



## A GENERAL OVERVIEW OF THE DEVELOPMENT OF THE CIVIL AVIATION SECTOR IN TURKEY

TÜRKİYE'DE SİVİL HAVACILIK SEKTÖRÜNÜN GELİŞİMİNE GENEL BİR BAKIŞ

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### Abstract

In parallel with the rapid advances regarding aviation in the world, Turkey has risen to a significant position in the international arena in civil aviation with the records broken in air traffic and the number of passenger, exemplary airport investments in the world, developments in the domestic and international flight network and the regulations made on flight safety and aviation security. Despite all of the adversities experienced in 2016, Turkey, which continues to be spoken throughout the world along with the breakthroughs and projects by evaluating its potential, opportunities and risks, offers the comfort of aviation to the world and its country in a fast and safe way by providing quality service with existing government and private businesses. It can be said that Turkey, which has bilateral aviation agreements with 168 countries, is one of the countries with the highest number of flight networks in the world. Turkey, which succeeded to become the member of ICAO Council Member, which sets international aviation rules, in 2016, is among the countries that make contributions in flight safety and aviation security at the international level. The success of Turkish Airlines, which is Turkey's national airline company and most valuable brand, in the world is also a sign of the importance given to civil aviation in the country. It is thought that the 3rd airport investment in Istanbul, which will enable Turkey to become a center for aviation in the world, will make Turkey more powerful in its region and will also provide significant advantages within the context of international strategy as well as economic returns. In this context, the purpose of this study is to summarize Turkey's civil aviation background and to put forward them in the light of the current data. In addition, it is also aimed to make issues that will make Turkey leader in its region and have a say in the world a current issue and to raise awareness on these issues.

**Keywords:** Aviation sector, Air transportation, Turkey

### Öz

Dünyadaki havacılıkla ilgili hızlı ilerlemelere paralel olarak Türkiye; uçak trafiği ve yolcu sayısında kırılan rekorlar, dünyaya örnek olan havaalanı yatırımları, yurt içi yurt dışı uçuş ağında yaşanan gelişmeler, uçuş emniyeti ve havacılık güvenliği konusunda yapılan düzenlemeler ile sivil havacılıkta uluslararası alanda önemli bir konuma yükselmiştir. 2016 yılında yaşanan tüm olumsuzluklara rağmen, taşıdığı potansiyel, fırsat ve riskleri değerlendirerek atılım ve projelerle tüm dünyada konuşulmaya devam eden Türkiye, mevcut devlet ve özel işletmeleriyle kaliteli hizmet sunarak havacılığın konforunu, hızlı ve güvenli olarak dünyaya ve ülkesine sunmaktadır. 168 ülke ile ikili havacılık anlaşması bulunan Türkiye'nin dünyada en fazla uçuş ağına sahip ülkelerinden biri olduğu söylenebilir. 2016 yılında Uluslararası havacılık kurallarını belirleyen ICAO Konsey Üyesi olmayı başaran Türkiye, uçuş emniyeti ve havacılık güvenliği konularında da uluslararası düzeyde katkı sağlayan ülkeler arasındadır. Türkiye'nin ulusal hava yolu şirketi aynı zamanda en değerli markası olan Türk Hava Yollarının dünyadaki başarısı da ülkede sivil havacılığa verilen önemin göstergesidir. Türkiye'nin dünyada havacılık açısından bir merkez olmasını sağlayacak olan 3. Havalimanı yatırımının Türkiye'yi bölgesinde daha güçlü bir hale getireceği ayrıca ekonomik getirilerinin yanı sıra uluslararası strateji bağlamında da belirgin avantajlar sağlayacağı düşünülmektedir. Bu kapsamda bu çalışmanın amacı Türkiye'nin sivil havacılıkla ilgili birikimlerini özetleyerek güncel veriler ışığında ortaya koymaktır. Ayrıca Türkiye'yi bölgesinde lider ve dünyada söz sahibi yapacak konuları gündeme getirerek bu konulara ilişkin farkındalık oluşturmakta amaçlanmıştır.

**Anahtar Kelimeler:** Havacılık sektörü, Hava ulaştırıcılığı, Türkiye

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## 1. INTRODUCTION

The improvements in the civil aviation sector, which is one of the most outstanding developments of the 21st century and constitutes one of the most important component of the fast and reliable transportation of modern life in our day, are particularly attracting attention. Although only over a hundred years have passed since the first motor-driven airplane was flown by Wright et al. in 1903; in the point that we have reached, there are tens of thousands of airplanes, thousands of airports and aviation businesses, and billions of passengers are transported by saving time, in a reliable and comfortable way each year through millions of flights. It can be said that these striking developments highly increased their difference among the other transportation options of aviation that could be an alternative, by making progress each passing day.

In parallel with the rapid advances in aviation in the world, Turkey has reached an important position in civil aviation in the international arena with the records broken in the airplane traffic and number of passengers, exemplary airport investments to the world, developments in domestic and international flight network, and the arrangements made on flight safety and aviation security. It can be said that Turkey, which has bilateral aviation agreements with 168 countries, is one of the countries with the highest number of flight networks in the world. As a result of the agreements made, it is seen that Turkey's international flight network has reached 286 points in 118 countries by the end of 2016. The fact that Turkey will realize a huge investment, which is the third airport in Istanbul which is Europe's largest airport, which will make it to become an aviation center on a world scale will make Turkey one of the most important transfer centers between Asia and Europe.

Flight safety and aviation security are as important as the strengthening the civil aviation infrastructure. In this context, Turkey, that has made great strides regarding the implementation of ICAO standards at the highest level in recent years, has become one of the countries that have made significant contributions to the development of the global aviation system not only with the passenger and airplane traffic figures but also on flight safety and aviation security. These developments have enabled Turkey to become the member of the ICAO Council that sets international aviation rules in 2016. In order to ensure the sustainable growth of the aviation sector that has been rapidly growing with the liberalization steps taken in the aviation after the 2000s, legislative regulations are being put into practice within the framework of international legislations by General Directorate of Civil Aviation (SGHM), on the other hand, studies are being carried out to realize these standards at the highest level along with quality increasing practices in auditing activities (SGHM, 2016).

This study is aimed to draw attention to the academic studies and sector reports carried out especially in the field of civil aviation in Turkey.

## 2. LITERATURE

In this part of the literature, developments of civil aviation in Turkey are examined according to the previous researchs.

When studies on civil aviation are examined, it is seen that the vast majority of the studies are sector evaluation or literature research (Çiçek, 2004, Bakırcı: 2012, Korul and Küçükönel: 2003, Oktal and Küçükönel: 2007; Zincirkıran, 2016).

The research also includes secondary data analysis studies, which are based on reports and evaluations of the sector (Gerede, 2006; Göktepe, 2007; Gerede, 2011; Ekinci, 2011; Beynam, 2013; Ergün, 2014; Gebeş and Battal, 2014; Gökırmak, 2014; Bakır et al., 2017).

The similar researches to the work have been given in chronological order (see blow).

Korul and Küçükönel (2003), examined the development of the Turkish Civil Aviation system in their work titled "Structural Analysis of the Turkish Civil Aviation System". Researchers aimed to present the current situation and propose solutions to problems of aviation sector in Turkey.

The research of Oktal and Küçükönel (2007) defined the concept of regional air transport, which has been developing in the world in recent years, and examined the development of air transport in the US and Europe. Later, it stated the current situation of air transport in Turkey, some basic approaches have been proposed towards the implementation of regional air transportation in Turkey.

Historical progress and current state of air transportation in Turkey with respect to transportation geography are examined by Bakırcı (2012). According to Bakırcı "as a result of investments made, significant improvements have been observed in air transportation in Turkey".

Yüksel (2014), examined the development of civil aviation and its contribution to globalization with the sample of Turkey in his research. According to Yüksel, developments in the Turkish civil aviation sector are not limited to increases in the number of aircraft and companies alone. On the one hand, while trying to improve the conditions within the country for air transport, on the other hand, an effort is being made to increase international activity in the sector.

Yayar and Tekin (2015), examined development of transportation industry in Turkey and determinants of airline firm preference with a case study in their research. They found that in an environment where competition is intense, airline companies need to produce goods and services that will satisfy consumer in order to sustain their assets.

Zincirkıran (2016), made an evaluation on civil aviation in Turkey, and examined the research in this field. According to the developments in the sector, Zincirkıran pointed out the lack of studies on the civil aviation sector. He also emphasized the importance of scientific work to further develop the civil aviation sector, which is in a significant position among other sectors.

Bahar (2018), examined the development of airline management in Turkey. According to Bahar, with the influences of political crisis, coup attempt and terrorist attacks, number of aircraft and passenger traffic in Turkey decreased in 2016. However, with the positive effects of Istanbul's New Airport and positive relations to be established with other countries, air transportation in Turkey will continue to increase.

### 3. METHOD

The study has been investigated under theoretical framework. The study is based on secondary sources. In this respect, field works, articles, publications of various public institutions and organizations and sectoral reports were used as secondary sources.

Secondary data is based on years between 2003 and 2017. International Civil Aviation Organization (ICAO) Annual Report, Republic of Turkey General Directorate of Civil Aviation (SGHM) Annual Reports, Turkish Airlines (THY) Annual Reports, Republic of Turkey General Directorate of State Airports Authority (DHMI) Annual Reports, EU Air Transport Market Reports, FlightGlobal World Airline Ranking Reports, ACI World Airport Traffic Rankings Reports, Investing Financial Summary Reports, Forbes Global 2000 List are in these main data sources. These reports are presented and explained through graphics, figures and tables.

#### 4. FINDINGS

Air transportation is one of the indispensable parts of everyday life, especially in developed countries, such as health and communication services, and is also necessary for social development and economic growth. Air transportation is of considerable benefit not only in developed countries but also in developing countries in terms of trade and tourism (Rochat, 2006: 1; Aktepe and Şahbaz, 2010).

When we look at the global picture of civil aviation in the world today; more than 920 air carriers in the world, more than 4,200 airports, approximately 170 air navigation providers 62 thousand aircraft with an average of 3 billion passengers a year is served.

In 1903, only the first airplane was launched 6 years after the first aircraft was launched in 1909, and the Turkish Air Force was founded on June 1, 1911 in Yesilkoy by Prime Minister Mahmut Şevket Paşa (HKK, 2017).

With the establishment of the Turkish Republic Mustafa Kemal Atatürk, the founder of the republic, said to the Turkish nation "The future is in the skies" and pioneered the steps that would encourage the development of Turkish aviation.

With the support of Atatürk, her spiritual daughter Sabiha Gokcen became the world's first female war pilot and Turkey's first woman pilot. Istanbul's second airport, Istanbul Sabiha Gokcen International Airport, has received the name from Sabiha Gokcen.

The establishment of the Turkish Tayyare Association in the years after the declaration of the Republic can be regarded as the first initiative on air transport in Turkey. This was followed by the establishment of Turkish airmail in the 1930s and a fleet consisting of a total of 10 flights was established in the 10th year of the Republic (Barutçugil, 1986: 105).

The Turkish Airlines Corporation (THY), the national flag carrier of Turkey, was established in Ankara in 1933 under the name "Airline State Administration". For many years, Turkish Airlines has carried passengers on domestic routes alone in Turkey. Private airline companies in Turkey have started to operate in the mid-eighties. The Turkish Civil Aviation Law No. 2920 adopted on 14.10.1983 and the restructuring process for civil aviation activities were entered into the civil aviation and airway operating right for private enterprises. Following the start of operations of private airline companies, rapid growth was observed in the early periods, and following this period of rapid growth, following the Gulf War in 1991, a significant number of private airline companies were forced to cease operations. After the April 5th decisions announced in 1994, most of the private airline companies had to withdraw from the sector (Aktepe and Şahbaz, 2010).

In conjunction with the rapid growth of the country, and the deregulations in the aviation industry, Turkish civil aviation has shown a remarkable growth since 2003. Some of the important developments from 2003 to 2017 are shown in the Table 1.

**Table 1.** Turkey's Aviation Sector Developments from 2003 to 2017 (SGHM, 2017)

		2003		2017
	NUMBER OF PLANE	162	3x ↑	517
	INCOME (BILLION TL)	3,1	23x ↑	70,2
	NUMBER OF PASSENGER (MILLION)	30	4x ↑	138
	NUMBER OF AIRPORT	26	2x ↑	55

With the new investments in progress, both the aviation and the airport industries are expected to grow with an ever increasing pace in the upcoming decade. Especially with the strategies and policies implemented in recent years, the diversity of products and services in the aviation sector has increased rapidly and has made a leap in the last fifteen years. By the end of 2016, the structure of the civil aviation sector in Turkey can be summarized as follows (DHMI, 2016; SGHM, 2017):

- A total of 55 airports,
- A total of 156 aviation businesses, 13 of which are airline companies,
- A total of 1,417 aircraft consisting of 540 airplanes, 231 air taxis, 237 balloons, 347 aircraft used in general aviation businesses and 62 aircraft used in agricultural spraying businesses,
- 29 flight (and type) training institutions, 80 maintenance organizations,
- 191,716 employees in the sector,
- Industry turnover of 23.4 billion dollars,
- 100,365 seats and 1,821,600 cargo capacity,
- 7 domestic centers, 55 domestic flight points and 286 international flight points abroad are available (Figure 1),

2017 Turkey Aviation Sector Assessment are summarized, according to the reports prepared by international aviation organizations in the world (SGHM, 2017);

- According to the 20-year Forecast Report prepared by the International Air Transport Association (IATA); Turkey ranks 10th worldwide by RPK (Revenue Passenger-Kilometers), 11th by RTK (Revenue Tonne-Kilometers), and 14th by FTK (Freight Tonne-Kilometers).

- According to the 20-year Forecast Report prepared by the International Air Transport Association (IATA); It is estimated that our country, which is not among the top 10 markets in terms of the number of passengers in 2016, will rise to 9th place in the world by 2036. It is expected to be the 5th fastest growing market by increasing the number of passengers by 119 million over 20 years.

- According to the International Airport Council (ACI) Atatürk Airport has become the 5th largest airport in Europe by increasing the number of passengers by 5.9 percent compared to the previous year.

- According to the International Airports Council (ACI) Airport Hub Connection Report, Ataturk Airport ranks 7th in the world, with 591% increase among the 20 airports that make the most central connection in the world.

In order to meet these rapid increases, the following measures can be taken within a comprehensive plan;

- Infrastructure development should be accelerated,
- Air navigation and airports capacities should be improved,
- Staff training opportunities should be increased, quality and numerical development should be provided,
- Sectoral cooperation should be strengthened (Saldıraner, 2011).



**Figure 1.** Demonstration of Airports in Turkey by Provinces (DHMI, 2017)

Significant progress has been made in airline traffic and cargo transport, along with the fact that airlines are in all cities and newly opened lines both on domestic and international routes.

As of the end of 2016, there are 13 airline companies registered in Turkey for passenger and cargo transportation or freight business in the civil aviation sector. The number of airplanes of airline companies has increased by 10% and reached 540 compared to the previous year. 515 of the planes are passenger planes, 25 of them are cargo planes. The total seat capacity of airline fleet is 100,365, and the total cargo capacity of the cargo planes is 1,821,600 kg. Within the scope of the study, statistical information about five major airline businesses in Turkey are presented in Table 2.

**Table 2.** Fleet Information of Airline Operators in Turkey (SGHM, 2017)

1065

Company	Number of Aircraft
<b>Turkish Airlines</b>	304
<b>Pegasus</b>	66
<b>SunExpress</b>	52
<b>Onur Air</b>	24
<b>Atlasjet</b>	24
<b>Subtotal</b>	470
<b>Other Companies</b>	47
<b>Grand Total</b>	<b>517</b>

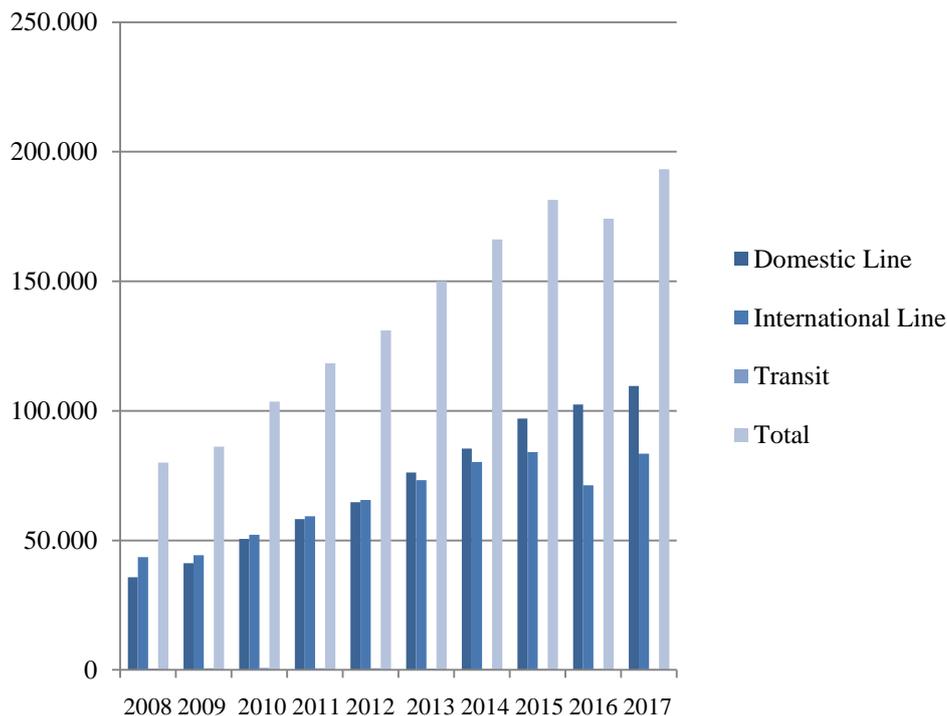
Another data that constitute the basis at the point of presenting the current situation in airline transport is the number of passengers transported. Table 3 shows the statistics of the number of passengers transported in the last five years. According to Table 3, a huge improvement has been made in the airline industry in our country along with the increasing number of passengers transported especially in domestic flights in the recent period.

**Table 3.** Number of Passengers between 2008 and 2017 (Thousand) (SGHM, 2017)

Years	Domestic	International	Transit	Total
2008	35.833	43.605	527	79.965
2009	41.227	44.281	616	86.124
2010	50.575	52.225	736	103.536
2011	58.258	59.362	672	118.292
2012	64.721	65.630	678	131.029
2013	76.148	73.282	566	149.996
2014	85.416	80.304	461	166.181
2015	97.041	84.033	363	181.437
2016	102.499	71.244	410	174.153
2017	109.599	83.433	287	193.319

Graphical representations of domestic, international and transit passengers between 2008 and 2017 are given in Figure 2.

In air transportation, Turkey is one of the fastest growing countries in the world and Europe. It has been observed that the growth rates have continuously increased except for the small fluctuation in 2016 according to the graph. Nevertheless the number of passengers increased from 174 million in 2016 to 193.3 million in 2017 and increased by 11 percent in one year. Turkey's civil aviation has not only continued to grow with double digits, but also increased the number of passengers by 20 million in one year and broke the 18 million passenger increase record in 2013.

**Figure 2.** Number of Passengers Growth between 2008 and 2017 (Thousand) (SGHM, 2017)

Considering past growth rates of passenger numbers, especially after 2003, the number of passengers increased rapidly in Turkey.

Air passenger statistics related to the world, Turkey and Turkish Airlines from 2003 to 2017 and the estimated growth rates in 2023 are given in Table 4.

From 2003 to 2017, the number of passengers in the world has grown by 20%. In Turkey, the number of passengers increased 3-fold, while the number of passengers Turkish Airlines has increased six-fold.

**Table 4.** Increase in Number of Passengers Between 2003-2023 (World, Turkey and Turkish Airlines Comparison) (SGHM, 2017; THY, 2018a)

	2003	2017	2023
<b>World</b>	3,4 Billion	4,1 Billion	4,3 Billion
<b>Turkey</b>	30 Million	138 Million	240 Million
<b>Turkish Airlines</b>	10 Million	68,6 Million	120+ Million

Istanbul Ataturk Airport was the airport with the longest average delay duration of 13.5 minutes of Europe in 2015 due to the density of air traffic.

As seen in Figure 3, the fact that Istanbul is in the center of the eastern and western part of the country and the possibility of using narrow-body fleet provides competitive advantage by bringing serious cost advantage. Because of the advantages allowing the use of narrow-body aircraft at 3-5 hour distances, Istanbul has become one of the fastest growing aviation centers of the world today. Due to infrastructure investments and geographical location, the number of international passengers transferred via Istanbul is increasing rapidly.



**Figure 3.** Istanbul's Strategic Location Advantage (THY, 2018a)

The strong growth of Istanbul Airport and Middle Eastern hubs have changed the travel behaviours of transfer passengers in recent years and also affected the share of transfer passengers at European hub airports. Due to their beneficial geographical location between Europe and Asia and notable governmental support, Turkish and Middle Eastern carriers such as Emirates, Qatar Airways, Etihad Airways and Turkish Airlines have managed to gradually attract an increasing number of transfer passengers travelling from Europe and North America to Australia, Far East and South East Asia (EU Report, 2016: 35).

In addition, Istanbul Ataturk Airport as the main hub of Turkish Airlines continues to advance on the list of the world's heaviest passenger traffic. According to Table 5 it can be seen that Ataturk Airport operated by TAV, was ranked to 11th place by advancing two steps and even surpassing Lufthansa's main hub, Frankfurt in 2015.

**Table 5.** Global Top 20 Airports – Passenger Traffic 2015 (EU Reports, 2016: 97)

Rank 2015	Rank 2014	Country	Airport / Code	Total Passengers	2014-2015 YoY Growth %
1	-1	USA	Atlanta (ATL)	101,491,106	5.5
2	-2	China	Beijing (PEK)	89,938,628	4.4
3	-6	UAE	Dubai (DXB)	78,010,265	10.7
4	-7	USA	Chicago (ORD)	76,949,504	9.8
5	-4	Japan	Tokyo (HND)	75,316,718	3.4
<b>6</b>	<b>-3</b>	<b>UK</b>	<b>London (LHR)</b>	<b>74,989,795</b>	<b>2.2</b>
7	-5	USA	Los Angeles (LAX)	74,937,004	6.1
8	-10	Hong Kong	Hong Kong (HKG)	68,283,407	8.2
<b>9</b>	<b>-8</b>	<b>France</b>	<b>Paris (CDG)</b>	<b>65,766,986</b>	<b>3.1</b>
10	-9	USA	Dallas Fort Worth (DFW)	64,072,468	0.9
11	-13	Turkey	Istanbul (IST)	61,836,781	9.2
<b>12</b>	<b>-11</b>	<b>Germany</b>	<b>Frankfurt (FRA)</b>	<b>61,032,022</b>	<b>2.5</b>
13	-19	China	Shanghai (PVG)	60,053,387	16.3
<b>14</b>	<b>-14</b>	<b>Netherlands</b>	<b>Amsterdam (AMS)</b>	<b>58,284,864</b>	<b>6</b>
15	-18	USA	New York (JFK)	56,827,154	6.8
16	-16	Singapore	Singapore (SIN)	55,449,000	2.5
17	-15	China	Guangzhou (CAN)	55,201,915	0.8
18	-12	Indonesia	Jakarta (CGK)	54,053,905	-5.5
19	-17	USA	Denver (DEN)	54,014,502	1
20	-22	Thailand	Bangkok (BKK)	52,902,110	14

According to ACI World 2017 World Airport Traffic Rankings, Istanbul has fallen to 14th place in 2016 and to 15th place in 2017. However, it is expected to be in higher place along with the new airport.

Along with the opening of Sabiha Gökçen Airport, the second airport in Istanbul, domestic airline passenger traffic was shifted to Sabiha Gökçen Airport and domestic airline passenger traffic at Ataturk Airport decreased. Along with the completion of the 3rd airport in 2018, capacity increase will be achieved and the delays can be avoided by eliminating the air traffic jam (TİB, 2016).

Turkish Airlines (THY) Corporation, which is a subsidiary of the state managed by private sector mentality and incorporates partnerships with 15 different companies, was founded in 1933 and its headquarter is in Istanbul.

Turkish Airlines provides domestic and international air freight and cargo services in Turkey. It is engaged in Air transportation and Aircraft Technical Maintenance Operations as two main areas of activity. The Air transportation department carries out domestic and international passenger and cargo air transportation activities, and the Aircraft Technical Maintenance Operations department carries out repair and maintenance services in the civil aviation sector and all kinds of technical and infrastructure support related to the airline industry (Forbes, 2017).

Turkish Airlines, which is Turkey's most well-known brand in the world, is economically, globally and strategically placed near the top among Turkey's largest

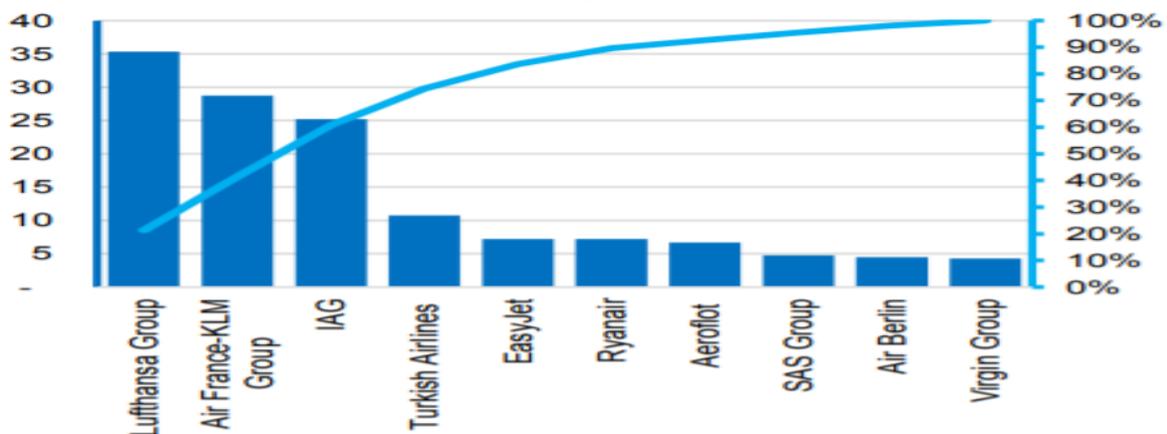
organizations, service exporters and brand values. According to the research of Brand Finance, an international brand valuation organization, Turkish Airlines (THY) became "the most valuable brand" of Turkey in 2016.

In addition, according to Skytrax rating agency, Turkish Airlines was selected as the "Europe's Best Airline Company" 6 consecutive years between 2011 and 2016 (THY, 2017a).

The year 2016 was a challenging year in many respects both for the aviation sector and as well as Turkish Airlines. In addition to global effects, Turkish Airlines' total revenues decreased by 6.9% compared to previous year due to the effects of the adverse events that took place in our country in 2016.

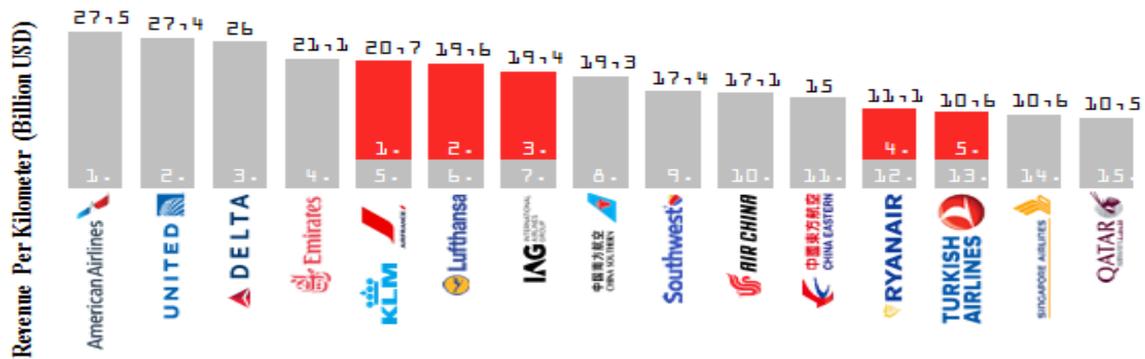
According to IATA, worldwide airline passenger revenues and cargo revenues have decreased by 2.7% and 9.5%, respectively. While the decline in passenger revenues of Turkish Airlines were above the average of the sector by 8.3%, cargo revenues increased by 6.5%, making a progress in contrast to the industry despite the adverse events experienced. In 2016, passenger revenues constituted 89% of total revenues while cargo revenues were recorded as 9% (THY, 2016).

Turkish Cargo; is the fastest growing and growing air cargo brand in the world with its infrastructure, new destinations added to its flight network and its fleet capacity (Turkish Cargo, 2018).



**Figure 4.** Top 10 Europe Airlines by Revenue, \$ Billion (Flightglobal, 2016)

According to the Figure 4, in terms of total revenue, the three big European airline groups (Lufthansa Group, Air France-KLM and IAG) were in the lead. In terms of passenger volumes, Ryanair was the top European carrier in 2015, followed by Lufthansa and EasyJet. Turkish Airlines was the 4th largest European carrier by passenger volume in 2015 and 10th largest worldwide (EU Report, 2016: 83).



**Figure 5.** Turkish Airlines' Passenger Revenue (European and World Ranking) (ICAO,2017)

According to Figure 5, it has shown that Turkish Airlines ranked 13th in the world and 5th in Europe in terms of passenger revenues with 10,6 Billion USD Dolar (ICAO, 2017).

**Table 6.** Summary of Turkish Airlines' Financial Statements Between 2013-2017 (Million USD) (Investing, 2018)

End of Period	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
<b>Total Revenue</b>	10958	9792	10522	11070	5183.09
<b>Gross Profit</b>	2196	1136	2102	2040	956.73
<b>Operating Income</b>	1022	-291	895	676	338.46
<b>Net Profit</b>	223	-77	1069	845	188.45

According to Table 6, Turkish Airlines made profit between the years 2013 and 2015, suffered a net loss of -77 USDmn (Million Dollars) in 2016 and made a profit of USD 223 million in 2017.

Turkish Airlines employs approximately 50,000 people along with its subsidiaries. Turkish Airlines employs candidates with whom it will work together globally under 4 main headings, these are;

- Cabin Crew,
- Cockpit Crew,
- Foreign Office Workers and
- Administrative/Technical Staff (General Employment) (THY, 2018a).

**Table 7.** Turkish Airlines Number of Personnel in Year 2018 (THY, 2018b)

	Grup-Personel	Toplam
<b>Turkish Airlines Inc</b>	Manager	578
	Pilot	4.509
	Cabin Crew Member	9.798
	Technician	186
	Other	9.004
	<b>Subtotal</b>	<b>24.075</b>
	<b>Subsidiaries</b>	<b>27.109</b>
	<b>Grand Total</b>	<b>51.184</b>

According to Table 7 it has shown that as of 2018, Turkish Airlines and its group companies has become a very large family where people work over 50 thousand. So it can be say that Turkish Airlines continues to be a major source of employment for Turkey.

Turkish Airlines showing an increasing performance every year in the capacity of passenger it transports succeeded to increase the number of passengers it transports to 48.3 million in 2013. The global transporter, gaining a great acceleration in 2014 by transporting approximately 55 million passengers, transported 61.2 million passengers in 2015, 62.8 million passengers in 2016 and 68,6 million passengers in 2017. Turkish Airlines' total Load Factor improved by 4.7 points up to 79.1%, while international Load Factor increased by 5 points, up to 78.4%, during January-December 2017 period (THY, 2018a).

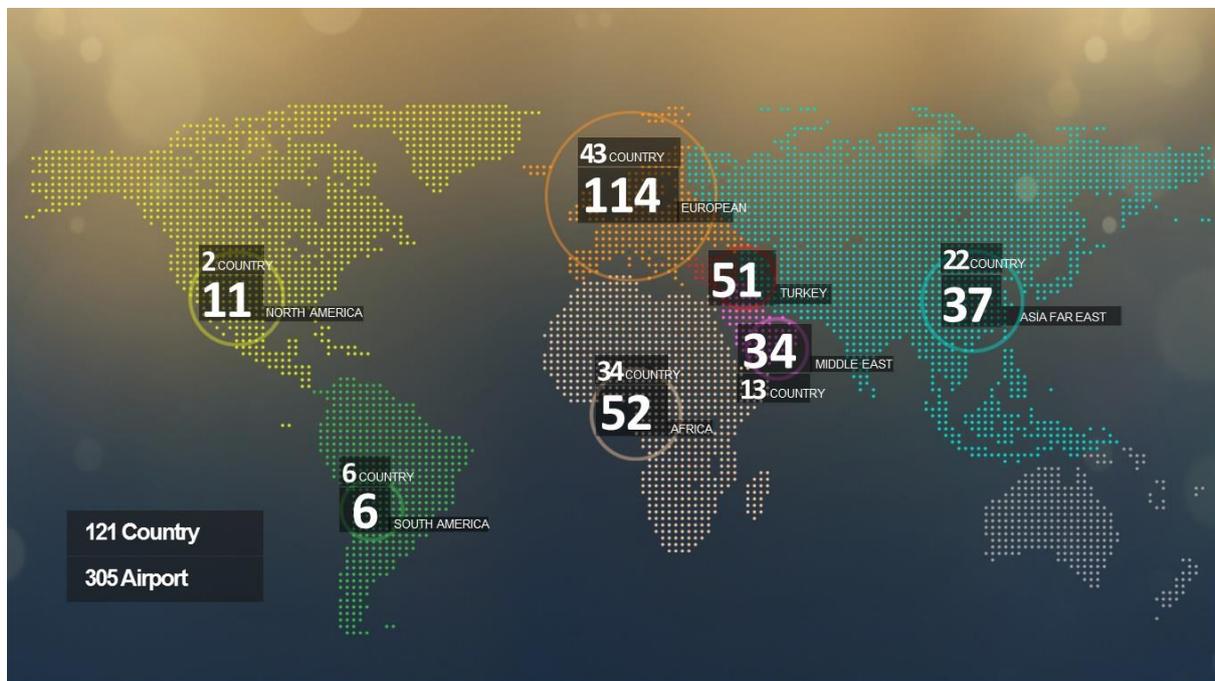
**Table 8.** Number of Passengers (Million) and Amount of Cargo (Ton) Transported by Turkish Airlines (Turkish Cargo, 2017)

	2013	2014	2015	2016	2017
<b>Number of Passengers</b>	48,3	55	61,2	62,8	68,6
<b>Amount of Cargo</b>	565.000	666.000	717.000	889.000	1122.697

In brief, Turkish Airlines is an airline company that (THY, 2017b)

- transports 2% of the world,
- has 329 passenger and cargo planes (+230 aircraft ordered),
- is a major global brand ranking among the world's top 10 airlines,
- has opened a significant number of new lines,
- has one of Europe's youngest fleets with an average fleet age of 7,7
- has an important revenue item with cargo transportation,
- prepares promotional and advertising films in different concepts for different regions of the world,
- flies to 305 points in 121 countries (Figure 6),

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**Figure 6.** Flight Destinations of Turkish Airlines (Number and Location) (THY, 2018a)

- transports 62.8 million passengers,
- has a partnerships of 15 different companies,

- employs approximately 50,000 people,
- aims to exceed the number of airplanes of 500 until 2023.

Turkish Airlines is the airline that flies from one center to the most countries and the most international destinations in the world.

It is thought that the 3rd Airport, which will transform Istanbul into a global aviation center, will make positive contributions to the growth of Turkish Airlines (THY, 2018b).

One of the key conditions for the long-term sustainability of the assets of the airline transportation industry, where operations are carried out on very sensitive balances, is that they can provide competitive advantage in the sector where foreign airline companies are also increasingly active in the transportation sector (Aktepe and Şahbaz, 2010).

ICAO, which was found in Canada-Montreal in 1947 in accordance with the Chicago Convention signed in 1944, is the most successful specialized organization of the United Nations. The organization continuously sets rules and recommendations related to all aspects of civil aviation and ensures their application at the global level. This organization can be briefly described as the most competent institution in civil aviation on a global scale.

Turkey ratified the Chicago Convention, which established the ICAO, with the law no. 4749 on 5 June 1945, and the law was published in Official Gazette dated 12.06.1945 and numbered 6029. However, Turkey as one of the founders of ICAO, has not been able to find opportunity to represent in this organization for 66 years.

39th ICAO General Assembly Meeting was held at ICAO's headquarter in Montreal between September 27 - October 7, 2016.

In the General Assembly Meeting, Turkey was involved in the elections as one of the candidates of the European group and became one of 36 members of the ICAO Council, taking 156 votes of 172 members.

Turkey, that has been elected as a member of the Council, the governing body of ICAO, will serve as a member of the Board of Directors for three years until the end of 2019 (DİB, 2017).

Istanbul's new airport, which is to be called Istanbul Grand Airport, will be the third international airport to be built in Istanbul after Ataturk Airport and Sabiha Gökçen Airport.

New Istanbul Airport, which is planned as the largest airport in the world, will have an anticipated capacity for up to six runways serving 150 million passengers with extendable capacity up to 200 million. 150 airlines will operate from the airport, serving more than 350 international destinations.

New Istanbul Airport is the only new airport planned and being constructed in Europe. With the superior geographical location of Turkey and the added traffic that the new airport will bring to the region, it is obvious that Istanbul will be the most important international aviation hub in Europe. This projection has been the main factor behind both Turkish Airlines and other private Turkish airliners setting up their strategies on expanding their regional destinations to adequately feed their international network (THY, 2016).

Due to the fact that Istanbul New Airport is the biggest infrastructure project in Turkey, it will have a huge impact on Turkey's economy. According to the Economic Impact Analysis report, once fully completed, INA will make a 4.89% contribution to national income per capita, as well as providing 100,000 direct and 150,000 indirect jobs. Its contribution to the tourism sector is estimated to be \$7bn (Airport Technology, 2018).

## 5. CONCLUSION

In addition to the difficulties and crises experienced in the airline transport at the international level in 2016, along with the influences of Russian crisis, coup attempt, terrorist attack that took place at Ataturk Airport and other terrorist actions, Turkish Civil Aviation entered into a painful period but managed to get through it without any significant regression. It is thought that the recession will enter into a rapid development course again along with opening of the 3rd Airport in 2018 after a recovery period envisaged for the year 2017.

Istanbul, which is a bridge between Asia and Europe, provides a very important advantage to Turkey in terms of aviation sector as location. Along with the realization of the 3rd airport project, this country having Ataturk Airport, which is one of the biggest airports of the Europe, has the potential to overtake locations like Frankfurt, Amsterdam and Paris by offering flight services to many new destinations. An airport with an annual capacity of 150 million passengers will be one of the most important hub airports between Asia and Europe.

Turkey, that has made its presence felt in the national and international civil aviation sector along with the performance and effects it has achieved in recent years with private and public institutions, especially with Turkish Airlines and General Directorate of Civil Aviation, continues its existence by further dominating the changes experienced in the sector.

In this study, it was aimed to provide the proper, up-to-date information and statistics that can be used to reflect the current situation in the aviation sector in Turkey healthily in summary. Despite all problems experienced, Turkey is mentioned all over the world with its breakthroughs and projects by evaluating its potential, opportunities and risks, and also continues to offer the comfort of aviation to the world and to the country fast and securely by providing quality service with its existing businesses.

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