

