

## **APPENDIX 7.3.1: CONVERSION FOR BUSY DAY FLIGHT SCHEDULES PRODUCED BY IATA**

### **1.0 INTRODUCTION**

Air traffic forecast by IATA is based on busy day schedule and projection whilst annual average daily conditions for Noise Exposure Forecast (NEF) calculation. The busy day is defined as the second busiest day of the average week of the busiest month of the year, whilst the annual average day corresponds to 1/365 of the annual traffic. Therefore, in order to apply the air traffic forecast produced by IATA for aircraft noise impact assessment, conversion to annual average daily basis is necessary.

### **2.0 BASIS**

IATA reviewed the historical data in Years 2008, 2009 and 2011 and observed that the busy day is about 6% above the annual average day in terms of ATM. Moreover, the distribution of ATM into aircraft ICAO codes is very similar during the busy day and the full year for the aforesaid reviewed years. Therefore, the distribution of ATM into ICAO codes is considered the same on the busy day and the annual average day.

### **3.0 CONVERSION FACTORS**

For the purpose of aircraft noise impact assessment, IATA estimated conversion factors based on 2011 operational data as below:-

<b>ATM</b>	<b>Day (0700 to 2159)</b>	<b>Night (2200 to 0659)</b>	<b>Total</b>
Busy Day	744	226	970
Average Day	735	180	915
<b>Conversion Factor</b>	<b>0.99</b>	<b>0.80</b>	<b>0.94</b>

To ensure consistency with the annual constrained forecast developed by IATA (i.e., annual ATM of 607,480 for year 2030 and 620,000 for year 2032 onwards), adjustment factors are introduced and applied to the above-mentioned conversion factors.