



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**THE MIDDLE EAST AIR NAVIGATION PLANNING  
AND IMPLEMENTATION REGIONAL GROUP  
(MIDANPIRG)**

**REPORT OF THE THIRD MEETING OF THE  
TRAFFIC FORECASTING SUB-GROUP**

**(Cairo, 27 – 29 April 2009)**

The views expressed in this Report should be taken as those of the MIDANPIRG TF Sub-Group and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting  
and published by authority of the Secretary General

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontier or boundaries.

## TABLE OF CONTENTS

Page

### PART I - HISTORY OF THE MEETING

1.	Place and Duration.....	1
2.	Opening.....	1
3.	Attendance .....	1
4.	Officers and Secretariat.....	1
5.	Language.....	1
6.	Agenda.....	1
7.	Conclusions and Decisions - Definition .....	2
8.	List of draft Conclusions and draft Decisions .....	2

### PART II - REPORT ON AGENDA ITEMS

Report on Agenda Item 1.....	1-1
Report on Agenda Item 2.....	2-1
Appendix 2A	
Report on Agenda Item 3.....	3-1
Appendix 3A – 3B	
Report on Agenda Item 4.....	4-1
Appendix 4A	
Report on Agenda Item 5.....	5-1
Report on Agenda Item 6.....	6-1
Appendix 6A	
Report on Agenda Item 7.....	7-1
Appendix 7A & 7B	
Report on Agenda Item 8 .....	8-1

### ATTACHMENT

List of Participants .....	A1-1/A1-4
----------------------------	-----------

## **PART I: HISTORY OF THE MEETING**

TF SG/3  
History of the Meeting

---

## **PART I – HISTORY OF THE MEETING**

### **1. PLACE AND DURATION**

1.1 The Third Meeting of the MIDANPIRG Traffic Forecasting Sub-group (TF SG/3) was held at the meeting room of the ICAO Middle East Regional Office, Cairo, 27 – 29 April 2009.

### **2. OPENING**

2.1 Mr. J. Faqir, Deputy Regional Director ICAO MID Regional Office, addressed the opening session and welcomed participants to the MID Regional Office and to the meeting. He reminded the meeting that despite the conclusions of MIDANPIRG /10 & 11 referring to the support of SG activities we still notice that some MID States are not giving the proper attention to the Traffic Forecast. He briefly outlined the objective of the meeting, namely to develop forecast and other planning analyses to support regional air navigation planning and implementation processes. Mr. Faqir ended his opening remarks by wishing that this meeting be a successful and fruitful meeting.

2.2 Chairman of the Sub-group Mr. Saleem Mohamed Hassan, welcomed the participants and wished them successful meeting.

### **3. ATTENDANCE**

3.1 The meeting was attended by a total of 15 participants from 5 States (Bahrain, Egypt, Kuwait, Saudi Arabia and Sudan).

### **4. OFFICERS AND SECRETARIAT**

4.1 The meeting was chaired by Mr. Saleem Hassan, Chief Air Traffic Management from Bahrain, Mr. Jehad Faqir, Deputy Regional Director served as Secretariat of the meeting assisted by Mr. Mustapha Chaouki, Economist, ICAO Headquarters, Montreal.

### **5. LANGUAGE**

1.1 The discussions were conducted in English. Documentation was issued in English.

### **6. AGENDA**

6.1 The following agenda was adopted:

Agenda Item 1: Adoption of Provisional Agenda

Agenda Item 2: Review of Conclusions and Decisions Made by MIDANPIRG/11 in Connection with the TF SG

Agenda Item 3: Increasing the Efficiency of MIDANPIRG

Agenda Item 4: Review of Updated Forecast

TF SG/3  
History of the Meeting

---

- Agenda Item 5: Peak-Period Analysis
- Agenda Item 6: Presentation by States
- Agenda Item 7: Future Work Programme
- Agenda Item 8: Any Other Business

**7. CONCLUSIONS AND DECISIONS – DEFINITION**

7.1 All MIDANPIRG Sub-groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

- a) **Conclusions** deal with matters which, in accordance with the group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and
- b) **Decisions** deal with matters of concern only to MIDANPIRG and its contributory bodies.

**8. LIST OF CONCLUSIONS AND DECISIONS**

*DRAFT CONCLUSION 3/1: MID REGION FORECAST*

-----

## **PART II: REPORT ON AGENDA ITEMS**

TF SG/3  
Report on Agenda Item 1

---

**PART II: REPORT ON AGENDA ITEMS**

**REPORT ON AGENDA ITEM 1: ADOPTION OF PROVISIONAL AGENDA**

1.1 The meeting reviewed the Provisional Agenda and adopted it as indicated in paragraph 6 of the History of the Meeting.

-----

TF SG/3  
Report on Agenda Item 2

---

**REPORT ON AGENDA ITEM 2: REVIEW OF CONCLUSIONS AND DECISIONS MADE BY  
MIDANPIRG/11 IN CONNECTION WITH THE TF SG**

2.1 The meeting was presented with the conclusion adopted by MIDANPIRG/11 in connection with traffic forecasting activities in the Middle East Region as at **Appendix 2A** to the Report on Agenda Item 2. MIDANPIRG/11 Conclusion 11/85 dealt with the membership and the composition of the Sub-group and the identification of the support which States are expected to extend to the forecasting activities in the region.

2.2 The meeting noted the information provided in the working paper and agreed to reiterate MIDANPIRG/11 Conclusion 11/85 as the basis of its work programme.

2.3 The meeting was briefed on the activities of the Traffic Forecasting. In this regard, the meeting appreciated the efforts of ICAO MID Regional Office in organizing two events to help Civil Aviation Authorities of the States of the Region in building forecasting skills for adequate infrastructure and facilities planning and to demonstrate how data collection and statistical analysis have a significant impact on improving efficiency and viability of the concerned stakeholders, notably, airlines, airports and ANS providers; furthermore the meeting was pleased to note that the participants at both workshops reiterated their commitment to collect data and report to ICAO Headquarters.

-----

TF SG/3  
Appendix 2A to the Report on Agenda Item 2

**FOLLOW-UP ACTION ON MIDANPIRG/11 CONCLUSIONS AND DECISIONS**

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
CONC. 11/85:	UPDATED TRAFFIC FORECASTING REQUIREMENTS IN THE MID REGION	<p>That,</p> <p>a) the ICAO MID Regional Office coordinate with other international and regional organizations; including IATA, establishing a MID database to support regional traffic forecasting activities;</p> <p>b) MID States continue their support to the Traffic Forecasting Sub-Group by ensuring that their respective nominees to the membership of the Sub-Group include, as much as possible, forecasting experts, air traffic management experts and, when required, financial analysts to carry out business case and cost/benefit analysis; and</p> <p>c) MID States continue to avail required FIR and other data to the Traffic Forecasting Sub-Group in the format agreed by the Sub-Group to facilitate the development of forecasts and other air navigation planning and implementation parameters.</p>	<p>Sub-Groups to meet and establish the database</p> <p>ICAO to co-ordinate with States</p> <p>Update information to be provided by States</p>	<p>TF SG and ICAO</p> <p>ICAO and States</p> <p>States and ICAO</p>	<p>Meeting of the SG</p> <p>Reminder</p> <p>State letter FIR traffic data</p>	<p>Apr.2009</p> <p>Apr.2009</p> <p>Mar.2009</p>

-----

TF SG/3  
Report on Agenda Item 3

---

**REPORT ON AGENDA ITEM 3: INCREASING THE EFFICIENCY OF MIDANPIRG**

*Increasing the Effectiveness of PIRGs*

3.1 The meeting noted that the Council, on 18 March 2008, considered a report submitted by the ANC on increasing the effectiveness of PIRGS and took the following actions: a) agreed that the Commission should present, on an annual basis, a consolidated report to the Council containing the Commission's analysis of regional air navigation developments and the status of the resolution of air navigation deficiencies, as well as an indication of the value added from the PIRGs' activities; b) while agreeing to retain, for the time being, the terms of reference of PIRGs, except those of the APIRG and the GREPECAS which should be amended to exclude security matters, requested that the Commission study the merits of the PIRGs; c) agreed that all ICAO Contracting States, who are service providers in an air navigation region and part of that region's ANP, should be included in the membership of that region's PIRG. Furthermore, user States are entitled to participate in any other PIRG meetings as a non-member. International Organizations recognized by the Council may be invited as necessary to attend as observers to the PIRG meetings; and d) requested that the Commission present, in due course, a report to the Council on the outcome of its study on merits of PIRGs and on the development of new structures to coordinate Business Plan implementation activities related to safety, security and environmental subjects.

3.2 The meeting noted the revised Terms of Reference of MIDANPIRG which was included in the latest edition of MIDANPIRG Procedural Handbook (Edition 4 April 2009).

*MIDANPIRG Organizational Structure*

3.3 The meeting noted the revised MIDANPIRG Organizational Structure as at **Appendix 3A** to the Report on Agenda Item 3, which was introduced as a result of the developments related to ATS Routes, RVSM, PBN and GNSS in the MID Region.

*Improving communication between ICAO MID Regional Office and States*

3.4 The meeting was apprised of the difficulties facing the ICAO MID Regional Office with regard to communication with States and noted that the level of participation of some States in the meetings of MIDANPIRG subsidiary bodies and the MID Regional Office activities (Seminars and Workshops) has been irregular and sometimes low; furthermore, responses from States to confirm attendance were not received in a timely manner. Consequently, follow-up reminders to State Letters had to be sent, almost systematically.

3.5 The meeting noted MIDANPIRG/11 Conclusion 11/3 related to increasing the efficiency of MIDANPIRG where States were requested to appoint ICAO Focal Point Persons using the form at **Appendix 3B** to the Report on Agenda Item 3. It was further highlighted that the Head of State Civil Aviation (DGCA) remains the official contact for all communication between ICAO MID Regional Office and the State.

TF SG/3  
Report on Agenda Item 3

---

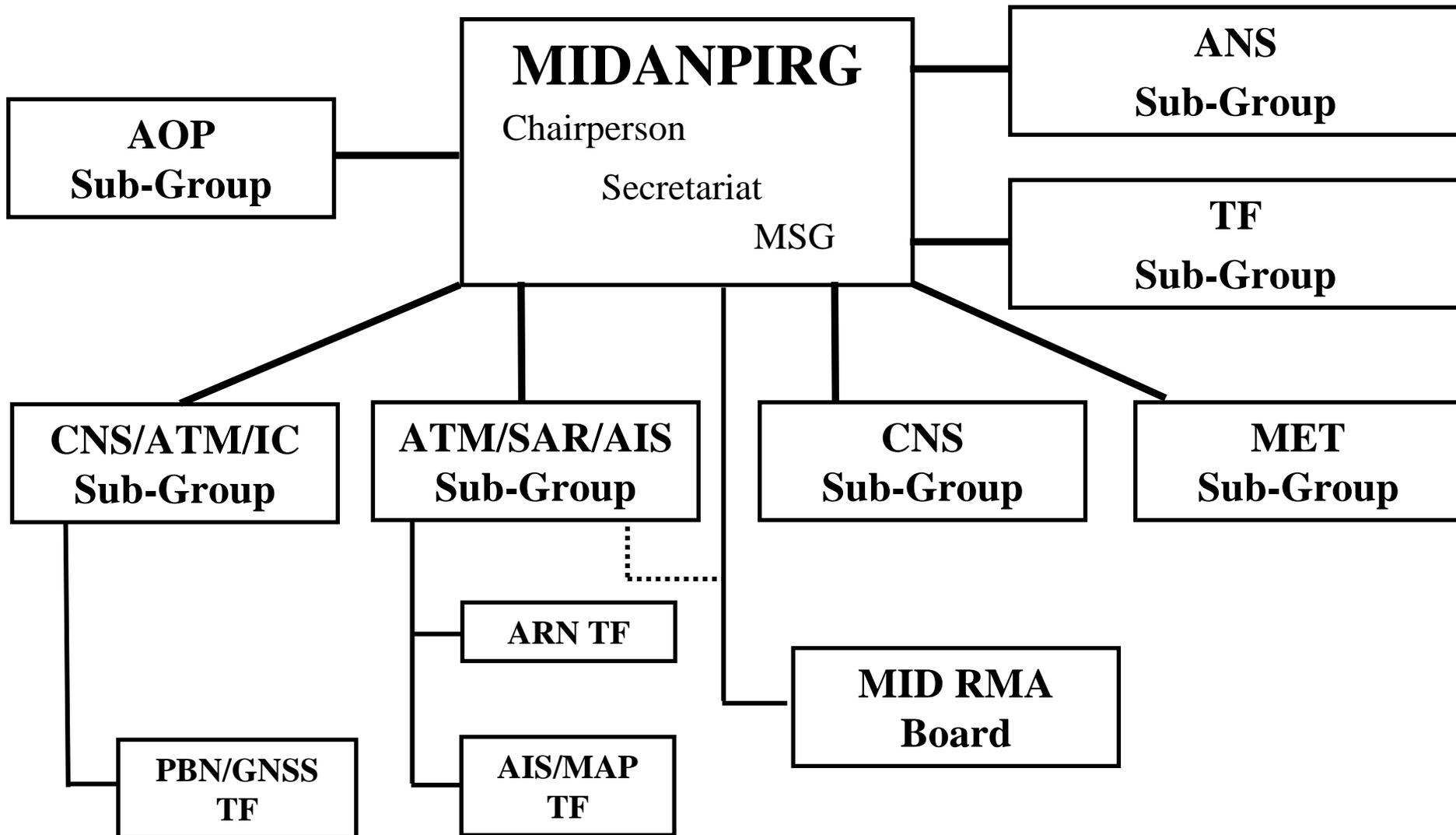
3.6 The meeting was concerned about the low number of States present and requested ICAO MID Regional Office to remind those States of the importance of participation at TF SG meetings.

***ICAO MID Forum***

3.7 The meeting noted that the ICAO MID Forum was successfully launched in September 2004 to provide an effective collaboration tool to boost communication and information sharing among MID States through the internet. However, this tool was not utilized for the intent it was created for and was mainly used as a normal website. The meeting recognized the importance of MID Forum and supported the effective use of the facility for the interest of MID Region and thanked Bahrain for continuing technical support of the MID Forum.

-----

# MIDANPIRG/11 Organizational Structure



TF SG/3  
 Appendix 3B to the Report on Agenda Item 3

---

**CIVIL AVIATION AUTHORITY CONTACT DETAILS AND  
 NOMINATION FORM FOR ICAO FOCAL POINT PERSON(S)**

1. **Name of State:** .....

2. **Official CAA Contact details:**

Name	Title	Address	email	Fax	Tel and Mobile
					Tel: Mob:

3. **Nomination of ICAO Focal Point(s):**

3.1 *Main ICAO Focal Point:*

Name	Title	Address	email	Fax	Tel and Mobile
					Tel: Mob:

3.1 *ICAO Focal Points for technical areas:*

If you find it appropriate to designate Focal Point(s) for the following technical areas, please check the appropriate Box and provide contact details of the designated Focal Point(s):

AGA (Airports) Focal Point:

Name	Title	Address	email	Fax	Tel and Mobile
					Tel: Mob:

ANS (ATM, CNS and AIS/MAP) Focal Point:

<b>Name</b>	<b>Title</b>	<b>Address</b>	<b>email</b>	<b>Fax</b>	<b>Tel and Mobile</b>
					Tel: Mob:

MET Focal Point:

<b>Name</b>	<b>Title</b>	<b>Address</b>	<b>email</b>	<b>Fax</b>	<b>Tel and Mobile</b>
					Tel: Mob:

Air Transport Focal Point:

<b>Name</b>	<b>Title</b>	<b>Address</b>	<b>email</b>	<b>Fax</b>	<b>Tel and Mobile</b>
					Tel: Mob:

Training Focal Point:

<b>Name</b>	<b>Title</b>	<b>Address</b>	<b>email</b>	<b>Fax</b>	<b>Tel and Mobile</b>
					Tel: Mob:

Flight Safety Focal Point:

<b>Name</b>	<b>Title</b>	<b>Address</b>	<b>email</b>	<b>Fax</b>	<b>Tel and Mobile</b>
					Tel: Mob:

**N.B:** It's to be noted that one person could be appointed as focal point for more than one technical area.

-----

TF SG/3  
Report on Agenda Item 4

---

**REPORT ON AGENDA ITEM 4: REVIEW OF UPDATED FORECAST**

4.1 Under this Agenda Item, the meeting was presented with a set of updated forecasts for international passenger and aircraft movement traffic to, from and within the MID Region up to the year 2025. According to these forecasts, the number of passengers is expected to increase more than quadruple from around 71 million passenger in 2007 to about 293 million passenger in 2025 and the number of aircraft movements is forecasted to grow from about 625 thousand to above 2.3 million movements over the same period.

4.2 For the purposes of the updated forecasts, the ICAO statistical regional classification was used. According to this definition, the MID Region is comprised of Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen. The meeting recommended that for future forecasts, this definition should be expanded to include Egypt and Afghanistan as they are part of the Middle East Regional Air Navigation Plan and accordingly adopted the following Draft Conclusion 3/1:

***DRAFT CONCLUSION 3/1: MID REGION FORECAST***

*That, ICAO to include Egypt and Afghanistan in the future forecasts of the MID Region.*

4.3 The meeting also recommended that future traffic forecast to include traffic between MID Region and North Africa.

4.4 The meeting adopted the updated forecasts as at **Appendix 4A** to the Report on Agenda Item 4, for presentation to MIDANPIRG/12.

4.5 The meeting noted that the forecasted fast pace of growth will pose challenges for States, air navigation service providers and airports in the region.

4.6 The meeting also discussed the importance of the availability of complete and reliable traffic and financial data for the development of traffic forecasts and re-iterated its request to States in the region to provide ICAO with the data as required by its Statistics program<sup>1</sup> in addition the occasional requests needed for specific analyses.

-----

---

<sup>1</sup> more information on this program can be found in the website below:  
<http://www.icao.int/icao/en/atb/ead/sta/index.html>

TF SG/3  
Appendix 4A to the Report on Agenda Item 4

---

**AIRCRAFT FORECAST  
FOR THE MIDDLE EAST REGION**

Prepared by the  
Secretariat for TF SG/3

## 1. INTRODUCTION

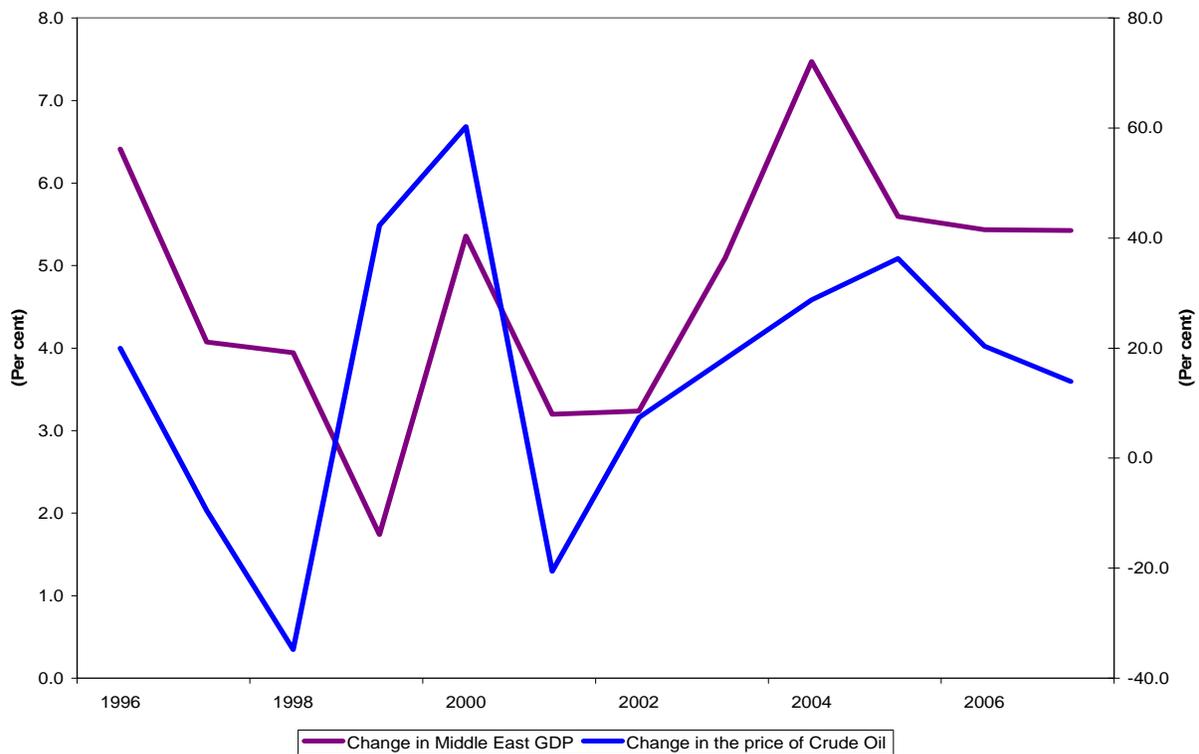
1.1 The MIDANPIRG Traffic Forecasting Sub-Group (TFSG) superseded, in 2004, the Middle East Traffic Forecasting Group (MID TFG) which was set up in 1998 with the objective of developing traffic forecasts and other planning parameters in support of the planning of air navigation services in the MID region. The TFSG has, so far, held two meetings in September 2004 and in May 2006.

1.2 This report provides forecasts prepared by the ICAO Secretariat for discussion by the TFSG/3 meeting in Cairo, 27-29 April 2009.

## 2. ECONOMIC TRENDS AND PROSPECTS FOR THE MIDDLE EAST REGION

2.1. The Middle East economy is largely driven by oil production and exports and as a result the region's economic growth is highly dependent on changes oil prices as illustrated in **Figure 1**.

**FIGURE 1**  
**Changes in Middle East GDP and Fuel Prices**  
(per cent)



2.2 The recent hike in oil prices since 2002 has helped the economy of the region grow at faster rates through increased investment particularly in construction projects, higher trade volumes and tourism activity. This particularly fast pace of growth has led to shortages in labour and construction material. The combination of the increase in consumption, dominated by imported goods, and higher world commodity prices led to higher inflation. This is expected in the short term to lead governments to intervene to control inflation and lay the ground for more sustainable growth. It is also expected that the impact of the global financial crisis on the economy of the region will be manageable. In the long run, the Middle East economy is expected to maintain a higher than world average growth through to the end of the forecast period. The GDP for the region is expected to increase at an average annual rate of 4 per cent for the 2007-2025 period.

### 3. GEOGRAPHICAL SCOPE AND HISTORICAL DATA

#### 3.1 Geographical Scope

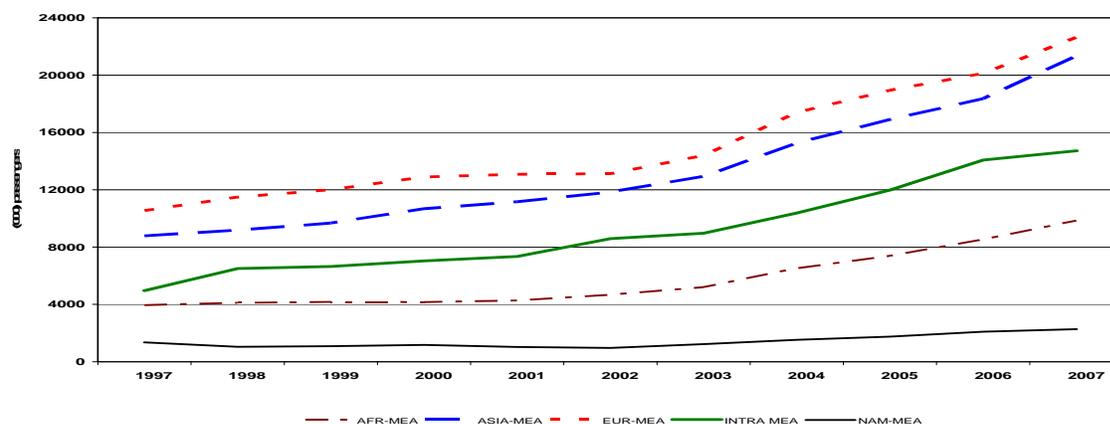
3.1.1 In order to facilitate the group's work and the forecasting process, the following major route groups to, from and within the Middle East Region have been identified:

- Between Middle East - Europe
- Between Middle East - Africa
- Between Middle East - Asia/Pacific
- Between Middle East - North America
- Intra Middle East

#### 3.2 Historical Passengers Traffic on Major Identified Route Groups

3.2.1 It is estimated that the air traffic on the identified five major route groups to, from and within the Middle East region increased from about 30 million in 1997 to more than 70 million passengers in 2007 at an average annual growth rate of 9.1 per cent. The annual passengers carried and growth rates for each of the route groups concerned are illustrated in **Figure 2**.

**FIGURE 2**  
**Traffic By Major Route Group - 1997 -2007**  
 (thousand passengers)



3.2.2 All route groups grew at an average annual rate ranging from 5.3 per cent to 11.5 per cent.

3.2.3 In 2007, the Middle East-Europe route group had the highest share in passenger traffic (32 per cent), followed by Middle East-Asia (30 per cent), Intra Middle East (21 per cent), Middle East-Africa, and Middle East-North America route groups.

### 3.3 Historical Average Aircraft Seating Capacity on Major Identified Route Groups

3.3.1 During the 1997-2007 period, the average aircraft seating capacity has decreased significantly on the Middle East –North America and moderately on Middle East-Asia Pacific route groups. This average has fluctuated in the range of 208-229 seats per aircraft for the Middle East Africa and the Middle East-Europe route groups while it has increased from around 181 to 190 seats per aircraft for the Intra-Middle East route group, during the same period. The historical trends of the average aircraft seating capacity by route group is provided in **Table 1** below.

**TABLE 1**  
**Average aircraft seating capacity by route group**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AFR-MEA	213	216	210	209	218	221	214	209	214	229	227
ASIA-MEA	266	266	263	266	266	257	259	250	246	249	253
EUR-MEA	217	219	213	208	211	213	218	222	219	224	226
INTRA-MEA	181	185	180	185	185	188	190	193	193	192	190
NAM-MEA	376	343	312	311	304	312	307	296	295	292	291

### 3.4 Historical Load Factor on Major Identified Route Groups

3.4.1 All route groups experienced increases in the Load Factors during the period 1997 to 2007. The highest load factors are those achieved on the Middle East-North America and Middle East-Asia route groups followed by load factors on the Middle East – Europe route group. Load factors on the Middle East-Africa and Intra-Middle East route groups are the lowest.

3.4.2 The historical trends in load factors for the route groups concerned are presented in **Table 2** below.

**TABLE 2**

**LOAD FACTORS FOR THE YEARS 1997-2007**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AFR-MEA	58.9	59.5	58.5	58.3	61.1	63.8	65.1	68.7	70	67.8	70
ASIA-MEA	65.4	67.5	66.1	68.9	69.7	72.7	69.8	72.1	74.3	77.3	79.7
EUR-MEA	65.9	66.2	65.9	68.1	66.3	69.1	68.1	70.6	72.1	70.4	74.8
INTRA-MEA	58.3	65.1	58.9	60	61.9	61.2	63.9	66.2	66.8	66.1	64.8
NAM-MEA	71.7	67.8	66.5	71.7	72.8	75.5	75.7	78.6	81.7	80.6	80.3

**4. METHODOLOGY**

4.1 The demand for air travel is primarily determined by economic developments, notably the growth of world and regional income levels as measured by the aggregate economic activities (GDP), demographic trends, and the cost of air travel measured by airline yields (gross passenger revenue per passenger kilometre flown). It is also assumed that the political and general economic climate are conducive to growth, however, no specific assumptions are made about possible political and economic scenarios beyond those implicit in the basic GDP growth rates forecast. World energy demand, supply, and prices are important to both economic progress and to the cost of air travel. It is assumed that during the forecast period there will be no major disruptions in the availability of fuel.

4.2 Econometric models were developed wherever possible to understand the cause and effect relationship between traffic and other causal factors. It was recognized, however, that even where models were developed, the forecasts should incorporate a significant element of judgement.

4.3 In route groups where consistent data were not available, forecasts were developed based on general assessments of traffic trends, economic and other relevant factors.

4.4 Forecasts of aircraft movements in a particular route-group can be derived from forecasts of passengers and assumptions about future trends in load factors and average aircraft seating capacity. The link between these variables is given by:

$$\begin{aligned} \text{Aircraft movements} &= \frac{\text{passenger numbers}}{(\text{passenger/seats}) \cdot (\text{seats/aircraft})} \\ &= \frac{\text{passenger numbers}}{(\text{load factor}) \cdot (\text{aircraft seating capacity})} \end{aligned}$$

4.5 The relationship between changes in the same variables can therefore be deduced:

$$Y = X1 - X2 - X3$$

Where:

- Y = change in aircraft movements (%)
- X1 = change in passenger numbers (%)
- X2 = change in load factor (%)
- X3 = change in average aircraft seats (%)

4.6 Judgements would be necessary about whether gradual improvements in load factors could be expected from marketing initiatives and yield programs. Assumptions were made about future trends in average aircraft seating capacity based on expectations about the types of aircraft that might be introduced to the route over the forecast period. Historical trends as well as data concerning aircraft orders were also factored into the development of future trends.

4.7 Having established the aircraft movement growth rates for each of the route-groups concerned, in the manner described above, aircraft movements forecasts for the year 2025 were estimated. These forecasts were developed for each of the major route groups concerned using the 2007 OAG (Official Airline Guide) data as the base year.

## 5. PASSENGER TRAFFIC FORECASTS

5.1 Based on the methodology described above, passenger traffic forecasts were developed for the major route groups concerned. The traffic to, from and within the Middle East region on the five major route groups concerned for the period 2007-2025 is expected to increase at an average annual rate of 8.2 per cent. The Intra-Middle East route group is expected to experience the highest average annual growth rate of 11.4 per cent per annum, followed by Asia/Pacific-Middle East, Africa-Middle East, Europe-Middle East and North America-Middle East route groups with growth rates of 8 per cent, 7.3 per cent, 6.1 per cent and 3.1 per cent respectively for the period concerned as illustrated in **Table 3**.

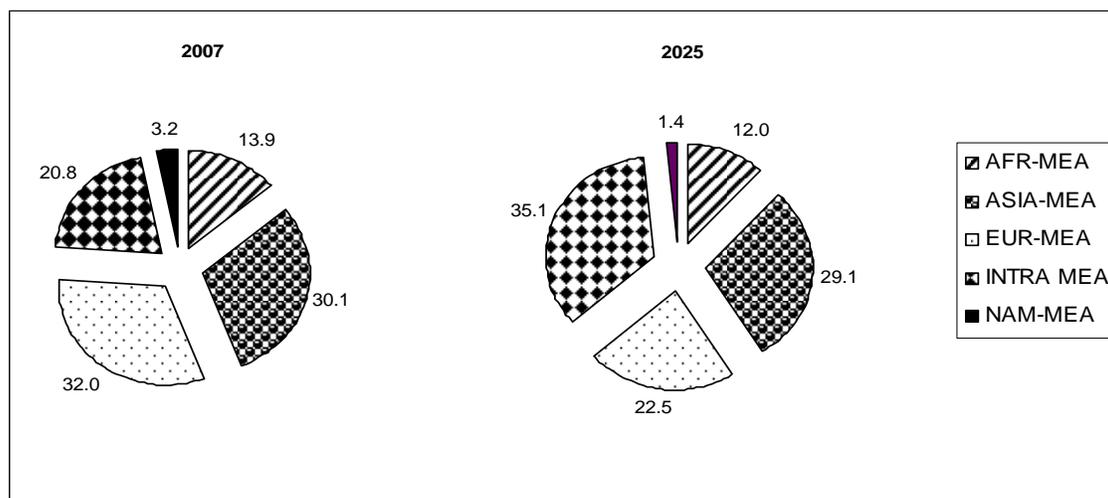
**TABLE 3**

**PASSENGER FORECAST TO THE YEAR 2025**  
(thousand passengers)

	Actual		Forecast	Average Annual Growths (per cent)	
	1997	2007	2025	1997-2007	2007-2025
AFR-MEA	3955	9843	34987	9.5	7.3
ASIA-MEA	8786	21334	85250	9.3	8.0
EUR-MEA	10542	22631	65704	7.9	6.1
INTRA MEA	4958	14709	102687	11.5	11.4
NAM-MEA	1362	2281	3951	5.3	3.1
<b>TOTAL</b>	29603	70798	292580	9.1	8.2

5.2 These forecasts result in a change in the shares of the various route groups in terms of passenger traffic as depicted in **Figure 3**.

**FIGURE 3**  
Shares of selected route groups in passenger traffic



## 6. FORECASTS OF AIRCRAFT MOVEMENTS

6.1 In order to develop aircraft movements forecasts for the major route groups assumptions were made regarding the evolution of the average aircraft seating capacity and load factors. These assumptions are depicted in **Table 4**.

**TABLE 4**

### ASSUMPTIONS ON THE EVOLUTION OF THE AVERAGE AIRCRAFT SEATING CAPACITY AND LOAD FACTOR OVER THE 2007-2025 PERIOD

	1997	2007	2025		1997	2007	2025
<b>AFR-MEA</b>	213	227	220	<b>AFR-MEA</b>	58.9	70	75
<b>ASIA-MEA</b>	266	253	350	<b>ASIA-MEA</b>	65.4	79.7	75
<b>EUR-MEA</b>	217	226	300	<b>EUR-MEA</b>	65.9	74.8	75
<b>INTRA MEA</b>	181	190	220	<b>INTRA MEA</b>	58.3	64.8	70
<b>NAM-MEA</b>	376	291	300	<b>NAM-MEA</b>	71.7	80.3	80

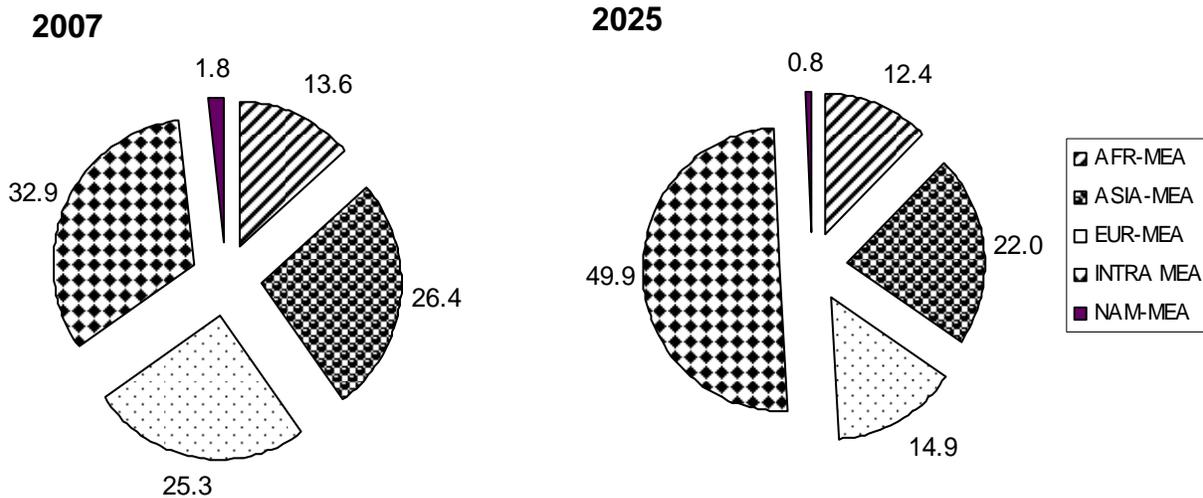
6.2 Using the methodology described above, movement forecasts for the major route groups for the 2007-2025 period are depicted in **Table 5**.

**TABLE 5**  
**AIRCRAFT MOVEMENTS FORECAST TO THE YEAR 2025**

	Actual 2007	Forecast 2025	Average Annual (per cent) 2007-2025	Growths
AFR-MEA	84933	291159	7.1	
ASIA-MEA	165364	514979	6.5	
EUR-MEA	158346	350380	4.5	
INTRA MEA	205769	1170709	10.1	
NAM-MEA	11075	18703	3.0	
<b>TOTAL</b>	<b>625487</b>	<b>2345929</b>	<b>7.6</b>	

6.3 The total aircraft movements to/from and within the Middle East region are estimated to increase from some 625000 in 2007 to around 2346000 in 2025 at an average annual growth rate of 7.6 per cent. The resulting movements' shares for the year 2025 are depicted in **Figure 4**.

**FIGURE 4**  
**Shares of selected route groups in aircraft movements**



**BETWEEN MIDDLE EAST AND ASIA /PACIFIC  
TOP 25 CITY-PAIRS RANKED BY 2007 MOVEMENTS**

Rank	City-Pair	No of aircraft movements		Average growth (Percent)
		2007	2025	
1	Karachi Pakistan-Dubai U.A. Emirates	6360	19758	6.5
2	Mumbai India-Dubai U.A. Emirates	4883	15170	6.5
3	Dubai U.A. Emirates-Delhi India	3358	10432	6.5
4	Singapore(Changi)-Dubai U.A. Emirates	2836	8810	6.5
5	Dubai U.A. Emirates-Bangkok (Intl) Thailand	2744	8525	6.5
6	Muscat (Intl) Oman-Mumbai India	2674	8307	6.5
7	Dubai U.A. Emirates-Colombo(Bandaranaike) Sri Lanka	2499	7764	6.5
8	Dubai U.A. Emirates-Chennai India	2277	7074	6.5
9	Dubai U.A. Emirates-Dhaka Bangladesh	2048	6362	6.5
10	Lahore Pakistan-Dubai U.A. Emirates	1989	6179	6.5
11	Shamshabad India-Dubai U.A. Emirates	1914	5946	6.5
12	Dubai U.A. Emirates-Beijing(Capital) China	1897	5893	6.5
13	Hong Kong(Intl) China-Dubai U.A. Emirates	1773	5508	6.5
14	Doha(Intl) Qatar-Colombo(Bandaranaike) Sri Lanka	1681	5222	6.5
15	Islamabad Pakistan-Dubai U.A. Emirates	1661	5160	6.5
16	Sharjah U.A. Emirates-Kochi India	1655	5142	6.5
17	Karachi Pakistan-Jeddah Saudi Arabia	1619	5030	6.5
18	Mumbai India-Kuwait	1590	4940	6.5
19	Kabul Afghanistan-Dubai U.A. Emirates	1504	4672	6.5
20	Bangkok (Intl) Thailand-Abu Dhabi(Intl) U.A. Emirates	1486	4616	6.5
21	Karachi Pakistan-Abu Dhabi(Intl) U.A. Emirates	1481	4601	6.5
22	Doha(Intl) Qatar-Bangkok (Intl) Thailand	1467	4557	6.5
23	Sharjah U.A. Emirates-Mumbai India	1460	4536	6.5
24	Perth WA Australia-Dubai U.A. Emirates	1460	4536	6.5
25	Muscat (Intl) Oman-Karachi Pakistan	1458	4530	6.5
	All Other	109590	341708	6.5
	<b>Total</b>	<b>165364</b>	<b>514979</b>	<b>6.5</b>

**BETWEEN MIDDLE EAST AND EUROPE  
TOP 25 CITY-PAIRS RANKED BY 2007 MOVEMENTS**

Rank	City-Pair	No of aircraft movements		Average growth (Percent)
		2007	2025	
1	London(Heathrow) England UK-Dubai U.A. Emirates Tel Aviv(Ben Gurion) Israel-Paris(Charles De Gaulle)	7165	15824	4.5
2	France	3356	7412	4.5
3	Paris(Charles De Gaulle) France-Dubai U.A. Emirates Tel Aviv(Ben Gurion) Israel-Moscow(Domodedovo)	2724	6016	4.5
4	Russian Fed.	2699	5961	4.5
5	Zurich Switzerland-Tel Aviv(Ben Gurion) Israel Tel Aviv(Ben Gurion) Israel-London(Heathrow)	2659	5872	4.5
6	England UK	2610	5764	4.5
7	Frankfurt Germany-Dubai U.A. Emirates	2504	5530	4.5
8	London(Heathrow) England UK-Bahrain London(Heathrow) England UK-Abu Dhabi(Intl) U.A.	2305	5091	4.5
9	Emirates	2234	4934	4.5
10	London(Gatwick) England UK-Dubai U.A. Emirates	2196	4850	4.5
11	Zurich Switzerland-Dubai U.A. Emirates	2190	4837	4.5
12	London(Heathrow) England UK-Doha(Intl) Qatar	2186	4828	4.5
13	Paris(Charles De Gaulle) France-Beirut Lebanon	2118	4678	4.5
14	Tel Aviv(Ben Gurion) Israel-Frankfurt Germany	2104	4647	4.5
15	Vienna Austria-Tel Aviv(Ben Gurion) Israel	1966	4342	4.5
16	Tel Aviv(Ben Gurion) Israel-Istanbul (Ataturk) Turkey	1908	4214	4.5
17	Istanbul (Ataturk) Turkey-Dubai U.A. Emirates	1881	4154	4.5
18	Tel Aviv(Ben Gurion) Israel-Milan (Malpensa) Italy	1788	3949	4.5
19	Munich(Intl) Germany-Dubai U.A. Emirates Tel Aviv(Ben Gurion) Israel-Bucharest(Otopeni)	1752	3869	4.5
20	Romania	1719	3796	4.5
21	Tel Aviv(Ben Gurion) Israel-Kiev(Borispol) Ukraine	1640	3622	4.5
22	Tel Aviv(Ben Gurion) Israel-Madrid Spain	1600	3534	4.5
23	Tel Aviv(Ben Gurion) Israel-Rome(Fiumicino) Italy	1597	3527	4.5
24	Larnaca Cyprus-Beirut Lebanon	1495	3302	4.5
25	Tel Aviv(Ben Gurion) Israel-Budapest Hungary	1485	3280	4.5
	All Other	100465	222551	4.5
	<b>Total</b>	<b>158346</b>	<b>350380</b>	<b>4.5</b>

**INTRA MIDDLE EAST (INTERNATIONAL)  
TOP 25 CITY-PAIRS RANKED BY 2007 MOVEMENTS**

Rank	City-Pair	No of aircraft movements		Average growth (Percent)
		2007	2025	
1	Doha(Intl) Qatar-Bahrain	9050	51147	10.1
2	Dubai U.A. Emirates-Bahrain	8298	46897	10.1
3	Kuwait-Dubai U.A. Emirates	8261	46688	10.1
4	Dubai U.A. Emirates-Doha(Intl) Qatar	8231	46518	10.1
5	Muscat (Intl) Oman-Dubai U.A. Emirates Tehran(Imam Khomeini Intl) Iran-Dubai U.A.	7503	42404	10.1
6	Emirates	6813	38504	10.1
7	Istanbul (Ataturk) Turkey-Ercan Cyprus	5018	28360	10.1
8	Doha(Intl) Qatar-Abu Dhabi(Intl) U.A. Emirates	4984	28168	10.1
9	Kuwait-Bahrain	4707	26602	10.1
10	Bahrain-Abu Dhabi(Intl) U.A. Emirates	4643	26240	10.1
11	Muscat (Intl) Oman-Bahrain	4338	24517	10.1
12	Kuwait-Doha(Intl) Qatar	3533	19967	10.1
13	Kish Island Iran-Dubai U.A. Emirates	3476	19645	10.1
14	Dubai U.A. Emirates-Beirut Lebanon Muscat (Intl) Oman-Abu Dhabi(Intl) U.A.	3439	19436	10.1
15	Emirates	3364	19012	10.1
16	Riyadh Saudi Arabia-Dubai U.A. Emirates	2956	16706	10.1
17	Beirut Lebanon-Amman(Intl) Jordan	2830	15994	10.1
18	Jeddah Saudi Arabia-Dubai U.A. Emirates	2699	15254	10.1
19	Muscat (Intl) Oman-Doha(Intl) Qatar	2633	14881	10.1
20	Dubai U.A. Emirates-Amman(Intl) Jordan	2204	12456	10.1
21	Kuwait-Beirut Lebanon	2105	11897	10.1
22	Kuwait-Damascus Syria Tel Aviv(Ben Gurion) Israel-Istanbul (Ataturk)	2000	11303	10.1
23	Turkey	1908	10783	10.1
24	Istanbul (Ataturk) Turkey-Dubai U.A. Emirates	1881	10631	10.1
25	Shiraz Iran-Dubai U.A. Emirates	1668	9427	10.1
	All Other	97227	557273	10.1
	<b>Total</b>	<b>205769</b>	<b>1170709</b>	<b>10.1</b>

**BETWEEN MIDDLE EAST AND AFRICA  
TOP 25 CITY-PAIRS RANKED BY 2007 MOVEMENTS**

Rank	City-Pair	No of aircraft movements		Average growth (Percent)
		2007	2025	
1	Jeddah Saudi Arabia-Cairo Egypt	6215	21362	7.1
2	Kuwait-Cairo Egypt	2901	9971	7.1
3	Riyadh Saudi Arabia-Cairo Egypt	2725	9366	7.1
4	Cairo Egypt-Amman(Intl) Jordan	2588	8896	7.1
5	Nairobi(Intl) Kenya-Dubai U.A. Emirates	2577	8858	7.1
6	Dubai U.A. Emirates-Cairo Egypt	2367	8136	7.1
7	Dubai U.A. Emirates-Addis Ababa Ethiopia	2150	7390	7.1
8	Cairo Egypt-Abu Dhabi(Intl) U.A. Emirates Johannesburg(Tambo) South Africa-Dubai	1823	6266	7.1
9	U.A. Emirates	1740	5981	7.1
10	Damman Saudi Arabia-Cairo Egypt	1645	5654	7.1
11	Doha(Intl) Qatar-Cairo Egypt	1594	5479	7.1
12	Istanbul (Ataturk) Turkey-Cairo Egypt	1589	5462	7.1
13	Cairo Egypt-Beirut Lebanon	1547	5317	7.1
14	Sanaa Yemen-Cairo Egypt	1399	4809	7.1
15	Kuwait-Alexandria(El Nozha) Egypt Sharjah U.A. Emirates-Alexandria(El Nozha)	1365	4692	7.1
16	Egypt	1308	4496	7.1
17	Cairo Egypt-Bahrain	1238	4255	7.1
18	Damascus Syria-Cairo Egypt	1225	4211	7.1
19	Lagos Nigeria-Dubai U.A. Emirates	1105	3798	7.1
20	Madinah Saudi Arabia-Cairo Egypt	1066	3664	7.1
21	Khartoum Sudan-Jeddah Saudi Arabia Jeddah Saudi Arabia-Alexandria(El Nozha)	1057	3633	7.1
22	Egypt	1042	3582	7.1
23	Luxor Egypt-Kuwait	1020	3506	7.1
24	Istanbul (Ataturk) Turkey-Algiers Algeria	929	3193	7.1
25	Khartoum Sudan-Dubai U.A. Emirates	838	2880	7.1
	All Other	39880	136301	7.1
	<b>Total</b>	<b>84933</b>	<b>291159</b>	<b>7.1</b>

**BETWEEN MIDDLE EAST AND NORTH AMERICA  
TOP 25 CITY-PAIRS RANKED BY 2007 MOVEMENTS**

Rank	City-Pair	No of aircraft movements		Average growth (Percent)
		2007	2025	
1	Tel Aviv(Ben Gurion) Israel-Newark/New York(Liberty) NJ USA	2067	3491	3.0
2	New York(Kennedy) NY USA-Dubai U.A. Emirates	1460	2466	3.0
3	Tel Aviv(Ben Gurion) Israel-New York(Kennedy) NY USA	1423	2403	3.0
4	Toronto(Pearson Intl) ON Canada-Tel Aviv(Ben Gurion) Israel	813	1373	3.0
5	New York(Kennedy) NY USA-Abu Dhabi(Intl) U.A. Emirates	729	1231	3.0
6	Tel Aviv(Ben Gurion) Israel-Atlanta(Intl) GA USA	726	1226	3.0
7	Chicago(O'Hare) IL USA-Amman(Intl) Jordan	535	904	3.0
8	New York(Kennedy) NY USA-Amman(Intl) Jordan	468	790	3.0
9	Tel Aviv(Ben Gurion) Israel-Los Angeles(Intl) CA USA	340	574	3.0
10	Washington(Dulles Intl) DC USA-Doha(Intl) Qatar	332	561	3.0
11	Washington(Dulles Intl) DC USA-Kuwait	331	559	3.0
12	New York(Kennedy) NY USA-Kuwait	312	527	3.0
13	Dubai U.A. Emirates-Atlanta(Intl) GA USA	306	517	3.0
14	Tel Aviv(Ben Gurion) Israel-Miami(Intl) FL USA	278	469	3.0
15	Toronto(Pearson Intl) ON Canada-Abu Dhabi(Intl) U.A. Emirates	183	309	3.0
16	New York(Kennedy) NY USA-Jeddah Saudi Arabia	131	221	3.0
17	Montreal(P.E. Trudeau) QC Canada-Amman(Intl) Jordan	126	213	3.0
18	Detroit(Metro Wayne) MI USA-Amman(Intl) Jordan	112	189	3.0
19	Riyadh Saudi Arabia-New York(Kennedy) NY USA	74	125	3.0
20	Washington(Dulles Intl) DC USA-Riyadh Saudi Arabia	69	117	3.0
21	Muscat (Intl) Oman-Fictitious City Five	59	100	3.0
22	Toronto(Pearson Intl) ON Canada-Dubai U.A. Emirates	56	95	3.0
23	Washington(Dulles Intl) DC USA-Jeddah Saudi Arabia	39	66	3.0
24	Houston(G.Bush Intl) TX USA-Dubai U.A. Emirates	26	44	3.0
25	New York(Kennedy) NY USA-Madinah Saudi Arabia	2	3	3.0
	All Other	78	131	3.0
	<b>Total</b>	<b>11075</b>	<b>18703</b>	<b>3.0</b>

-----

TF SG/3  
Report on Agenda Item 5

---

**REPORT ON AGENDA ITEM 5: PEAK-PERIOD ANALYSIS**

5.1 The meeting was informed about the new ICAO database on aircraft movements and a presentation of a peak-period analysis computer program being developed by ICAO.

5.2 The meeting was informed that ICAO is working on the establishment of a global database on aircraft movements. Such a database would be extremely useful in analyses related to aviation safety, efficiency and environmental protection. The complexity of the task and the need for support from States and air navigation service providers in particular was highlighted. The same subject was presented to the last meeting of ICAO Statistics Panel held in Montreal from 23 to 27 March 2009. The panel noted the complexity of the proposed task and agreed to progress this work in preparation for the forthcoming Statistics Division Meeting to be held in Montreal from 23 to 27 November 2009.

5.3 The meeting supported this ICAO initiative and highlighted the interaction and complementarities between the global and regional levels and was of the opinion that some of the data collected by MIDANPIRG Sub-groups could be useful in the process of building this inventory.

5.4 The meeting was also presented with a computer program which is being developed by ICAO to analyze traffic flows and peak-period analyses along with traffic densities and distribution by aircraft type and flight level. The data used is FIR traffic data using the format adopted by the Group in its second meeting. The meeting was informed that the ultimate objective is to collect FIR traffic data from States in the region, to integrate it into a single database and to conduct the analyses for the region as whole to serve the requirements of MIDANPIRG.

5.5 The meeting agreed that this tool will be very useful in support of the work of the various Sub-groups of MIDANPIRG.

-----

TF SG/3  
Report on Agenda Item 6

---

**REPORT ON AGENDA ITEM 6: PRESENTATION BY STATES**

6.1 The meeting noted with appreciation the presentations delivered by Bahrain and Saudi Arabia and thanked both States for their support and commitment to forecasting activities.

6.2 Bahrain presentation provided an overview of Bahrain airport existing capacity and facilities, passengers and aircraft movements forecast for the period 2009-2015 which is expected to increase; while cargo forecast which has experienced a modest increase of 5 percent in 2008 and a slight decrease in 2009 is expected to recover in 2010 by an average annual growth rate of 3 percent/year. On the other hand, FIR movements for 2009-2015 are expected to have a healthy growth with an average growth of 11 percent/year. An illustration of peak analysis of the most congested airways in Bahrain FIR (A791, B418 and UL 768) during the months of August and December 2008 was provided and showed high increase on average peak hour demand movements. The FIR peaking was of particular concern to Bahrain and would require immediate action and coordination with Jeddah FIR to alleviate the current situation.

6.3 Saudi Arabia presentation provided an overview of the methods used in collecting Statistical data and highlighted the actual air traffic movement statistics from 2000 to 2008 and the forecast for the period 2007 -2025 which is expected to increase at annual average growth of 7.5 per cent. The presentation also addressed general airport statistics in Saudi Arabia for the year 2008.

6.4 The meeting was of view that States need to put more efforts to supply FIR traffic data using the format as at **Appendix 6A** to the Report on Agenda Item 6 in order to facilitate the timely and efficient development of traffic forecast and analysis of peak periods.

-----

TF SG/3  
 Appendix 6A to the Report on Agenda Item 6

---

**Data on Aircraft Movements Across FIRs**

<b>Field</b>	<b>Field Type</b>
Call Sign and Flight Number	Text
Aircraft Registration (If available)	Text
Aircraft Type Designator	Text
Departure Aerodrome (ICAO location indicator)	Text
Destination Aerodrome (ICAO location indicator)	Text
Entry point	Text
Entry Date/Time	Date/Time
Entry Flight Level (if available)	Text
Exit Point	Text
Exit Date/Time	Date/Time
Exit Flight Level (if available)	Text
ATS Route(s) (if available)	Text
Flight Classification (Inbound/Outbound/Over-flight/within FIR)	Text
Flight Type (Scheduled/Non-scheduled/Military/Government/ Business/General Aviation)	Text
Flight Nature (Passenger/Cargo)	Text

-----

TF SG/3  
Report on Agenda Item 7

---

**REPORT ON AGENDA ITEM 7: FUTURE WORK PROGRAMME**

7.1 The meeting in accordance with the MIDANPIRG Procedural Handbook agreed to hold the TF SG/4 meeting after MIDANPIRG/12 meeting (tentatively planned for 10-14 October 2010), and after coordination between the Secretariat and the Chairperson of the TF SG. The venue would be tentatively Cairo. However, MID Region States are encouraged to host the TF SG/4 meeting.

7.2 The meeting recalled that in accordance with ICAO business plan and the requirements for performance monitoring, the Sub-group has to develop a follow-up action plan on the results of the meeting. Accordingly, the meeting developed the action plan as at **Appendix 7A** to the Report on Agenda Item 7.

7.3 With regards to the tentative work programme and Provisional Agenda of the Sub-group it was agreed to include, as basic elements, a forecast of aircraft movements to, from, within and across the MID Region and peak-period analyses for the FIRs.

7.4 The meeting adopted the provisional agenda for the TF SG/4 Meeting as at **Appendix 7B** to the Report on Agenda Item 7.

-----

TF SG/3  
Appendix 7A to the Report on Agenda Item 7

**TF SG/3 FOLLOW-UP ACTION PLAN TEMPLATE**

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
CONC. 11/85:	<b>UPDATED TRAFFIC FORECASTING REQUIREMENTS IN THE MID REGION</b>	<p>That,</p> <p>a) the ICAO MID Regional Office coordinate with other international and regional organizations; including IATA, establishing a MID database to support regional traffic forecasting activities;</p> <p>b) MID States continue their support to the Traffic Forecasting Sub-Group by ensuring that their respective nominees to the membership of the Sub-Group include, as much as possible, forecasting experts, air traffic management experts and, when required, financial analysts to carry out business case and cost/benefit analysis; and</p> <p>c) MID States continue to avail required FIR and other data</p>	<p>Sub-Groups to meet and establish the database</p> <p>Secretariat to co-ordinate with States</p> <p>Update information to be provided by States</p>	<p>TF SG and ICAO</p> <p>States and ICAO</p> <p>States and ICAO</p>	<p>Meeting of the SG</p> <p>Reminder</p> <p>State letter FIR traffic data</p>	<p>Apr. 2009</p> <p>Apr. 2009</p> <p>Dec. 2010</p>
Draft Concl.3/1	<i>MID REGION FORECAST</i>	<p><i>That,</i></p> <p><i>ICAO secretariat includes Egypt and Afghanistan in the future forecasts of the MID Region.</i></p>	Secretariat to co-ordinate with ICAO HQ	ICAO	Traffic forecast	Jun. 2011

-----

TF SG/3  
Appendix 7B to the Report on Agenda Item7

---

**FOURTH MEETING OF THE TRAFFIC FORECASTING SUB-GROUP**

**(TF SG/4)**

**PROVISIONAL AGENDA**

- Agenda Item 1:** Adoption of the Provisional Agenda
- Agenda Item 2:** Follow-up action on Reports of both the MIDANPIRG/12 and MSG/2 meetings related to TF SG.
- Agenda Item 3:** Review of updated Forecast
- Agenda Item 4:** Peak-period analysis
- Agenda Item 5:** Presentations by States
- Agenda Item 6:** Future work programme
- Agenda Item 7:** Any other business

-----

TF SG/3  
Report on Agenda Item 8

---

**REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS**

8.1 The meeting was briefed on ICAO new proposal to collect data on air navigation equipment on board aircraft (avionics) and on the ground, on a regular basis. This proposal is justified by the need for this data in analyses related to the financial impact of the setting of new standards and recommended practices as well as new air navigation projects and initiatives requiring specific equipment on board aircraft and/or on the ground and the possible decommissioning some of existing equipment.

8.2 Further more the meeting noted that the proposal was presented to the ICAO Statistics Panel Meeting held in Montreal from 23 to 27 March 2009 and the agreement of the panel to continue to further study this issue for presentation to the forthcoming Statistics Division Meeting to be held in Montreal from 23 to 27 November 2009.

8.3 The meeting noted that some of the data collected by MIDANPIRG Sub-groups could be useful in the process of building this inventory.

-----

# **ATTACHMENT A**

TF SG/3  
Attachment A to the Report

**LIST OF PARTICIPANTS**

NAME	TITLE & ADDRESS
<p><b><u>STATES</u></b></p> <p><b>BAHRAIN</b></p> <p>Mrs. Ebtesam Mohamed Al Shamlan</p>	<p>Acting Air Transport Director Civil Aviation Affairs Bahrain International Airport B.O.Box 586 KINGDOM OF BAHRAIN Fax: 973 17 333 278 Tel: 973 17 321 169 Mobile: 973 39 469 557 Email: ealshamalan@caa.gov.bh</p>
<p>Mr. Saleem Mohamed Hassan</p>	<p>Chief Air Traffic Management Civil Aviation Affairs P.O. Box 586 KINGDOM OF BAHRAIN Fax: 973 17 321 992 Tel: 973 17 321 117 Mobile: 973 39 608 860 Email: saleemmh@caa.gov.bh</p>
<p><b>EGYPT</b></p> <p>Mr. Ahmed Saad Sabra</p>	<p>A.T.C. Inspector ECAA Ministry of Civil Aviation Egyptian Civil Aviation Authority Cairo Airport Road Cairo - EGYPT Fax: 202 22880617 Mobile: 012 7148177 Email: sabra160@yahoo.com</p>
<p>Mr. Mokhtar Ayman Mohamed Ahmed</p>	<p>Senior A.T.C.O - Director of External Affairs National Air Navigation Services Company Egyptian Civil Aviation Authority Cairo Airport Road Cairo - EGYPT Fax: 202 226880617 Tel: 202 226880617 Mobile: 010 1275019 Email: mokhtar.fahmi@nansceg.org</p>

NAME	TITLE & ADDRESS
Eng. Mostafa Attia Aly Kaoud	Information & Decision Support System Manager National Air Navigation Services Company Egyptian Civil Aviation Authority Cairo Airport Road Cairo - EGYPT Fax: 202-226880617 Tel: 202-226880617 Mobile: 912 18839963 Email: mkaoud@gmail.com
<b>KUWAIT</b> Mr. Ibrahim Haji	Statistical Analyst Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat Safat 13001 - KUWAIT Fax: 965-2 4346528 Tel: 965-2 4346528 Mobile: 965 99881263 Email: stat@kuwait-airport-kw.com
Mr. Naif T. Al Sulaili	Statistical Analyst Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat Safat 13001 - KUWAIT Fax: 965-2 4346528 Tel: 965-2 4346528 Mobile: 965 99725082 Email: naif-75@hotmail.com
Mr. Mohammad A. Al-Asqah	Air Navigation Advisor Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965) 2472 1268 Tel: (965) 2474 5820 Mobile: (965) 933 0370

NAME	TITLE & ADDRESS
Mr. Yacoub M. Al Darweesh	Head of Tower and ATC OPS Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Tel: (965) 4710268 Mobile: (965) 99579364
<p><b>SAUDI ARABIA</b></p> <p>Mr. Fawaz Alotaibi</p>	System Engineer General Authority of Civil Aviation P.O. Box 15441 Jeddah 21444 – KINGDOM OF SAUDI ARABIA Tel: 966-2 671 7717 Ext 103 Mobile: 966-555056748 Email: fawazalotaibi@hotmail.com
Mr. Khalid T. Attiah	Head of Safety System & OA General Authority of Civil Aviation P.O. Box 15441 Jeddah 21444 – KINGDOM OF SAUDI ARABIA Fax: 966 2 6405000 Ext 4301 Tel: 966 2 505612760 Email: kattian@gmail.com
Mr. Waleed M. Madani	Manager, Operations Planning General Authority of Civil Aviation P.O.Box 929 Jeddah 21421 – KINGDOM OF SAUDI ARABIA Fax: (966-2) 640 1477 Tel: (966-2) 640 5000 Mobile: (966-50) 5674867 Email: almadani6@yahoo.com

NAME	TITLE & ADDRESS
Mr. Ibrahim Mohammed I. Mufti	Developmental Position Air Traffic Management Department Air Navigation Services General Authority of Civil Aviation P.O.Box 887 Jeddah 21165 – KINGDOM OF SAUDI ARABIA Fax: (966-2) 640 1477 Tel: (966-2) 640 5000 Ext. 5519 Mobile: (966-2) 0500020123 Email: imufti@gaca.gov.sa
<b>SUDAN</b> Mr. Ibrahim Ahmed Mohamed	Deputy Director of Air Transport Civil Aviation Authority P.O.Box 430 Khartoum - SUDAN Fax: 249 183786883 Tel: 249 183786886 Mobile: 249 922796935 Email: mohammedkazzam@yahoo.com
Mr. Kazzam Mohammed	Airtransport Statistics Civil Aviation Authority P.O.Box 430 Khartoum - SUDAN Fax: 249 183786886 Tel: 249 774322 Mobile: 249 912377264 Email: mohammedkazzam@yahoo.com