COSCIONAL STREET

International Civil Aviation Organization

Fourth Meeting of Traffic Forecasting Sub-Group (TF SG/4)

(Cairo, Egypt 15-17 November 2011)

Agenda Item 4:

Review of updated Forecast

UPDATED FORECAST 2010-2030

(*Presented by the Secretariat*)

SUMMARY

At its third meeting the Middle East Traffic Forecasting Sub-Group discussed and approved forecasts of passenger and aircraft movements' traffic to, from and within the Middle East Region covering the period 2007-2025. This paper provides an update of these forecasts for the period 2010-2030. Despite the current economic crisis, air traffic to, from and within the region is expected to continue to grow throughout this period.

Action by the meeting is at paragraph 3.

References

MID Region forecast 2007-2025 report

1. INTRODUCTION

1.1 The efficient planning and implementation of air navigation plans depend, to a large extent, on the availability of accurate and up-to-date forecasts of aircraft movements and other relevant planning parameters.

1.2 A uniform strategy has been adopted by ICAO for the purpose of preparing traffic forecasts in support of the regional planning process. This involves the establishment of a small group of forecasting and planning experts in each of the ICAO regions. The ICAO MID Traffic Forecasting Group (MID TFG) was formed in 1997 with the objective of developing traffic forecasts and other planning parameters required for the planning of air navigation services in the MID Region.

2. DISCUSSION

2.1 The main purpose of the MID TFG is to support the planning of air navigation services in the MID Region. Traffic forecasts and peak-period planning parameters are important in anticipating where and when airspace and airport congestion may occur. It is then possible to plan for the required expansion of capacity. These forecasts also have an important role in planning the implementation of CNS/ATM systems components. The primary users of the

forecasts developed by the MID TFG are expected to be Contracting States of ICAO, ATS service providers in the region, and the MIDANPIRG and its subsidiary bodies.

2.2 The Secretariat has developed the forecasts as at **Appendix A** to this working paper to assist MIDANPIRG and its subsidiary bodies in performing their tasks of planning and implementing air navigation plans including the implementation of CNS/ATM systems, in the region. In this connection, it will be recalled that MIDANPIRG and its subsidiary bodies had requested the Traffic Forecasting Sub-group to provide medium and long-term passenger, freight and total aircraft movement forecasts on the following route groups between:

- Middle East-Europe;
- Middle East-Africa;
- Middle East-Asia/Pacific;
- Middle East-North America;
- Intra Middle East; and
- Asia/Pacific-Europe/North America (and vice-versa) over flying the Middle East.
- *Note:* Traffic forecasts should also include peak-periods of Hajj and other seasonal traffic as determined by the Sub-group.

2.3 MIDANPIRG and its subsidiary bodies also requested the Sub-group to analyze data from selected Flight Information Regions (FIRs) to establish peak-period and other parameters required for planning and implementation purposes.

2.4 In connection with the above the ICAO MID Regional Office sent a State Letter ME 3/56.11.1-10/439 on 19 December 2010 requesting states to provide traffic data for the period January-December 2010 using the form at **Appendix B** to this working paper; followed by a Fax Reminder F.ME 11/202 on 4 August 2011.

2.5 The meeting may wish to note that a number of States (Bahrain, Egypt and Saudi Arabia) have put all effort to provide the requested data in a timely manner to meet the deadline for the development of the peak analysis. Accordingly, the meeting may wish to review and agree to the following Draft Conclusion:

Why	To develop traffic forecast & peak period analysis for the MID Region
What	Provision of traffic data
Who	MID States
When	TF SG/5

DRAFT CONCLUSION 4/X: TRAFFIC FORECASTING REQUIREMENTS IN THE MID REGION

That, considering the on-going requirements for developments of traffic forecasts and peak period analysis in the MID Regions; MID States to be urged to:

- a) provide required FIR traffic data in the format agreed by the Sub-Group in order to facilitate the timely and efficient development of traffic forecasts and analysis of the peak periods;
- b) 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
- c) States not providing the required data to ICAO, in accordance with the requirements of traffic forecasting, be included in the MIDANPIRG List of air navigation deficiencies.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review and endorse the forecasts prepared by the Secretariat on behalf of the Sub-Group as at **Appendix A** to this working paper for presentation to MIDANPIRG/13; and
 - b) agree to the Draft Conclusion in paragraph 2.5.

APPENDIX A

AIRCRAFT MOVEMENT FORECASTS FOR THE MIDDLE EAST REGION 2010 - 2030

Prepared by the Secretariat for TF SG/4

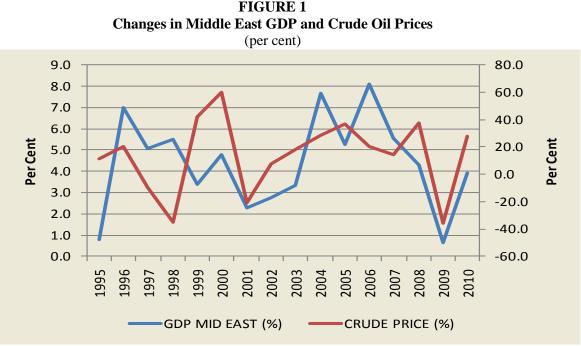
1. INTRODUCTION

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 three meetings in September 2004, in May 2006 and in April 2009.

1.2 This report provides forecasts prepared by the ICAO Secretariat for discussion by the TFSG/4 meeting in Cairo, 14-17 November2011.

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**.



2.2 The recent hike in oil prices, particularly in 2008 helped the economy of the region grow at faster rates through increased investment particularly in construction projects, higher trade volumes and tourism activity. The global economic crisis of 2009 had affected the economic growth of the region and as a result the region's GDP grew only about 0.6 per cent. This crisis had also 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, however, this trend was short lived and in 2010 the inflation rate in the region came down from 13 per cent in 2008 to about 5 percent in 2010. It is expected that the long term inflation rate will be between 4 to 5 per cent. The Middle East economy recovered from the previous year's economic crisis and posted a 4 per cent GDP growth in 2010. 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 4.1 per cent for the 2010-2030 period.

3. GEOGRAPHICAL SCOPE AND HISTORICAL DATA

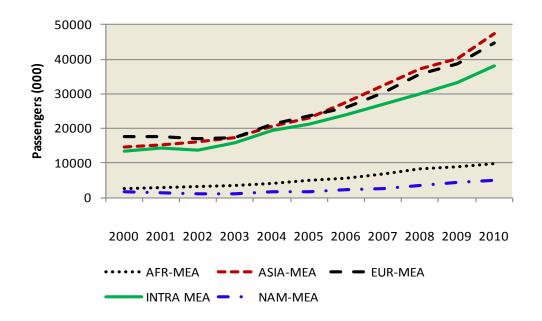
3.1 **Geographical Scope**

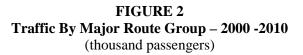
3.1.1 In order to facilitate the group's work and the forecasting process, the following major route groups to, from and within the Middle East Region have been identified. It is to be noted that according to the conclusion 3/1 of TF SG/3, Egypt has been included in the Middle East Region:

- 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 According to the historic air traffic trends on the identified five major route groups to, from and within the Middle East region the passenger traffic increased from 50 million in 2000 to about 145 million passengers in 2010 at an average annual growth rate of 11.2 per cent. The annual passengers carried and growth rates for each of the route groups concerned are illustrated in **Figure 2**.





3.2.2 All route groups grew at an average annual rate ranging from 9.8 per cent to 14.1 per cent.

3.2.3 In 2010, the Middle East-Asia/Pacific route group had the highest share in passenger traffic (32.7 per cent), followed by Middle East-Europe (31 per cent) and Intra Middle East (26 per cent). The combined Middle East-Africa and Middle East-North America route groups share was about 10.2 per cent.

3.3 Historical Average Aircraft Seating Capacity on Major Identified Route Groups

3.3.1 During the 2000-2010 period, the average aircraft seating capacity decreased significantly on the Middle East –North America, while a moderate decrease took place on Intra Middle East and Middle East-Asia Pacific route groups. This average has fluctuated in the range of 204-207 seats per aircraft for the Middle East Africa and the Middle East-Europe route groups. The historical trends of the average aircraft seating capacity by route group are provided in **Table 1** below.

TABLE 1Average aircraft seating capacity by route group

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	100	004			100						
AFR-MEA	198	204	206	201	196	202	214	208	205	205	204
ASIA-MEA	243	247	242	242	238	233	234	239	230	230	232
EUR-MEA	194	195	198	201	202	202	208	209	208	208	207
INTRA MEA	177	178	183	185	187	188	186	186	179	176	173
NAM-MEA	307	300	305	300	290	290	289	291	290	291	295

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 2000 to 2010. 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 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AFR-MEA	59.6	62.4	65.1	66.4	70.0	71.3	69.1	71.3	72.5	69.4	71.1
ASIA-MEA	70.4	71.2	74.2	71.3	73.6	75.8	78.8	81.2	79.1	76.8	79.0
EUR-MEA	69.0	67.2	70.0	69.0	71.5	73.0	71.3	75.7	78.7	76.2	78.4
INTRA MEA	61.5	63.4	62.7	65.4	67.7	68.3	67.6	66.3	68.7	65.9	67.5
NAM-MEA	72.2	73.3	76.0	76.2	79.1	82.2	81.1	80.8	80.6	81.2	81.5

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:

passenger numbers

(load factor) . (aircraft seating capacity)

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 2030were estimated. These forecasts were developed for each of the major route groups concerned using the 2010 OAG (Official Airline Guide) data as the base year.

5. PASSENGER TRAFFIC FORECASTS

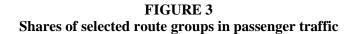
5.1 Based on the methodology described above, passenger traffic forecasts were developed for the major route groups concerned. The traffic to, from and within the Middle East region on the five major route groups concerned for the period 2020-2030 is expected to increase at an average annual rate of 9.1 per cent. The Middle East-Africa route group is expected to experience the highest average annual growth rate of 10.4 per cent per annum, followed by Intra Middle East, Asia/Pacific-Middle East, North America-Middle East and Europe-Middle East route groups with growth rates of 10.3 per cent, 9.2 per cent, 8.8 per cent and 7.3 per cent respectively for the period concerned as illustrated in **Table 3**.

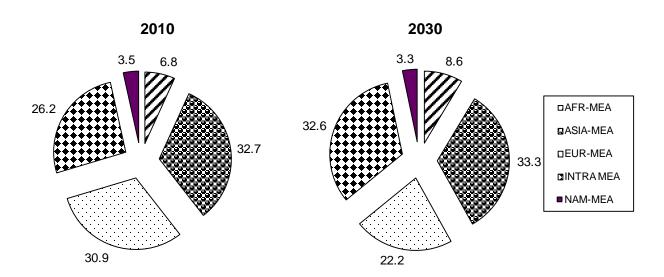
TABLE 3

PASSENGER FORECAST TO THE YEAR 2030 (thousand passengers)

	ACT	UAL	FORTECAST	AVERAGE ANNUAL GROWTH			
				(per ce	(per cent)		
	2000	2010	2030	2000-2010	2010-2030		
AFR-MEA	2622	9837	71161	14.1	10.4		
ASIA-MEA	14696	47362	275350	12.4	9.2		
EUR-MEA	17627	44774	183240	9.8	7.3		
INTRA MEA	13468	37959	269666	10.9	10.3		
NAM-MEA	1620	5005	27039	11.9	8.8		
TOTAL	50033	144937	826456	11.2	9.1		

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**.





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 2010-2030 PERIOD

	AVERAGE SEATS				LOAD FACTORS		
	2000	2010	2030		2000	2010	2030
AFR-MEA	198	204	217	AFR-MEA	59.6	71.1	75.0
ASIA-MEA	243	232	250	ASIA-MEA	70.4	79.0	81.0
EUR-MEA	194	207	237	EUR-MEA	69.0	78.4	80.0
INTRA MEA	177	173	170	INTRA MEA	61.5	67.5	75.0
NAM-MEA	307	295	310	NAM-MEA	72.2	81.5	81.0

6.2 Using the methodology described above, movement forecasts for the major route groups for the 2010-2030 period are depicted in **Table 5**.

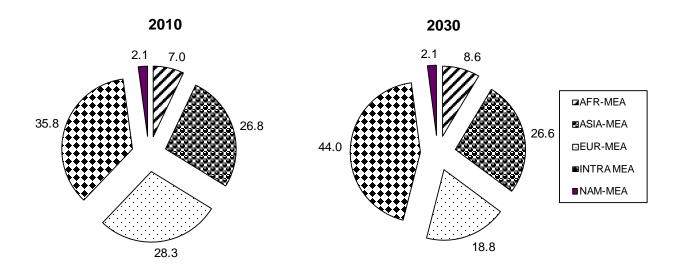
TABLE 5

	Actual	Forecast	Average Annual Growth
			2010-2030
	2010	2030	(per cent)
AFR-MEA	68588	446722	9.8
ASIA-MEA	261359	1384191	8.7
EUR-MEA	276285	977855	6.5
INTRA MEA	349324	2287506	9.9
NAM-MEA	20843	107917	8.6
TOTAL	976399	5204191	8.7

AIRCRAFT MOVEMENTS FORECAST TO THE YEAR 2030

6.3 The total aircraft movements to/from and within the Middle East region are estimated to increase from some 976400 in 2010 to slightly above 5204000 in 2030 at an average annual growth rate of 8.7 per cent. The movements' shares for the years 2010 and 2030 are depicted in **Figure 4**.

FIGURE 4 Shares of selected route groups in aircraft movements



APPENDIX B

BETWEEN MIDDLE EAST AND ASIA /PACIFIC TOP 25 CITY-PAIRS RANKED BY 2010 MOVEMENTS

		No of a move	Average growth (Percent)	
Rank	City-Pair	2010	2030	(i creent)
1	Mumbai - Dubai	7231	39788	8.9
2	Kabul - Dubai	5926	31431	8.7
3	Karachi - Dubai	5815	22502	7.0
4	Dubai - Delhi	5779	53788	11.8
5	Sharjah - Kochi	3667	36658	12.2
6	Hyderabad - Dubai	3666	19444	8.7
7	Dubai - Chennai	3650	25930	10.3
8	Dubai - Bangkok	3644	15479	7.5
9	Dubai - Colombo	3181	14827	8.0
10	Mumbai - Bahrain	3031	8844	5.5
11	Dubai - Dhaka	3007	20230	10.0
12	Muscat- Mumbai	2920	24848	11.3
13	Singapore(Changi) - Dubai	2884	8101	5.3
14	Kuala Lumpur - Dubai	2771	14697	8.7
15	Dubai - Bengaluru	2770	18635	10.0
16	Dubai - Beijing(Capital)	2673	26249	12.1
17	Kozhikode - Dubai	2617	13880	8.7
18	Thiruvananthapuram - Sharjah	2588	13726	8.7
19	Doha - Colombo	2252	15150	10.0
20	Kochi - Dubai	2251	18478	11.1
21	Hong Kong - Dubai	2189	14461	9.9
22	Riyadh - Mumbai	2189	12268	9.0
23	Sharjah - Kozhikode	2186	12251	9.0
24	Kathmandu - Doha	2184	11584	8.7
25	Delhi - Abu Dhabi	2036	22246	12.7
	Total above	83107	515496	9.6
	All other	178252	868695	8.2
	TOTAL	261359	1384191	8.7

BETWEEN MIDDLE EAST AND EUROPE TOP 25 CITY-PAIRS RANKED BY 2010 MOVEMENTS

		No of aircraft movements		Average growth (Percent)
Rank	City-Pair	2010	2030	(rerectiv)
1	London(Heathrow) - Dubai	7327	25818	6.5
2	Tel Aviv - Paris(Charles De Gaulle)	3967	14243	6.6
3	Tel Aviv - Moscow(Domodedovo)	3731	13147	6.5
4	Tel Aviv - Rome(Fiumicino)	3511	10640	5.7
5	Istanbul - Dubai	3168	19104	9.4
6	Istanbul - Cairo	3056	19115	9.6
7	London(Heathrow) - Abu Dhabi	2920	7748	5.0
8	London(Heathrow) - Doha	2914	14897	8.5
9	Zurich - Tel Aviv	2663	5197	3.4
10	Tel Aviv - London(Heathrow)	2592	4247	2.5
11	Tel Aviv - Istanbul	2551	5590	4.0
12	Paris(Charles De Gaulle) - Beirut	2538	4584	3.0
13	Tehran - Istanbul	2447	8622	6.5
14	London(Heathrow) - Cairo	2419	9717	7.2
15	Istanbul - Amman	2416	13540	9.0
16	Tel Aviv - Madrid	2411	12325	8.5
17	Paris(Charles De Gaulle) - Dubai	2345	9961	7.5
18	Istanbul - Beirut	2315	8958	7.0
19	Frankfurt - Dubai	2312	8147	6.5
20	London(Heathrow) - Bahrain	2312	6619	5.4
21	London(Gatwick) - Dubai	2292	14077	9.5
22	Rome(Fiumicino) - Cairo	2275	8016	6.5
23	Dubai - Amsterdam	2228	13684	9.5
24	Tel Aviv - Kiev	2202	7759	6.5
25	Zurich - Dubai	2190	10991	8.4
	Total above	71102	276745	7.0
	All other	205183	701110	6.3
	TOTAL	276285	977855	6.5

INTRA MIDDLE EAST (INTERNATIONAL) TOP 25 CITY-PAIRS RANKED BY 2010 MOVEMENTS

		No of aircraft movements	Average growth (Percent)	
Rank	City-Pair	2010	2030	(2 02 0000)
1	Kuwait - Dubai	12872	107583	11.2
2	Dubai - Doha(Intl)	12461	91791	10.5
3	Doha - Bahrain	11880	79923	10.0
4	Dubai - Bahrain	10103	66743	9.9
5	Kuwait - Bahrain	7971	49857	9.6
6	Jeddah - Cairo	7611	42655	9.0
7	Muscat - Dubai	7287	48140	9.9
8	Bahrain - Abu Dhabi	7010	29777	7.5
9	Doha(Intl) - Abu Dhabi	6595	43568	9.9
10	Damman - Bahrain	6414	42372	9.9
11	Muscat - Abu Dhabi	6382	42161	9.9
12	Tehran - Dubai	5794	31301	8.8
13	Dubai - Beirut	4999	25555	8.5
14	Beirut - Amman	4972	36625	10.5
15	Kuwait - Beirut	4804	38731	11.0
16	Kuwait - Doha	4687	34526	10.5
17	Kuwait - Cairo	4517	20667	7.9
18	Cairo - Amman	4363	29352	10.0
19	Muscat - Bahrain	4318	22074	8.5
20	Dubai - Amman	4175	39560	11.9
21	Riyadh - Cairo	3817	25216	9.9
22	Muscat - Doha	3739	34184	11.7
23	Riyadh - Dubai	3701	27262	10.5
24	Kuwait - Abu Dhabi	3405	25082	10.5
25	Jeddah - Dubai	3361	22204	9.9
	Total above	157238	1056908	10.0
	All other	192086	1230598	9.7
	TOTAL	349324	2287506	9.9

BETWEEN MIDDLE EAST AND AFRICA TOP 25 CITY-PAIRS RANKED BY 2010 MOVEMENTS

		No of aircraft movements	t	Average growth (Percent)
Rank	City-Pair	2010	2030	(_ • • • • • • • • • • • • • •
1	Khartoum - Cairo	4164	47982	13.0
2	Tripoli - Cairo	2500	16218	9.8
3	Nairobi - Dubai	2249	9553	7.5
4	Dubai - Addis Ababa	2236	21569	12.0
5	Johannesburg - Dubai	2192	11001	8.4
6	Khartoum - Dubai	1954	18849	12.0
7	Lagos - Dubai	1616	10108	9.6
8	Tripoli - Dubai	1589	6750	7.5
9	Khartoum - Doha	1505	5303	6.5
10	Khartoum - Jeddah	1465	10792	10.5
11	Casablanca - Cairo	1197	5683	8.1
12	Tunis - Dubai	1049	6805	9.8
13	Mauritius - Dubai	944	6124	9.8
14	Cairo - Algiers	934	9849	12.5
15	Khartoum - Bahrain	928	9277	12.2
16	Sanaa - Addis Ababa	844	6217	10.5
17	Tripoli - Amman	833	4258	8.5
18	Jeddah - Casablanca	820	3483	7.5
19	Riyadh - Khartoum	804	4187	8.6
20	Tunis - Cairo	790	2784	6.5
21	Sharjah - Khartoum	776	5034	9.8
22	Nairobi - Doha	772	3404	7.7
23	Cairo - Benghazi	754	2657	6.5
24	Jeddah - Asmara	745	2174	5.5
25	Dubai - Dar Es Salaam	734	5214	10.3
	Total above	34394	235274	10.1
	All other	34194	211448	9.5
	TOTAL	68588	446722	9.8

BETWEEN MIDDLE EAST AND NORTH AMERICA TOP 25 CITY-PAIRS RANKED BY 2010 MOVEMENTS

		No of aircraft movements		Average growth (Percent)
Rank	City-Pair	2010	2030	(rereent)
1	Tel Aviv - Newark/New York	2063	4105	3.5
2	Tel Aviv - New York(Kennedy)	1926	5727	5.6
3	New York(Kennedy) - Dubai	1460	14337	12.1
4	New York(Kennedy) - Cairo	1340	10421	10.8
5	Los Angeles - Dubai	854	5245	9.5
6	Houston - Dubai	852	5233	9.5
7	New York(Kennedy) - Amman	847	5202	9.5
8	Toronto - Tel Aviv	809	4213	8.6
9	Chicago(O'Hare) - Abu Dhabi	730	4483	9.5
10	Dubai - Atlanta	730	3801	8.6
11	Houston - Doha	730	3801	8.6
12	New York(Kennedy) - Abu Dhabi	730	3801	8.6
13	New York(Kennedy) - Doha	730	3801	8.6
14	San Francisco - Dubai	730	3801	8.6
15	Washington(Dulles) - Doha	730	3801	8.6
16	Washington(Dulles) - Kuwait	730	3801	8.6
17	Tel Aviv-Philadelphia	726	3780	8.6
18	Washington(Dulles) - Dubai	718	3739	8.6
19	Tel Aviv - Atlanta	563	2932	8.6
20	Chicago(O'Hare) - Amman	542	2670	8.3
21	Tel Aviv - Los Angeles	402	1173	5.5
22	New York(Kennedy) - Kuwait	314	1215	7.0
23	Toronto - Dubai	314	1635	8.6
24	Toronto - Abu Dhabi	312	1625	8.6
25	New York(Kennedy) - Jeddah	245	591	4.5
	Total above	20127	104933	8.6
	All other	716	2984	7.4
	TOTAL	20843	107917	8.6

APPENDIX B

STRUCTURE OF PROPOSED DATABASE

- 1. Date : Date of the flight in dd/mm/yy
- 2. Call sign
- 3. Flight No
- 4. Aircraft Registration
- 5. Aircraft Type
- 6. Departure Airport
- 7. Destination Airport
- 8. Entry Point : The point from which the aircraft has entered the FIR boundary
- 9. Entry Time : The actual time at which the aircraft has entered the FIR in UTC
- 10. Entry Flight level (FL): The Flight level to which the aircraft has entered the relevant FIR
- 11. Exit Point
- 12. Exit Time : The actual time to which the aircraft has left the FIR boundary
- 13. Exit Flight level (FL)
- 14. ATA Actual Time of Arrival and ATD Actual Time of Departure
- 15. STA Scheduled Time of Arrival and STD Scheduled Time of Departure
- 16. ATS Route
- 17. Flight Classification: Arrival (IN), Outbound (OUT), En-route (ENR)
- 18. Flight Type (Scheduled/Non-scheduled/Business/ General Aviation)
- 19. Flight Nature (Passenger/Cargo/Other).

- END -