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# ISTANBUL'S THIRD AIRPORT IN TERMS OF TRANSPORTATION GEOGRAPHY: GEOPOLITICS, REGIONAL AND ECONOMIC EFFECTS

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#### **Abstract**

More passengers have come to use airplanes in parallel with the developing aircraft technology. The remarkable and rapid development of commercial airlines after the World War II positively affected the costs to turn airborne transportation into a global activity taken up by masses. Doubtlessly, immense is the effect of developing airborne transportation on the emergence and dissemination of "globalization" herein.

As one of the major components of airborne transportation, airports serve as spaces allowing for direct and connecting flights in a short time and make considerable contributions to the economy of the country they are located in. A region's airborne accessibility enables the transportation of any goods and services to that particular region in a short while. Thus, accessibility is indispensable to the growth of a region's economy. Taking the abovementioned as a premise, some airports have acquired new functions not only to regulate ordinary flight services and airborne transportation but also to turn into hubs to orchestrate interregional transportation. Such airports also function as tourism embassies. Among the hubs are the airports in Dubai, Bangkok, Frankfurt, London, Paris, and New York.

In recent years, Istanbul has set out to be listed among the above hubs thanks to its geographical location and developing economy. Istanbul's Third Airport, which has reached almost 70% of its construction and will come into service soon, has been designed to be the largest airport of the world. Istanbul is distinguished from the metropolitans listed above for the historical role it played and the diversity of its historical and cultural landmarks. Throughout its history of around 8000 years, Istanbul has served as a capital to the Roman, Byzantine, and Ottoman Empires, which exerted substantial influences on the world history, and is teemed with cultural heritage of these civilizations. Every year, the city hosts some 12 million tourists. The present study discusses the probable global effects of Istanbul's Third Airport under construction in terms of transportation geography and its geopolitical, regional, and economic effects in consideration of its projected mission.

## **Keywords**

Transportation, Tourism, Geography, Region, Economy

## 1. Introduction

Today airborne transportation is among the fastest and the most popular systems although it is expensive. Rapidly developing aircraft technology and proliferation of civil airline companies after the World War II allowed more people to avail of airborne transportation (Hopper, P. Cain & P. Whaite, 2000:36). Global air trafic has grown especially within the last 30 years. The number of passengers who have travelled worldwide by air transportation has reached to 2500 million in 2010 . So, airports have become vital functional nodes in the world economy as they lead to regional, national, and international competitiveness (Karacor, E: 223). There is an organic bound between airborne transportation and globalization. It allows people to travel from different lands to other territories with different climates, topographies and cultures just in hours. In one sense, this turns the world into a small village.

Airborne transportation is a global organization incorporating many components ranging from tourism to economy, from trade to regional development. The fact that the economy of such countries as the USA, Germany, and France, which have advanced aviation and airline systems, have powerful economies, attract more tourists, are listed among the commercially strong counties substantially results from their capabilities to produce aviation systems and to easily market these products to other countries all over the world.

Among the most important components of airborne transportation are airports. Rapid development of air transportation encumbers existing airports and requires the revision of related concepts, operational management and opportunities (Airport Planning Guide,

1987:1). The present study investigates what kind of global changes Istanbul's Third Airport may cause and its geopolitical, regional and economic effects from the viewpoint of transportation geography.

# 2. Istanbul's Geopolitical Importance

Istanbul, one of the older's settlements in the world, has hosted many civilizations throughout its history of about 8000 years and served as the natural capital of the countries founded in the region. Chronologically, the West Roman Empire, the Byzantine Empire and lastly the Ottoman Empire assigned Istanbul as their capitals, which makes the city the world's oldest *metropolis*. Thanks to its geographical location, Anatolian peninsula and the straits serving as a junctions among Asia, Europe and Africa have always attracted commercial and military attention. Istanbul is economically, demographically and culturally the biggest and the most popular region in Turkey. It connects Asia and Europe. Its strait serves as a passage linking the Black Sea to the Marmara, Aegean and Mediterranean Sea. Besides marine transportation, it is located in a central position for land and airborne transportation connecting Asia and Europe. Moreover, Istanbul has a marine passage to the Black Sea - the Caspian basins. It plays a key role in the transfer of oil and natural gas drilled in the Middle East and the Caspian region to the West.

Istanbul, functioning as a bridge between the East and the West, is a melting pot of cultures and religions of the world. Its characteristics encompassing natural, cultural and historical features have transformed Istanbul into a hub of attraction. The region once used as an administrative center, sacred worship area, port, commercial and industrial place and a recreational spot still preserves these features. Important historical and religious incidents in the regions bestowed the area a holy mission and created a culturally rich ares.







Figure 1, 2, 3 & 4: Various images from Istanbul

# 3. Istanbul's Third Airport from the Perspective of Transportation Geography

Istanbul is one of the most popular cities in the world thanks to its aforementioned geographical, historical and cultural properties. It has all of the land, airborne, marine, and rail transportation types. Currently there are two airports operating in Istanbul. Of these, Atatürk Airport (IST), located on the European side and constructed in 1953, is the main hub in Istanbul. Atatürk Airport has multimodal transportation facilities but, there are no rapid train services and road transportation has many difficulties (high traffic density). It is expected for the new airport to have better multimodal transport services, such as; direct connection to State highway networks and express/rapid train services (including metro) which will provide easy access to airport (Saldıraner, Y:7). Its ever-growing population and increased airborne travels to Istanbul gave way to the construction of the second airport. Sabiha Gökçen International Airport SAW), which was put into service on the Asian side in 2001, but this airport either, could not solve the problem of deteriorating airborne traffic in Istanbul. This is why Istanbul's third and the world's biggest airport will be built. Specialists predict that by 2018 the Grand Airport will be among the five busiest airports in the world and the biggest and most modern airport in Europe. Istanbul Grand Airport will play a crucial role in the economic development of Turkey and the achievement of the county's 2023 targets (Düzgün, M& Tanyaş, M:7).



Figure 5: The Location of Istanbul's Third Airport

The project land is located on the coastline of the Black Sea region. The recommended airport is located 35 km north of the Atatürk Airport and 40 km north of Istanbul city (Istanbul New Airport Project:1). Its construction is in progress - currently 70% completed - and the projected budget amounts to 22 billion 152 million euros, which happens to be Turkey's highest tender bid. The Third Airport covers an area of 7,600,000 m² between Yeniköy and Akpınar on the European side of the Black Sea and has been designed to host 150 million passengers and to serve with its 6 runways. The New Istanbul Airport Project has been planned to be implemented in four phases. The first phase will be completed in the middle of 2018 in a way to allow airplanes to land and take off.



Figure 6: The Project Simulation of Istanbul's Third Airport

When all the phases have been completed, it will have an indoor area of 1,471,096 m<sup>2</sup>, 165 passenger bridges, terminal buildings inter accessible via rail transportation - three technical buildings and an airport traffic control tower - ramp control towers - six independent runways suitable for any airplane - 16 parallel taxiways, a parking capacity of 500 airplanes - VIP, cargo and general aviation terminal - State Guest House - indoor and outdoor parking lots of nearly 70 thousand vehicles and many other commercial and social facilities.

"Airport Urban Complex" units such as sports center, museum and exhibition hall, conference center, cultural center, business center, mosque, church, synagogue, hospital and commercial areas are mentioned. So the project in front of us is far beyond an airport project and is an urban complex as it is named. It is inevitable that this complex will trigger other constructional activities and give birth to infrastructural/transportation needs in the vicinity. As a matter of fact, in the 'Real Estate Market Is Reshaping' Report released by the Turkey division of the global company JJL who operates in the real estate services field, it is suggested that a Port-City will be founded neighboring the 3rd Airport; it is also stated that upon the completion of 3rd Airport, 3rd Bridge and North Marmara Highway projects, road and air transport to this city will increase (Northen Forest: 14).



Figure 7: Project Area of Istanbul's Third Airport

As for intracity transposition and transfers to nearby centers, the highway to and from the third airport is an integral component of the network of the North Marmara Highway and the Yavuz Sultan Selim Bridge. Besides, the railway systems will reach the connection station at the airport via High Speed Trains. The terminal will be connected to Taksim, considered to be center of the city, by a railway system. Thusly, it will be accessible from the

city center in 15 minutes. As can be seen, intra- and extra-city transportations to and from this huge project has an integrated structure.

# 4. Regional and Economic Effects

Favorable transportation opportunities play a significant part in a region's population, industry, commerce, and tourism (Kahraman: 339). At the present time, modern airports with a variety of functions greatly contribute to the development of the region they are located. They have important parts in branding of a city thanks to their symbolic values (Pektas, G.Ö, Karadeniz, M.:545). Such airports incorporate many other functions as trade centers, fair and expo sites, hotels, convention centers. Moreover, it is known that cities with advanced airports dominate flights to surrounding regions and countries by serving as connection hubs. Such cities as Dubai, Bangkok, Frankfurt, London, Paris, New York, which has this kind of airports, gain a considerable amount of income not only from the transportation sector but also tourism and commerce supported by airborne transportation. The author believes that Istanbul deserves to host world's largest airport thanks to its aforementioned historical and cultural mission, geopolitical location and vast economy. Istanbul's Third Airport, 70% of whose construction has been completed, will annually serve around 15 million passengers. It is thought to create employment for about 120 thousand people.

Direct economic impact is composed of employment, income and value added associated with execution and management of the activities in airports including airport related establishments located at or near to an airport. These include the operations of airport operator, airlines, airporttraffic controller, general aviation, ground attendants, airport security, immigration and customs authorities, airplane maintenance companies and other enterprises in the airport such as duty free and retail stores (Istanbul New Airport Ekonomic Impact Analysis:11). Therefore, it is estimated that 1,500,000 people will benefit from the added value produced at and around the airport. The enterprises which are closely related with airport operations but not located in the airport (or just partially located in the airport) such as airline company offices, logistic operators and air cargo are also included in the direct impact. These enterprises are an integral part of airport operations even though they are located outside the airport. Indirect economic impact contains employment, income and value added associated with generation of products and services required to be procured to perform a passenger flight. As an example to this product and service range, we can talk about food provider wholesalers for food and beverage service during flights, petroleum refining operations for jet fuels, companies which provide accounting and legal services, and travel agencies booking flights (Istanbul New Airport Ekonomic Impact Analysis:11-12).

Such a huge project will potentially affect demographical migrations. Istanbul's Third Airport's attraction is likely to create new settlements around. Actually, limited settlement areas and overpopulation is among Istanbul's major problems. Settlement of a certain amount of population around the airport will marginally ease the burden on the city's center.

Besides, INA has been shaped as an airport city, beyond this as an "aerotropolis" from the beginning. Implementation of this new interconnected model that would put the social, financial, intellectual and cultural connections into life to maximum extent eliminates, at least restricts the possibility of making a debate on addressing to growth mentality in context of traditional criteria. Additionally, this concept should be considered as integrated with the 3rd Bosporus Bridge and Channel İstanbul mega projects specific to İstanbul and INA. It is not sufficient to consider INA just in context of aviation sector of Turkey that is rapidly expanding with its current condition. Essentially, INA has been conceived as a key nature building store of a strategy which would ensure transformation of the urban macro form within the framework of a certain insight and approach. The INA Project economic life of which is estimated as 100 years goes beyond the modern insight that airports are located on the periphery of a city and represents an insight by which the city is being shaped around the airport. By considering that every day 1.5 million people travel between two continents for work andother reasons in İstanbul, it is difficult to say that the city would not benefit from a;

- a) Environment and sustainability conscious,
- **b**) Socio-economic and socio-cultural sense planned,
- c) Strategic location in terms of being based on a consistent and integrated

future prediction to certain extents. It is apparent that the said localization does not create a consequence beyond urban expansion when it remains limited with the "satellite town" model that has been implemented until today. In this respect, an interwoven model with the projects feeding each other and based on three main principles above with a strategic approach may open the door for a more proper urbanization (Istanbul New Airport Ekonomic Impact Analysis: 27).

The most important outcome the New Istanbul Airport will produce is that it will regulate connecting flights from North America and Europe to Asia and Africa. This feature will boost its competitive capacity in comparison with the surrounding countries. Enabling the operation of a new hub-spoke-process-transfer (hub) airport that would create further service capacity in İstanbul is a necessary condition to ensure continuity of this acceleration. INA shall ensure possibility of flight to over 350 destinations for 150 airline companies. İstanbul is

located at the center of this traffic with its position of being the gate opening abroad and Turkey. It should be suggested that INA shall support and improve this position (Istanbul New Airport Ekonomic Impact Analysis:26). The Third Airport Project has been designed in a way to be environmentalist and environmentally friendly, to generate its own energy, and to be handicap-accessible and a green facility. The airport is expected to be the largest tourism and commercial centers of the world thanks to its expo, medical, convention, trade, and recreational centers.

# 5. Conclusion

Rapid technological advancements today allows for the easy transportation of people, communication, goods and services to any spot in the world. Advanced technologies also affecting social structures make masses more demanding and assertive. These technological changes and developments necessitate the design of transportation, thusly airborne transportation as in any sector according to to new concepts.

Currently, although the number of airports incorporating many cultural and commercial functions and able to satisfy the growing needs is scarce, a great number of airports will necessarily evolve into airports as described in the present paper. The construction of Istanbul's Third Airport is a product of such thinking. The author is of the opinion that Istanbul, which will have the world's most functional airport in a year, will globally become one of the most important cultural and tourism cities.

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